

**WARREN COUNTY FINANCE DEPARTMENT
WARREN COUNTY ADMINISTRATIVE OFFICE BUILDING
201 LOCUST STREET, SUITE 2
MCMINNVILLE, TENNESSEE 37110
PHONE (931) 473-2381 FAX (931) 473-0635**

**SPECIFICATIONS FOR FRONT END LOADER
FOR THE
WARREN COUNTY SANITATION DEPARTMENT**

Sealed bids, subject to the conditions contained herein, will be accepted by the Warren County Financial Management Committee at the Warren County Administrative Building, Office of the Finance Department, 201 Locust Street, Suite 2, McMinnville, Tennessee, 37110, up to but no later than 10:00 A.M. Central Time on Thursday, September 12, 2013 and then publicly opened and read for a new and unused hydraulically actuated partial pack front end loader for the Warren County Sanitation Department.

Specifications are as follows on the attached sheet and all bids submitted must meet or exceed these specifications.

Bid must include delivery to the Warren County Sanitation Department.

Bid must also specify Warranty Information.

DOES YOUR BID MEET OR EXCEED ALL SPECIFICATIONS EXACTLY AS WRITTEN? IF NO, PLEASE LIST EXCEPTIONS.

YES NO (Please Circle One)

No bidder may withdraw his bid for a period of Sixty (60) Days after date set for opening of the bids. In case of tie bids, the Financial Management Committee reserves the right to negotiate with the bidders or reject any or all bids. Bids will be awarded accordingly as prescribed by law, which states lowest or best. A Supreme Court ruling states that the discerning of best lies solely on those requesting the bid and not the bidder. The right is reserved as the interest of Warren County, Tennessee may require to accept or reject any or all bids received, to accept or reject any item thereon, to waive any informalities in bidding, and/or to abandon or postpone this project without any obligation to bidders.

**PUBLIC NOTICE
TITLE VI OF THE 1964 CIVIL RIGHTS ACT**

“No person in the United States shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.”

BIDS MUST BE SIGNED AND DATED TO BE VALID

DATE: _____

FIRM NAME: _____

BY (SIGNATURE): _____ PRINT NAME: _____

TITLE: _____

ADDRESS: _____

PHONE NUMBER: _____ FAX NUMBER: _____

E-MAIL ADDRESS: _____

BID: MAKE/MODEL: _____

BID PER UNIT: _____

BIDS MUST BE SEALED AND CLEARLY MARKED: "BID ENCLOSED-SANITATION DEPARTMENT FRONT END LOADER"

**BID SPECIFICATIONS
FOR FRONT LOADING REFUSE COLLECTION BODY**

INTENT:

This specification describes a hydraulically actuated partial pack front loader with a container hoisting device capable of handling 1-10 cubic yard containers with side pockets. The body shall be capable of compacting and transporting refuse to a landfill or transfer station and discharging the load by means of hydraulically ejecting the load from the body.

GENERAL TERMS:

All equipment furnished under this contract shall be new, unused and the same as the manufacturer's current production model. Accessories not specifically mentioned herein, but necessary to furnish complete unit ready for use, shall also be included. Unit shall conform to the best practice known to the body trade in design, quality of material and workmanship. Assemblies, sub-assemblies and component parts shall be standard and interchangeable throughout the entire quantity of units as specified in this invitation to bid. The equipment furnished shall conform to ANSI Safety Standard Z245.1-1992.

GUARANTEE:

Bidder shall state his normal warranty and extended warranty where available.

PARTS MANUAL:

Bidder shall furnish a complete parts, maintenance, and operator's manual with each body sold.

Bidder shall complete every space, in the specification's bidder's proposal column, with a check mark to indicate if the item being bid is exactly as specified. If not, the "NO" column must be checked and a detailed description of the deviation shall be listed on a separate sheet.

YES **NO**

BODY SPECIFICATIONS

A. CAPACITY

1. The partial pack front loader body shall have a body capacity, excluding the receiving hopper, of not less than 28 cu. yd.
2. The hopper shall have a capacity of twelve (12) cubic yards, min.

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B. BODY DIMENSIONS

1. Body Length, including cab shield: 352".
2. Overall length with arms down and forks in horizontal position: 453".
3. Body width, outside (maximum): 96".
4. Body height above chassis rail, arms down (maximum): 107".
5. Hopper width (bottom) (minimum): 80".
6. Hopper length at roof (minimum): 94".
7. Hopper depth (minimum): 91".

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- C. CONSTRUCTION:** Packer body will have flat 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. Body shall be equipped with front head closure screen.

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____ _

- D. ROOF:** Minimum 8 gauge high tensile steel sheet (80,000 PSI minimum yield).

____ _

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YES **NO**

E. SIDE WALLS

1. Lower hopper sides - minimum 3/16" AR400 abrasion resistant steel plate, 184,000 PSI minimum tensile strength.
2. Upper hopper sides - minimum 8 gauge high tensile steel sheet, 80,000 PSI minimum tensile strength.
3. Body Sides - minimum 8 gauge high tensile steel sheet, 80,000 PSI minimum yield.

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F. FLOOR

1. Hopper floor - Minimum 1/4" AR400, 184,000 PSI minimum tensile strength.
2. Body floor - Minimum 1/4" AR400, 184,000 PSI minimum strength.

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G. HOPPER SIDE REINFORCING

1. The bottom side brace shall be 7 gauge formed 6" x 2" channel, 50,000 PSI minimum yield.
2. Lower and intermediate side bracing - minimum of five (5) 11 gauge 80,000 PSI minimum yield 7 1/4" x 1 1/2" formed angles of lap construction.
3. Upper hopper side braces (2) shall be 11 gauge formed 5 3/4" x 1 1/8" channel, 80,000 PSI minimum yield.
4. All external welds of hopper side bracing shall be continuous full seam.

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H. FLOOR CROSS MEMBERS

1. Cross Members shall be 6" x 3", 7 gauge 80,000 PSI formed channel. Cross members

shall be full width, single piece construction. _____

2. Cross members shall interlace with body longitudinals to fully support the floor. _____

I. BODY LONGITUDINALS: Shall be minimum 7 gauge 80,000 PSI minimum yield formed box section. _____

J. SIDE ACCESS DOOR: The side access door shall be located at the front street side of the body with a minimum opening of 27" x 29½" (796.5 in²). Steps and grab handles shall be provided for ease of entry. Electrical interlocks shall be provided to disable the pump whenever the side door is open _____

K. ROOF ACCESS LADDER: A ladder shall be provided on the rear of the tailgate for access to the body roof. Steps must be of a non-slip material and bottom step must be no higher than 28" above ground. _____

L. SLIDING TOP DOOR

- 1. A hydraulically actuated sliding top door will be provided to cover the hopper for traveling to the discharge site. _____
- 2. The top door cylinder shall be double acting and have a minimum 2½" bore x 90" stroke with a 1½" diameter chrome plated rod. _____
- 3. An in-cab mounted light will be provided to indicate when the door is not fully open. _____
- 4. Top door to be constructed of 12 gauge hot rolled sheet with 2" x 2" x ⅛" structural tube frame. Door shall be reinforced to withstand packing forces generated within the body. _____
- 5. The door hat channel guide track shall be constructed of a minimum 7 gauge 80,000 PSI minimum yield steel. _____

M. HOPPER SUMP: A 32 gallon hopper liquid sump with a 14" X 5.5" door on each side of the hopper will be provided for ease of cleanout. A 3" sump drain valve shall be provided. _____

N. SERVICE LIFT: Body shall be equipped with service hoist with a rear hinge to allow for raising of a empty body for servicing. Two (2) interconnected aluminum body props will be provided to hold the empty body in a partially raised position for servicing. _____

YES NO

O. PACKING MECHANISM

- 1. A hydraulically actuated packer traversing a minimum of 83½" into the body, from the front head, shall clear the hopper of material with a maximum cycle time of twenty-six (26) seconds. _____
- 2. The lower packing panel face will be a minimum 3/16" AR400 184,000 PSI minimum tensile strength, abrasion resistant steel plate. The upper vertical face will be a minimum 7 gauge, 80,000 PSI minimum yield. The packer will be reinforced with a combination of structural members for maximum rigidity. _____
- 3. Packing mechanism guide rails
 - a. The hopper zone packer guide rails (2) in the side of the body shall be comprised ⅝" 50,000 PSI minimum yield formed channel welded to 3½" x ¼" 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. _____
 - b. Abrasion resistant wear bars (145,000 PSI minimum yield) shall be clad to the hopper zone guide rails, each side, as follows:
 - i. Bottom (lower) track wear bar, ¼" thick x 3½" wide located 3½" above floor at corner. _____
 - ii. Top (upper surface) track wear bar, ¼" thick x 2½" wide. _____
 - iii. Outer (vertical surface) track wear bar, ¼" thick x 2½" wide. _____
 - c. Ejection zone guide rails shall be ⅝" 50,000 PSI minimum yield formed channel welded to the full length 3½" x 3½" x 3/16" ASTM A500 Grade B structural tube. A ¼" x 2½" HRS wear bar shall be welded to the inside vertical surface of the structural tube. The top wear surface shall be clad with ¼" X 3½" H.R.S. steel. _____

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|----|--|-------|-------|
| 4. | The packer panel shall be guided on each side of the body with 3" x 6" x 1/4" ASTM A500 Grade B structural tubing clad with 145,000 PSI minimum yield abrasion resistant wear bars in the following manner: | _____ | _____ |
| a. | Bottom (lower) packer panel wear bar to be 3/8" thick x 3" wide x 41" long. | _____ | _____ |
| b. | Top (upper surface) packer panel wear bar to be 1/4" thick x 3" wide x 41" long. | _____ | _____ |
| c. | Vertical surface packer panel wear bars (2 each side), located below the structural tubing shall be 1/4" thick x 2" wide x 18" long. | _____ | _____ |
| 5. | a. The packer panel shall be provided with bolt-on lugs for each of the two (2) packing cylinders. The cylinders shall be attached to the packer panel lugs via two inch (2") diameter pins. Cylinder removal may be accomplished by either pulling the pins or by removing the entire bolt-on lugs. The lugs shall be attached to the packing panel with six (6) 3/4" diameter bolts for each lug assembly. | _____ | _____ |
| b. | The body front head shall also be provided with bolt-on lugs for packing cylinders. The lugs shall retain each cylinder pin with four (4) 3/4" diameter bolts. | _____ | _____ |
| 6. | a. The packer will be hydraulically actuated by two (2) double acting Rosenboon telescopic cylinders with rods hardened to 50 HRC and rod scrapers, 5 1/2" bore x 182" stroke. | _____ | _____ |
| b. | Packer cylinders shall have spherical bearings both ends. | _____ | _____ |
| c. | The Packer cylinder grease zerks located at the rod and base end of the cylinder shall be equipped with a remote lube system that is accessible from the ground. | _____ | _____ |
| 7. | Packing force - minimum cylinder compaction force shall be 105,000 pounds. | _____ | _____ |

P. BUSTLE TAILGATE

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|----|---|-------|-------|
| 1. | Tailgate must be one piece, top hinged and shall open approximately 30° above horizontal. | _____ | _____ |
| 2. | Tailgate shall be constructed of a minimum 10 gauge, 80,000 PSI minimum yield on rear walls. | _____ | _____ |
| 3. | The tailgate shall be reinforced by a minimum 1/4" 80,000 PSI minimum yield, horizontal boxed braces. | _____ | _____ |
| 4. | The tailgate will be secured to the body by two (2) sets of hinges with 2" pins at the roof line. The Tailgate hinge grease zerks shall be equipped with a remote lube system that is accessible from the ground. | _____ | _____ |
| 5. | A heavy duty rear door positive seal of rubberized gasket material will be installed the full length of the bottom and 68" up the sides of the tailgate to prevent leakage. | _____ | _____ |
| 6. | 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. | _____ | _____ |
| 7. | a. The tailgate shall be raised and lowered hydraulically actuated by two (2) double acting cylinders with a minimum bore of 3" x 28 1/4" stroke with 1 1/2" diameter 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" x 3 5/8" stroke with 1 1/2" diameter hardened chrome plated rod. Lock and tailgate raise cylinders shall be actuated by separate controls in the cab. | _____ | _____ |
| 8. | All lights will be LED type recessed into the tailgate with the lens flush with the outer skin. Clearance, backup and directional lights shall be a Lexan lens, shock mounted in a protective housing. The whole unit will be pop-out and replaceable. All vehicles will meet FMVSS #108 and State lighting and reflector requirements. | _____ | _____ |
| 9. | An in-cab mounted light and audible alarm will be provided to indicate that the tailgate is not fully closed and locked. Physical tell-tale devices must be included to indicate that the tailgate is locked. | _____ | _____ |

YES **NO**

Q. LIFT ARMS

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|----|--|-------|-------|
| 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 10' maximum pocket height. | _____ | _____ |
| 3. | Lift arm cycle time will be approximately 18-20 seconds | _____ | _____ |

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|-----|---|-------|-------|
| 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. | Two (2) 3" x 8" rigidly constructed lift arms will be clamped to a 4" diameter rear torque tube. | _____ | _____ |
| 7. | The arm torque tube will be mounted in four (4) sets of split bearing blocks with four (4) sets of replaceable split bronze bushings with grease provisions. The split bearing blocks will be rigidly welded to the lower front of the body. | _____ | _____ |
| 8. | a. The lift arms will be hydraulically actuated by two (2) double acting cylinders 4½" bore x 41½" stroke with a 2½" diameter induction hardened and 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. | a. Two (2) 1½" high tensile, 50,000 PSI minimum yield forks shall be welded to a 4½" O.D. x ¾" 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. | The forks will be hydraulically actuated by two (2) double acting cylinders, 4" bore x 25" stroke with a 2" diameter induction hardened and chrome plated rod and fork stops to limit travel of the forks in the dumping operation. | _____ | _____ |
| 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. | _____ | _____ |
| 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. | _____ | _____ |

YES **NO**

R. HYDRAULICS

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|----|---|-------|-------|
| 1. | The maximum operating pressure of the system will be 2500 PSI. | _____ | _____ |
| 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 of 52 GPM @ 1500 RPM in neutral or foot on brake. | _____ | _____ |
| 3. | All hydraulic tubes will be securely clamped to prevent vibration, abrasion, and excessive noise. | _____ | _____ |
| 4. | All hydraulic hoses shall conform to S.A.E. standards for designed pressure. Bends shall not be less than recommended by S.A.E. standards. Flat spots in hoses will not be acceptable. Fabric guard covering shall be installed over all high pressure hoses. | _____ | _____ |
| 5. | a. The hydraulic oil reservoir shall have a minimum capacity of 47 gallons filled with 41 gallons of hydraulic fluid. | _____ | _____ |
| | b. The tank shall be complete with a screened fill pipe and cap, filter breather, clean out cover, shut off valve and 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. | _____ | _____ |
| | 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 in need of replacement. | _____ | _____ |
| 6. | a. A hydraulic pump shut down system shall also be included which shall prohibit prolonged operation of the hydraulics when the filter is in bypass mode. | _____ | _____ |
| | b. The hydraulic circuit shall consist of two (2) controlling valves. The packing, arms raise/lower, and fork valve sections will be controlled by a valve under the mid body on the | _____ | _____ |

street side of the unit. The valve will be protected with a steel cover to prevent contamination and damage. This valve assembly shall provide a relief to prevent overload damage to the body.

- c. The tailgate cylinders, top door cylinders, and the tailgate lock cylinders shall be controlled by a valve the street side rear body skirt. This valve will be electric over hydraulic with in-cab controls to prevent the operator from exiting the cab to operate. This valve shall also be protected with a steel cover.
- d. These valves shall have a minimum capacity of 50 GPM @ 2500 PSI. 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 hydraulics due to excessive engine temperature.

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S. CONTROLS

- 1. Arm, fork, packer, top door, body hoist and tailgate raise air 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 control levers and joystick shall be located inside the cab within easy access to the driver.
- 2. Each control handle shall be properly labeled and indicate the direction of travel (i.e., arms up, arms down, etc.) with warning lights to indicate Tailgate Open, Top Door Closed, and Arms Above Cab.

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T. ELECTRICAL

- 1. A mobile controller with control center and display shall be provided in the cab to monitor systems 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 controller shall use solid-state technology with no mechanical relays or switches inside the controller. This mobile controller will be installed in the truck cab and shall display self-diagnosing error codes in a readable text format which identify the potential trouble source. Both audio and text alerts must be made available to aid in locating trouble source.

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YES NO

- 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.
- 3. All switches not manually operated shall be proximity in type. Mechanical switches are not acceptable.

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U. LIGHTING

- 1. Clearance, back up, and directional lights shall be Lexan lens, shock mounted in a protective housing. The whole unit shall be pop out and replaceable and LED in design.
- 2. All lights shall be provided in accordance with FMVSS#108, plus mid body turn signals on each side of the body and a center brake light on the rear.
- 3. Body shall be equipped with rear strobe light with in-cab switch.
- 4. Body shall be equipped with one (1) hopper floodlight with in-cab switch.

_____	_____
_____	_____
_____	_____
_____	_____

V. CAB SHIELD: Body shall be equipped with a full cab shield to fully protect the roof of the cab and the windshield from falling debris. Shield shall have folding front section to facilitate tilting of the cab.

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W. REAR UNDER RIDE GUARD: The body shall be equipped with a rear under ride guard as standard equipment, to meet Federal Motor Carrier Safety Regulation (49CFR393.86).

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X. SAFETY EQUIPMENT: A Safety Triangle Kit and 1st Aide Kit shall be inside cab mounted. Body shall be equipped with a full width tailgate mounted "Caution" decal. _____

Y. MOUNTING AND PAINTING

- 1. Unit shall be installed within accepted industry standards. There shall be no welding on the chassis frame. _____
- 2. The entire body shall be properly cleaned of all dirt, grease, and weld slag. Cleaning shall be in keeping with accepted industry practices. _____
- 3. A liberal coat of DuPont Corlar primer-sealer shall be applied. _____
- 4. Top coat finish shall be DuPont Imron Elite, a two-component polyurethane enamel, WHITE. _____

Z. WARRANTY: Bidder shall enclose a copy of the warranty on the body. Minimum acceptable warranty shall be 100% coverage on:

- 1. Total Body - 12 months. _____
- 2. Hydraulic Cylinders - 60 months. _____

AA. TRAINING AND DELIVERY:

- 1. Bidder shall provide at least two (2) days of training on the proper operation and maintenance of the unit. The County will determine if a lesser amount of time is needed for training. Bidder shall also provide two (2) days of factory mechanics training for a chosen mechanic. _____
- 2. State the time, in days, needed for delivery after receipt of order. _____ Days
- 3. The vehicle shall be equipped with a full supply of fuel, oil and lubricants upon delivery. _____

BB. REAR VISION CAMERA: A rear vision camera system, with a rear vision camera with in-cab flat screen color monitor shall be provided. Monitor, camera and cables shall use water proof connectors. _____

CHASSIS-CAB SPECIFICATIONS

YES NO

A. CAB: New and Unused Forward Control Chassis, Welded Steel Cab, Color: White. _____

B. ENGINE

- 1. In-line 6 cylinder, Diesel, 4-cycle, turbo-charged, cooled exhaust, 345 HP @ 1500-1700 RPM and a torque rating of 1280 lb-ft @ 100-1300 RPM, electronic, 2010 Emissions. _____
- 2. Chassis mounted aftercooler in front of radiator. _____
- 3. Vertical Exhaust DPF _____
- 4. Silicone engine hoses and tubing, including heater and radiator hoses. _____
- 5. Dry air filter with restrictor gauge. _____
- 6. 120V engine block heater, 1500 Watt. _____
- 7. Engine protection alarm system with lights and buzzers for high coolant temperature, low oil pressure, low coolant level in radiator. _____
- 8. Air cleaner; single element dry type. _____
- 9. Front crankshaft adapter for front pump. _____
- 10. Fuel / Water separator. _____
- 11. Power Leash Engine Brake. _____

C. TRANSMISSION: Allison 4500-RDS-6 Speed with synthetic transmission fluid. _____

D. FRONT AXLE & SUSPENSION

- 1. 20,000# capacity I-beam front axle. _____
- 2. 20,000# capacity multi-leaf front suspension. _____
- 3. Power steering with 20,000# capacity. _____
- 4. Shock Absorbers. _____

E. REAR TANDEM AXLE & SUSPENSION

- 1. 46,000# tandem rear axle with bronze trunnion bushings and automatic power divider. _____
- 2. 46,000# anti-sway multi-leaf camelback rear suspension. _____
- 3. Transverse torque tubes. _____

F. FRAME

- 1. Heavy-duty double channel frame, 120,000 PSI, with 1/4" frame reinforcement. _____
- 2. Front tow pin. _____
- 3. Swept-back heavy-duty front bumper with for front mount pump. _____
- 4. Front under bumper and radiator. _____
- 5. 210" WB. _____

G. BRAKES

- 1. Dual Air Brakes, Cam-type Service Brakes with Dual Air Reservoir Tanks with ABS Brakes. _____
- 2. Spring Loaded Parking Brake. _____
- 3. 37.4 CFM Air Compressor. _____
- 4. Bendix Heated Air Dryer. _____
- 5. Front Brakes - 6" x 16½" Cam-type; Rear Brakes - 7" x 16½" Cam-type. _____
- 6. Automatic Front and Rear Slack Adjusters. _____
- 7. Air Dryer, Heated. _____
- 8. Raised Rear 30/30 Brake Chambers. _____

H. FUEL TANK: Frame-mounted 80 Gallon RH with RH 6.6 Gallon RH DEF Tank. _____

YES NO

I. ELECTRICAL

- 1. 12V Electrical System with Circuit Protectors, Auto Reset Type. _____
- 2. 160 Amp Alternator. _____
- 3. Three (3) Batteries, minimum 1950 CCA. _____
- 4. Battery Cut-Off Switch. _____

J. WHEELS & TIRES

- 1. 22.5 x 12.25 front hub piloted polished disc wheels. _____
- 2. 22.5 x 8.25 rear hub piloted disc wheels. _____
- 3. 425/65R22.5 20PR tubeless front tires. _____
- 4. 11-R-22.5-14PR tubeless traction rear tires. _____

K. CAB EQUIPMENT

- 1. Tinted Glass All Around. _____
- 2. Bright Finish Heated West Coast Mirrors with Bright finish LH and RH Convex Mirror. _____
- 3. 2-Speed Electric Windshield Wipers & Washers with Intermittent feature. _____
- 4. Air Horn, Twin trumpet. _____
- 5. Roll-up LH & RH Door Windows. _____
- 6. Cab Ladder and Anti-Skid Roof. _____
- 7. Cloth Mid Back Driver's Seat & Standard Passenger Seat. _____
- 8. AM-FM Stereo Radio with Weather Band. _____

- 9. Factory Integral Air Conditioning with Heater and Defroster.
- 10. Refuse Noise Reduction Package.
- 11. One cylinder, Hydraulic Cab Lift.
- 12. Full dash instrumentation.

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L. WARRANTY: Bidder shall enclose a copy of the warranty on the chassis.

____ _

All equipment Submitted for consideration must meet or exceed all specifications listed above.