



Request for Proposal
2024 High Compaction Front Load Refuse Truck
December 4, 2023

City of Fargo Request for Proposal

The City of Fargo is requesting proposals for (1) one High Compaction Front Load Refuse Truck. Sealed proposals will be received by the City of Fargo Auditor's Office at 225 4th Street North, Fargo, ND 58102, for the purpose of evaluating costs and operating parameters on a new High Compaction Front Load Refuse Truck. Upon completion of the evaluation by the selection committee an order may be placed. Proposals must be uploaded to fargond.bonfirehub.com/ or submitted to the City of Fargo Auditor's office at 225 4th Street North, Fargo, ND 58102. **Proposals will be received until 2:00 PM on December 4, 2023.**

Need Help?

Please contact Bonfire at Support@GoBonfire.com for technical questions related to your submission.

CITY OF FARGO RIGHTS

The City reserves the right to cancel this RFP in writing or postpone the date and time for submitting proposals at any time prior to the proposal due date. The City, by this RFP, does not promise to accept the lowest cost or any other proposal and specifically reserves the right to reject any or all proposals, to waive any formal proposal requirements, to investigate the qualifications and experience of any Proposer, to reject any provisions in any proposal, to modify RFP contents, to obtain new proposals, to negotiate the requested services and contract terms with any Proposer, or to proceed to do the work otherwise.

The City hereby notifies all proposers that it will affirmatively insure that in regard to any contract entered into, pursuant to this request, minority business enterprises will be afforded full opportunity and are encouraged to submit proposals in response to this invitation and will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award. The City reserves the right to accept or reject any and all bids that is in the best interest of the City. All questions and inquiries will be addressed to:

Equipment Specifications:

Tom Ganje
Fleet Purchasing Manager
402 23 St N
Fargo, ND 58102
Phone(701) 241-1460
E-Mail: Tganje@FargoND.gov

David Rheault
Solid Waste Route Supervisor
2301 8 Ave N
Fargo, ND 58102
(701) 241-1497
Drheault@FargoND.gov

GENERAL SPECIFICATION

MODEL: Unit shall be a new current year model.

WARRANTY: Shall be stated in **writing** on the form provided.

DELIVERY: Proposer must perform a complete pre-delivery service prior to delivery of equipment. All units are F.O.B., Fargo Central Garage.

Proposer must state the number of days for delivery from time of order.

MANUALS: One (1) complete service manual, flash drive or printed
One (1) complete parts manual, flash drive or printed
One (1) operator's manuals.
One (1) training video (if available)
One (1) complete service filter part number list

TRAINING: Upon delivery to end-user Proposer will provide instruction to operators on proper operation and daily maintenance.

PROPOSER: There shall be \$500,000.00 minimum of product liability coverage by the manufacturer and minimum of \$500,000.00 liability coverage by the product installers to protect the City of Fargo. Certification shall be provided with proposal.

Preference may be given to Proposer who has a local dealer with a reasonable amount of parts inventory for the unit that has been proposed and a complete service facility. On new models or equipment not previously purchased by the City of Fargo, the selection committee may elect to have a demonstration of the models being considered.

High Compaction Front Load Refuse Truck Proposal Specifications

1.0 INTENT

It is the intent of this specification to provide for the purchase of one (1) new and unused High Compaction Front Load Refuse Truck to be used by the City of Fargo.

The City of Fargo has evaluated different styles of High Compaction Front Load Refuse Trucks and has determined that this published specification is best suited for the City of Fargo's needs in terms of quality and features. This specification shall not be interpreted as restrictive but rather as a measure of quality and performance against which all other High Compaction Front Load Refuse Trucks will be compared.

In comparing proposals, comparison will not be confined to price only. The successful proposer will be one whose product is judged as best serving the interests of the City of Fargo when price, product, quality and delivery are considered. The City of Fargo also reserves the right to reject any or all proposals or any part thereof, and to waive any minor technicalities. A contract will be awarded to the proposer submitting the lowest responsible proposal meeting the requirements.

2.0 EQUIVALENT PRODUCT

Proposals will be accepted for consideration on any make or model that is equal or superior to the High Compaction Front Load Refuse Truck specified. Decisions of equivalency will be at the sole interpretation of the City of Fargo. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. An original manufacturer's brochure of the proposed product is to be submitted with proposal.

3.0 INTERPRETATIONS

In order to be fair to all proposers, no oral interpretations will be given to any proposer, as to the meaning of the specification documents or any part thereof. Every request for such a consideration shall be made in writing. Based on such inquiry, the City of Fargo may choose to issue an addendum in accordance with local state laws.

4.0 GENERAL

The specification herein states the minimum requirements of the City of Fargo. All proposals must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The City of Fargo will consider as irregular or non-responsive any and all proposals that are not prepared and submitted in accordance with the proposal document and specification, or any proposal lacking sufficient technical literature to enable the City of Fargo to make a reasonable determination of compliance to the specification. It shall be the Proposer's responsibility to carefully examine each item of the specification. Failure to offer a completed proposal or failure to respond to each section of the technical specification (COMPLY: YES NO) will cause the proposal to be rejected without review as non-responsive. All variances, exceptions and/or deviations shall be fully described in the appropriate section. Deceit in responding to the specification will be cause for rejection.

5.1 GENERAL

YES

NO

- 1. Successful proposer shall supply a current year, completed truck, refuse body and minimum body capacity of 28 yd³. Front Loading. Peterbilt 520 Cab over chassis, or approved equal.

5.2 SAFETY AND COMPLIANCE

- 1. Refuse body shall meet OSHA regulations with proper shielding and visible warning labels.
- 2. Complete unit shall meet all applicable standards and regulations in effect at the time of manufacture.
- 3. Vehicle must comply with the City of Fargo weight restrictions. The specifications are listed on www.fargotruckroutes.com

5.3 CAB AND CHASSIS

- 1. Premium air-ride seat for the operator.
- 2. Cab will have air conditioning and high output heater.
- 3. Cab shall have remote adjustable, heated mirrors with extra convex mirrors for additional visibility.
- 4. Frame shall have front and rear tow hooks.
- 5. Front frame shall have the capability of mounting an engine driven hydraulic pump.
- 6. Instrument panel shall have full instrumentation including hour meter, transmission temperature, and air filter restriction gauge.
- 7. Power windows, Power locks, Cruise, AM/FM Bluetooth radio.
- 8. Cab shall have tilt steering column with a 15” maximum steering wheel diameter.
- 9. Power supply and ground shall be provided for the installation of a two-way radio.
- 10. Proposer shall work with chassis manufacture(s) to ensure proper chassis specifications are complete.
- 11. Rear axle shall be 46,000 lbs., Hendrickson HMX or equivalent.
- 12. Front tire size 425/65R22.5 (20ply).
- 13. Back up camera installed in cab.

YES

NO

5.4 ENGINE

- | | | |
|--|-------|-------|
| 1. Diesel engine shall be a wet sleeve design. | _____ | _____ |
| 2. Engine shall be a minimum of 350 HP. | _____ | _____ |
| 3. Engine shall have a 120v block heater. | _____ | _____ |
| 4. Engine shall have a front PTO provision. | _____ | _____ |
| 5. All coolant hoses must be silicone. | _____ | _____ |
| 6. Clutched radiator fan. | _____ | _____ |

5.5 TRANSMISSION

- | | | |
|--|-------|-------|
| 1. Allison 3000 6 speed RDS transmission, auto neutral function. | _____ | _____ |
| 2. Heavy duty oil cooler. | _____ | _____ |
| 3. Synthetic fluid. | _____ | _____ |

5.6 CAPACITY

- | | | |
|--|-------|-------|
| 1. The body shall have a capacity, excluding the receiving hopper, of not less than twenty-eight (28) Cubic Yards. | _____ | _____ |
| 2. The hopper shall have a capacity of twelve (12) cubic yards. | _____ | _____ |

5.7 BODY DIMENSIONS

- | | | |
|--|-------|-------|
| 1. Body length shall be a minimum of 360". | _____ | _____ |
| 2. Overall length with arms down and forks in full tuck position min. 405". | _____ | _____ |
| 3. Overall length with arms down and forks in horizontal position min. 453". | _____ | _____ |
| 4. Body width outside shall be no more than 102". | _____ | _____ |
| 5. Hopper width (bottom), above guide tracks, must be no less than 75". | _____ | _____ |
| 6. Hopper width (top) must be a minimum of 80". | _____ | _____ |
| 7. Hopper length at roof must be a minimum of 90". | _____ | _____ |
| 8. Hopper depth must be a minimum of 85". | _____ | _____ |

YES

NO

5.8 BODY CONSTRUCTION

- | | | |
|--|-------|-------|
| 1. Packer body will have curved hopper and body floor with curved roof and body sides and of overhead loading design. Hopper will be designed to properly handle containers from 1-10 cubic yard capacity. | _____ | _____ |
| 2. Roof - Minimum 8-gauge high tensile steel sheet 80,000 PSI typical yield. | _____ | _____ |
| 3. Side Walls: | | |
| a) Hopper sides-minimum 3/16" AR450 abrasion resistant plate steel. | _____ | _____ |
| b) Body sides – minimum 8 gauge high tensile steel sheet, 80,000 PSI typical yield. | _____ | _____ |
| 4. Floor: | | |
| a) Hopper floor – minimum 1/8" AR450 abrasion resistant plate steel. | _____ | _____ |
| b) Body floor – minimum 1/4" AR450 abrasion resistant plate steel. | _____ | _____ |
| 5. Roof, Hopper and Side Reinforcements: | | |
| a) All external welds of hopper side bracing shall be continuous full seam. | _____ | _____ |
| 6. Floor Reinforcements: | | |
| a) Cross members shall interlace with body longitudinal to fully support the floor. | _____ | _____ |
| 7. Body Longitudinal (Long Members) - Shall be minimum of 7 gauge 80,000 PSI typical yield formed box section. | _____ | _____ |
| 8. Side Access Door - The side access door shall be located at the front side of the body with minimum opening of 26" x 29". Steps and grab handles shall be provided for ease of entry. An electrical interlock shall be provided to disable the pump whenever the side door is open. | _____ | _____ |
| 9. Roof Access Ladder - A ladder shall be provided for access to the body roof. Steps must be of "non-slip" material. | _____ | _____ |
| 10. Sliding Top Door: | | |
| a) A hydraulically-actuated sliding top door will be provided to cover the hopper for traveling to the discharge site. | _____ | _____ |
| b) The top door cylinder shall be double acting and have a minimum 2-1/2" bore x 90" stroke with a 1-1/2" diameter chrome plated rod. | _____ | _____ |

	<u>YES</u>	<u>NO</u>
c) An in-cab mounted light will be provided to indicate when the top door is not fully open.	_____	_____
11. Hopper Sump - A 20-gallon hopper liquid sump with a minimum 14" x 6" door each side or rear of the hopper will be provided for ease of clean out.	_____	_____
12. Hopper Sump Drain – A 3" sump drain valve located on the street-side and curbside shall be provided for the removal of liquid waste from the hopper sump.	_____	_____
13. Front Head Closure - A front head closure screen made of expanded metal shall be provided to prevent loose debris from entering the area in front of the packer and to prevent unauthorized entry by non-service personnel.	_____	_____
14. The body shall be equipped with a rear hinge style to allow for the manual raising of the body for serviceability. Two (2) interconnected body props will be provided to hold the empty body in a partially raised position for servicing the unit. When the props are released and the body is raised, the props automatically position themselves in the support pockets.	_____	_____
15. A plastic shovel and bracket shall be mounted to the rear of the packing blade for the sump area cleanout.	_____	_____
16. A single 20 lb. fire extinguisher shall be provided and be readily accessible.	_____	_____

5.9 PACKING

1. A hydraulically-actuated packer shall clear the hopper of material with a maximum cycle time of thirty seconds.	_____	_____
2. The packing panel face will be a minimum 3/16" AR450 abrasion resistant plat steel. The packer will be reinforced with any combination of structural members.	_____	_____
3. Packing mechanism guide rails:		
a) The hopper zone packer guide rails (2) in the side of the body shall be comprised of 3/8" 50,000 PSI typical yield structural angle welded to 3-1/2" x 1/4" ASTM A500 Grade B structural tubing on each side of body. The structural tubing shall be of a continuous piece the full interior length of the hopper, 128" long.	_____	_____

	<u>YES</u>	<u>NO</u>
b) Abrasion resistant wear bars, AR500 abrasion resistant with typical 184,000 PSI tensile strength and 145,000 PSI yield strength x 500 BHN, shall be clad to the hopper zone guide rails.	_____	_____
c) The ejection zone guide rails shall be high grade 3/8" structural tube.	_____	_____
d) The packer panel shall be guided on each side of the body with high grade structural tubing clad with AR500 abrasion resistant wear bars.	_____	_____
4. Bolt-on lugs:		
a) The packer panel shall be provided with bolt-on lugs for each of the two (2) packing cylinders. Cylinder removal may be accomplished by either pulling the pins or by removing the entire bolt-on lugs.	_____	_____
b) The body front head shall also be provided with bolt-on lugs for packing cylinders.	_____	_____
5. Packer cylinders:		
a) The packer will be hydraulically actuated by two telescopic cylinders with 5" minimum bore.	_____	_____
b) Packer cylinders shall have spherical bearings on both ends.	_____	_____
c) The Packer cylinder grease zerks that are located on the rod and base end shall be equipped with a remote lube system that is accessible from the ground.	_____	_____
6. Packing force – minimum cylinder compaction force shall be 105,000 pounds.	_____	_____

5.10 TAILGATE

1. Tailgate must be one piece; top hinged and shall open approximately 4° above horizontal.	_____	_____
2. Tailgate back sheets shall be constructed of a minimum, 80,000 PSI typical yield steel.	_____	_____
3. Tailgate side sheets shall be constructed of a minimum 80,000 PSI typical yield steel.	_____	_____
4. The tailgate shall be reinforced by a minimum 1/4" 80,000 PSI typical yield, horizontal boxed braces.	_____	_____
5. The tailgate will be secured to the body by two (2) sets of hinges.	_____	_____

	<u>YES</u>	<u>NO</u>
6. The Tailgate hinge grease zerks shall be equipped with a lube system that is accessible from the ground.	_____	_____
7. A heavy duty rear door positive seal of rubberized gasket material will be installed the full length of the bottom and a minimum of 36" up the sides of the tailgate to prevent leakage.	_____	_____
8. The tailgate shall be secured in the closed position by means of a fully automatic latching mechanism actuated by a separate control in the cab.	_____	_____
9. Hydraulic tailgate:		
a) The tailgate shall be raised and lowered hydraulically actuated by two (2) double acting cylinders with a minimum bore of 2", hardened chrome plated rod. Cylinder design shall also include an orifice fitting in the base port which will prevent the rapid descent of the tailgate in the event of a hydraulic failure.	_____	_____
b) The tailgate shall be locked by two (2) lock cylinders with a minimum bore of 3", hardened chrome plated rod. Lock and tailgate raise cylinders shall be actuated by controls in the cab.	_____	_____
10. All lights will be recessed into the tailgate. Clearance, backup, backup camera and directional lights shall be, anti- shock mounted in a protective housing. The whole unit will be "pop-out" and replaceable.	_____	_____
11. An in-cab light and audible alarm will be provided to indicate that the tailgate is not fully closed.	_____	_____

5.11 LIFT ARMS

1. The lift arms will be 3" x 8" box reinforced type construction rated and capable of lifting 8,000 pound gross container and payload.	_____	_____
2. Lift arms shall be capable of lifting loaded containers from a truck dock with 9' maximum pocket height.	_____	_____
3. Lift arm cycle time will be approximately 15-25 seconds.	_____	_____
4. Pick-up, dump, and disengagement will be done without the need for assistance and without the driver leaving the cab.	_____	_____
5. The lift arms, during the dump cycle must not obstruct or interfere with the opening of the truck cab doors on either side.	_____	_____
6. The two (2) rigidly-constructed lift arms will be held tight to the torque tube.	_____	_____

	<u>YES</u>	<u>NO</u>
7. The arm torque tube will be mounted in four (4) split bearing blocks with four (4) replaceable split bushings with grease provisions.	_____	_____
8. Lift arm hydraulics:		
a) The lift arms will be hydraulically actuated by two (2) double acting cylinders 4-1/2" bore, chrome plated rod.	_____	_____
b) The cylinders will be located outside the body at the body floor level and directly attached to the lift arms.	_____	_____
9. Container Forks:		
a) Two (2) 1-1/2" x 51" grip high tensile, 50,000 PSI typical yield forks shall be welded to a 4-1/2' O.D. x 3/8" wall C-1018 Seamless tubing fork cross shaft assembly. This assembly shall include rubber bumpers to reduce impact and prevent damage to containers.	_____	_____
b) Fork cross shaft assembly shall be attached to the arms with two (2) split bearing blocks with replaceable split bronze bushings fitted with grease provisions.	_____	_____
10. Fork Hydraulics - The forks will be hydraulically actuated by two (2) double acting cylinders, chrome plated rod.	_____	_____
11. Forks shall be designed to provide the necessary dump angle to assure complete discharge of materials from the refuse containers.	_____	_____
12. Lift arms shall be brought to a smooth stop in the raised and lowered position by use of cushioned hydraulic arm cylinders.	_____	_____
13. Heavy duty bolt-on hard rubber arms stops located at the side of the body will cushion and prevent over travel of the lift arms.	_____	_____
14. Maximum height with the lift arms raised in the full up and forks fully tucked position will be 13'6" (based on a chassis rail height of 42").	_____	_____
15. An in-cab mounted warning light will be provided to indicate when any part of the arms are raised above the body.	_____	_____

5.12 HYDRAULICS

1. The maximum operating pressure of the system will be 2500 PSI.	_____	_____
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	<u>YES</u>	<u>NO</u>
2. The hydraulic pump shall be a front engine, crank driven, Denison single vane pump with electronic over-speed control. The packer panel operation shall be limited to a flow 52 GPM @ 1500 RPM in neutral or foot on brake. Pump shall comply with specification 219-2303 or equal.	_____	_____
3. Pump-to-body hard plumbing shall be provided and shall be securely supported and clamped to prevent vibration, abrasion, and excessive noise. Flex hoses shall be provided at each end of the hard plumbing to provide adequate flexure to prevent hydraulic leaks.	_____	_____
4. Hydraulic Hoses-All hydraulic hoses shall conform to S.A.E standards for designed pressure. Bends shall not be more than recommended by S.A.E. standards. Flat Spots in hoses will not be acceptable.	_____	_____
5. Hydraulic Oil Reservoir:		
a) The hydraulic circuit shall consist of (2) controlling valves. The packing, arms raise/lower, and the fork valve sections will be located under the mid body on the street-side of the unit. This valve will be protected with a steel cover to prevent contamination and damage. This valve assembly shall consist of a relief to prevent overload damage to the body. The tailgate cylinders, top door cylinders, and the tailgate lock cylinders shall be controlled by a valve located on the street-side rear body side skirt. This valve shall be an electric over hydraulic valve with in cab controls to prevent the operator from exiting the cab to operate. This valve shall also be protected by with a steel cover. These vales shall have a minimum capacity of 50 GPM @ 2500 PSI and designed to properly operate all the hydraulic components. Hydraulic valves located behind the cab near high-temperature engine exhausts are not acceptable due to the difficulty of servicing and the potential risk to hydraulic components due to excessive engine temperatures.	_____	_____
b) The tank shall be complete with a screened fill pipe and cap, filter breather, shut off valve, oil level sight, and temperature gauge.	_____	_____
c) The hydraulic system shall be protected by a three (3) micron, in tank, return line filter along with a 100 mesh (140 micron) reusable oil strainer in the suction line.	_____	_____

YES

NO

- d) The return line filter shall also include an in-cab filter by-pass monitor which shall alert the operator or service personnel when the filter is need of replacement.
- e) A hydraulic pump shut down system shall also be included which shall prohibit prolonged operation of the hydraulics when the filter is in the bypass mode.

5.13 CONTROLS

- 1. Arm, fork, packer, top door, tailgate raise, and tailgate lock controls shall be provided. Arm and fork movement shall be accomplished by an air over hydraulic, self-centering joystick that returns to the neutral position when released. An arm rest shall be provided for operator comfort. Packer, top door, tailgate raise, and tailgate lock controls shall be air toggle type. All controls shall be located inside the cab within easy access to the driver. A separate in-cab control shall be provided for tailgate lock function.
- 2. Manual joystick operation available to the operator.
- 3. All controls shall be properly labeled and indicate the direction of travel (i.e., arms up, arms down, etc.) with warning lights to indicate use.
- 4. Light on during hydraulic pump activation visible from operator seat.

5.14 ELECTRICAL

- 1. A mobile controller with control center and display shall be provided in the cab to monitor system functions and operation of the truck. This controller shall be able to withstand the vibration, moisture, dirt ingress, and climate variations that are present in the cab of the vehicle. The mobile controller shall be installed inside the truck cab and shall display self-diagnosing error codes in readable text format which identify the potential trouble source.
- 2. All electrical wiring connectors to be automotive double-seal, with wiring in split convoluted loom. All wiring connections to be soldered with rubber molded covering or crimp type connectors with shrink wrap. Unprotected wiring in any application is unacceptable.

YES

NO

3. All switches not manually operated shall be proximity in type. Mechanical switches are not acceptable. _____
4. All lights shall be LED plus mid body turn signals on each side of the body and a center brake light on the rear. _____
5. A LED 360° strobe light along with front and rear strobes shall be provided. _____
6. A hopper light illuminating the hopper area shall be provided and controlled by an on/off switch in the cab. _____
7. Backup lights fender lighting to come on in reverse. _____
8. Camera in the hopper to view hopper area. _____

5.15 REAR UNDERRIDE GUARD

1. The body shall be equipped with a rear underride guard as standard equipment, to meet Federal Motor Carrier Safety Regulation. _____

5.16 MAINTANCE

1. All system components are easily accessible and suitable for maintenance and repair with common hand tools. Grease fittings shall be incorporated into banks that are accessible from the standing position on the ground. _____
2. One operator and parts manual from the truck and refuse body manufacture. _____
3. One complete repair manual including electrical schematics for the refuse body and all subcomponents. _____

5.17 WARRANTY

1. One year all-inclusive warranty on chassis. _____
2. One year all-inclusive warranty on refuse body. _____
3. Please provide warranty details on the form provided. _____

5.18 ACCESSORIES

1. Fire extinguisher and triangles. _____

High Compaction Front Loading Refuse Truck Warranty:

Base Manufacture: _____

Engine: _____

Hydraulics: _____

OTHER: _____

Proposal Sheet
2024 High Compaction Front Load Refuse Truck
City of Fargo

Company Name: _____

Packer Make: _____

Model: _____

Chassis Make: _____

Model: _____

Delivery Date

Chassis Delivery Slot Date: _____

Body build timeline from Chassis delivery: _____

Date of Delivery: ____/____/2024

High Compaction Front Load Refuse Truck Price: \$ _____

Trade - in Value: \$ _____

Navistar 4900 Rear packer

Estimated Hours: 25,718

(City of Fargo reserves the right to accept/reject trade – in value)

High Compaction Front Load Refuse Truck/ Less Trade – In Value \$ _____

(Signature)

(Title)

(Date)

(Phone)