

PROPOSAL

Purchasing Agent
City of Norman
P.O. Box 370
Norman, OK 73070

_____, 2008

Purchasing Agent:

The undersigned proposes to furnish the following equipment, f.o.b., Norman, Oklahoma, ready for immediate use with all the necessary parts and accessories needed for its operation, as follows:

- Two (2) New and Unused 62,000 GVWR Truck Chassis with
- Two (2) 32 - 35 Cubic Yard Front Loading Body

The truck chassis and refuse body shall be delivered as a complete package. The successful bidder shall bid both truck chassis and refuse body. One single bidder will be responsible for the preparation and delivery of the complete package to Norman, Oklahoma.

"COMPLY" OR "EXCEPTION" MUST BE CLEARLY NOTED IN THE "BIDDER'S PROPOSAL" SECTION. A DETAILED EXPLANATION OF THE EXCEPTION(S) MUST BE PROVIDED ON A SEPARATE PAGE LABELED "EXCPETIONS - DETAIL"

BIDDER'S PROPOSAL

TRUCK CHASSIS

MANUFACTURER: _____

MODEL: _____

YEAR: Please specify, must be new and unused _____

GROSS VEHICLE WEIGHT RATING: 62,000 lbs. (minimum) _____

WHEEL BASE:

The body manufacturer's engineers should establish the wheelbase by truck loading equations so that the load on the front axle shall not exceed 12,500 lbs. and that the load on the rear axle shall not exceed 37,500 lbs., either when the unit is fully loaded or when it is completely unloaded.

CAB TO TANDEM (CT) LENGTH:

The CT length will be determined from the above wheelbase computations and will be in conformance with the truck manufacturer's wheelbase. The shortest possible CT should be used for maneuverability, however, the front axle shall not have less than 20% (twenty percent) weight distribution at any loading condition.

FRAME

Minimum 2 million in-lb. RBM to rear end of frame, factory reinforced if necessary.

AXLES AND SUSPENSION:

FRONT Steel front axle and suspension, minimum 18,000 lbs. GAWR

REAR Single speed tandem drive rear axle, minimum 46,000 lb. GAWR. Rear suspension Hendrickson HMX 460, axle spacing 54". Speed compatible to 65 mph. No spin or automatic positive locking differential on both rear axles.

NOTE Rear axle ratio to be selected by Bidder in accordance with engine and transmission provided. The ratio will provide a loaded road speed on level grade of at least 65 mph and the greatest low gear reduction is desired.

ENGINE

TYPE Cummins Diesel ISL 8.9 liter or approved equivalent and Be top 3 in its fuel efficient class. The speed limit to be set at 65 mph And a five minute idle time factory set In the engine ECM and factory pass code Shall be shared or not entered at factory

HP Gross 345 HP at 1,900 rpm (minimum)

TORQUE 850 ft. lbs.; torque at 29% minimum

FILTERS Engine shall be quipped with heavy-duty full flow replaceable element oil, fuel, air filters.

Maximum capacity cooling system available with automatic fan clutch. Must be compatible with automatic transmission System to include an extended life coolant rated to 400 °, silicone radiator hoses, by-pass hoses, coolant and heater lines. Radiator must have cutout for front mounted hydraulic pump.

Heavy-duty dry type air cleaner, with service (restriction) indicator, dash mounted.

Engine Manufacturer computer controlled engine alarm system (light and audible alarm) and shutdown system activated by low engine oil pressure, low engine coolant level, and high engine coolant temperatures or any combination of these occurrences.

Must include 5 year 150,000 mile full warranty with no deductible.

TRANSMISSION:

Allison 3000RDS 5 speed, close ratio with PTO opening

An auxiliary external transmission oil cooler shall be installed, it shall be connected in series with, but after the oil cooler in the radiator.

Must include 5 year 150,000 mile full warranty with no deductible.

ALTERNATOR: 12 Volts, 130 amperes.

BATTERY: 312 amp-hr.

STEERING: hydraulic power steering

Exhaust: Stainless steel vertical exhaust system, with stainless guard with a 45 degree turnout.

BRAKES:

Full air brakes with 13.2 cfm air compressor, and air reservoir(s) with automatic moisture ejector valve(s) unheated. Compressor to be gear driven

Shall have automatic moisture ejector valve(s) heated
Located on wet tank.

Moisture ejector valve (s) not to be mounted on bottom
of air tank if at all possible. Side or remote
locations preferred.

Spring applied parking brake with in-cab parking brake
control. Brake chambers to be mounted as high as
possible

Front and rear brakes to be Eaton single anchor pin,
Rockwell "Q" series, or approved equivalent. Out-board
mounted.

Automatic slack adjusters, front and rear.

Low air pressure warning indicators in cab

Air dryer between air compressor and the #1 reservoir,
Bendix ADIS or approved equivalent. To include heater
Dryer shall be mounted outside the frame for easy
access.

WHEELS:

Front 2 - 22.5 X LW (disc, painted white)

Rear 8 - 22.5 X 8.0 (disc, painted white)

TIRES:

Type steel-belted radial

Front 2 - 315/80R22.5 18PR Goodyear G291 Duraseal
or approved equivalent

Rear 8 - 11R22.5 Goodyear G177 Duraseal
or approved equivalent

GAUGES:

Factory installed speedometer, odometer, ammeter or voltemeter, fuel gauge, engine oil pressure, tachometer, engine hour meter, dash mounted air pressure gauge, air cleaner restriction gauges. water temperature _____

Tilt cab with factory tinted safety glass in all openings, and tinted windshield _____

The driver's seat shall be either a Bostrom Level-Air, A national Cush-N-Air or equal with single passenger seat. _____

Interior to be black in color. _____

WINDSHIELD GUARD:

An extra heavy duty windshield guard shall be securely mounted to the cab to protect against flapping container lids. It will also serve as an access ladder to the front of the truck. Must be sloped at an angle so that debris does not collect. _____

FUEL TANK:

Aluminum minimum 50 gallon frame mounted _____

ACCESSORIES:

Variable speed electric operated windshield wipers and washers _____

Right and left chrome metal heated west coast (6" X 16") with convex spot mirrors on both sides, factory installed _____

Dual sun visors _____

Seat belt _____

Cab done light _____

AC/heater/defroster _____

AM/FM Radio _____

2-way radio

Shall be E.F. Johnson model 53SL-ES mounted inside cab within easy access by driver. Must use Max Rad Antenna mounted to rear of cab or on rear window not to exceed height of cab.

Right and left side cab grab handles

Air-filter pre-cleaner

Factory installed air horns, mounted in area not to be damaged by normal operations.

Fire extinguisher model 5MB-5H Badger or equal

Hour meter

Heavy-duty front bumper with two (2) tow hooks, frame mounted

Full variable speed Pneumatic throttle control with switch for actuation with PTO

Auto-adjusting volume back-up alarm, must meet the latest issue of SAE J994, Type B, 107DBLA

Cab mounted work lights, switch mounted in cab, to be mounted at top rear corners of cab

CAMERA/MONITOR SYSTEM:

Rear view camera/monitor system shall be installed. Power requirements shall be 12 volt D.C. camera, lens to be 6.5 mm, f 1/8 C-mount. Monitor will be 6" diagonal with heavy duty cabinet and adjustable mounting base. Camera to monitor cable shall have steel braid flexible outer covering and be coaxial shielded (military-type). The cable shall be securely tied to the body and a flexible conduit shall be used at pinch points. Intec CarVision Model #9300 system or equal shall be provided.

An audible backup warning system shall be included in conjunction with the camera system when backing to warn driver of the distance of the object behind vehicle.

Coax cable shall be run independent from any other cabling, shall be run inside metal tubing or approved equivalent with the only exception of pivot points.

NOTES:

The maximum capacity cooling system shall be a system with a capacity or component(s) that will provide the greatest cooling ability for the vehicle bid, regardless of option combination. A maximum capacity cooling system offered from the manufacturer may include: a larger capacity or design of the radiator, cooling fan, engine oil cooler or any combination of these components.

Welding shall not be permitted on the frame side rails, nor shall the frame rails be cut to lengthen or shorten the wheelbase. Wheelbase modifications area allowed only by sliding the suspension with the "AF" dimension affected accordingly (excess length behind the rear axle may be cut off as required) An wheelbase and frame combination that is identical to one available from the manufacturer.

All body installation shall be done by the manufacturer. Mounting shall be chassis and body manufacturer's engineering specifications.

FRONT LOADING REFUSE BODY

BODY:

Body wiring will be tied into the circuitry provided by the OEM no mid range splices will be accepted

Total capacity not to exceed 35 cubic yards.
State capacity

Rear floor body shall be 3/16" AR-400, heat treated to pass a brinnell hardness test of 400 minimum

Body sides shall be 3/16" AS-235, heat treated to pass a brinnell hardness test of 235 minimum, and rolled into a broad radius for added strength.

Body roof shall be a minimum of 3/16" AS235 treated to pass a brinnell test of 235 minimum.

Tailgate shall be one (1) piece, bubble style, top hinged. Tailgate shall be 3/16" AS235 sheet metal, reinforced with 6" X 3/16" formed channel. It shall be secured to the body using two (2) sets of hinges with 1 1/2" hinge pins at the roofline. Door must be secured in the closed position by means of a self locking tailgate feature.

A heavy-duty rubber seal shall be installed along the bottom and partially up the side to prevent leakage.

HOPPER:

12 Cubic yard hopper capacity minimum

Lower hopper sides shall be formed of 3/16" AR235 plate (minimum) rolled into a broad radius for added strength and material flow.

Shall be made of material that is abrasion resistant, quenched and tempered to pass a brinnell hardness test rating of 235 minimum. It shall extend up 72" from the floor and extend the full length of the hopper

Upper hopper sides shall be formed from 3/16" ASTM A36 sheet metal to extend 12" above roof line to help prevent spillage.

Hopper floor shall have 4" channel cross members mounted on 12" centers and covered with a minimum 1/4" AS-400 steel

Hopper floor material shall cover the entire hopper area and extend 24" into the body

Hopper front shall be completely enclosed with expanded metal for viewing behind the packer, while keeping debris off engine and transmission.

Hopper access door shall cover an opening of 20" X 30", hinged door, driver's side front of hopper side

Sliding hopper cover shall be constructed of 14 GA, ASTM A572 GR50 sheet metal. Cover shall open automatically when raising arms, but must be closed with cab control air toggle valve

PACKER:

Full packing cycle shall not exceed 17 seconds _____

Packer shall be constructed of structural tubing frame with ¼" minimum 235 brinnell plate welded solid to the face _____

Packer skid channels shall be formed from 5/16", ASTM A572, GR50. Ship channel packer skids are not acceptable _____

Bottom, sides and top of packer skid channels shall be lined with AS-400 brinnell wear strips, plow steel flat bar is not acceptable _____

LOADING MECHANISM:

Loading arms shall be constructed from ¼" ASTM A572 GR65 and 3/8" X 3" ASTM A36 mild steel continuous weld _____

Arms shall be rated at 8,000 lb. capacity and come to a progressively slow stop before coming into contact with rubber arm stops by using an adjustable deceleration valve. Internal cushioning of arm cylinders is not acceptable _____

Arm pivot shaft shall be constructed of 4 ½" OD X ½" wall DOM round tubing. Two (2) pivot bushings, a minimum of 12" long to prevent wear of pivot shaft. Arms are to be clamped to pivot shaft, not bolted or welded _____

Forks shall be constructed of 1 ½" ASTM A572 GR50 plate, 53" long with hooked ends. Tips of the forks at the dump end are not to exceed 13'6" from the ground. _____

Fork bushings shall be brass split type, bolted to arms with 4 each - ¾", grade 8 bolts on each side. _____

Fork shaft shall be 4 ½" OD X ½" wall DOM grade steel tubing. _____

Full cycle time for arm shall not exceed 12 seconds _____

Hoist Eject

Process shall be capable of ejecting full load in under 60 seconds. The unloading process shall be achieved by hoisting the body to a 42° angle with the use of 2 telescoping cylinders mounted outside the chassis frame rails for stability. cylinders shall have a minimum of a 72" stroke.

CONTROLS:

Arm/fork controls shall consist of two (2) each; 4-way metering air controllers bolted together along with the pump control and mounted separately from the other controls

Arm/fork controller shall be mounted with an arm pad within easy reach of the driver, controllers shall communicate with the hydraulic valve air shifters in a metering function providing more control of the loading process

Fork dump control shall be locked unless the packer is fully retracted and hopper cover is fully opened to prevent dumping behind the packer and hopper cover

Packer, hoist, hopper cover and rear door operation to be provided with a 4-way, three (3) position air toggle valve. Tailgate shall not operate without also having to depress a safety valve.

All controls are to be clearly labeled with hard plastic signs and shall be mounted in a compact sheet metal enclosure.

HYDRAULICS:

Hydraulic power shall be by heavy-duty tandem section gear pump Parker/Commercial P365 or approved equivalent. Both sections will provide flow and pressure enough to run the system at idle speed. When throttle is applied, one section with dump back into the suction side of the pump allowing the remaining section to run the packer between stops.

Pump shall achieve all operational hydraulic requirements at engine idle. An over speed system will

be provided to prevent damage to hydraulic system. Over speed controls shall not be accessible by operator. _____

Return line filter shall be an in-tank, fiberglass type rated at 10 micron with clearly visible dirt indicator. Suction strainer shall be 100 micron, mounted inside the reservoir and equipped with a built in bypass for pump protection. _____

There shall be a 48 gallon reservoir with a 10 micron sealed air breather, sight gauge, a 2' gate valve on the suction outlet and a magnetic drain plug. Low mounted with access from the ground. _____

All hydraulic plumbing shall be aeroquip or approved equal "bite wire" type crimping on fittings and nylon guarded in tight areas. _____

Seamless steel tubing shall be used wherever possible and held in place with shock absorbing bolt-on clamps _____

All hose ends, tubing and adapters shall have JIC 37 degree flares. Pipe thread or flat-faced O-ring seals are not acceptable. _____

Any exposed hose shall be guarded with a hose protector _____

CYLINDERS:

Packer 2 each - 5.5" bore X 59" stroke _____

Hoist 2 each - 5" bore X 72" stroke, 3 stage _____

Arm 2 each - 4.5" bore X 36" stroke _____

Fork 2 each - 3.5" bore X 16" stroke _____

Tailgate 2 each - 3" bore X 42" stroke _____

Hopper Cover 1 each - 2.5" bore X 80" stroke _____

Arm and fork cylinders shall have spherical bearing rod ends to relieve side load. _____

All cylinders shall have straight thread O-ring boss porting. Pin material shall be stress proof C1144 or equivalent. _____

Tailgate and hoist cylinders shall have built in safety valves in case of hydraulic failure.

LIGHTING:

All lighting shall be LED type, recessed to prevent breakage.

For long life and ease of service, all clearance, tail, stop and backup lights shall be plug-in type, grommet mounted, shock resistant, water proof with lexan lens.

Lights shall be truck light or approved equivalent and conform to State and Federal regulations.

Lighting to include: 2 each 4" clear strobing LED recessed grommet mounted truck light or approved equivalent mounted to rear in lieu of beacon.

EXTERIOR PAINT:

The complete unit shall be cleaned and all weld slag shall be removed.

One (1) coat of high grade zinc oxide primer shall be applied.

Two (2) coats of Dupont Imron Green 5000, #895 enamel paint shall be applied.

MISCELLANEOUS:

A visor shall be installed to protect the remainder of the cab, it shall be able to flip up to allow for raising the cab.

An access ladder shall be provided on the right hand side of body, OSHA approved with 12" wire and 7" deep rungs

A red pilot light shall be installed to indicate "pump on", "hoist up" and "tailgate open". Audible buzzer will sound when tailgate is open and/or hoist

is raised.

All controls shall be permanently labeled using a heavy plastic or metal signs.

Automatic packer: all air operated, no electric buttons, relays or limit switches acceptable. The "start" air button sends the packer out and back at 1500 rpm. The red "stop" button stops and retracts the packer. Neutral safety disallows the throttle to accelerate if the transmission is in gear. Hopper access door lockout shall be installed as part of this option.

One (1) complete set of filters to service BOTH truck and body shall be furnished at the time of delivery of the unit.

OPERATION AND MAINTENANCE MANUALS:

Bid to include one (1) each: Operator's manual, Service manual, Parts manual and Repair manual for chassis, engine, transmission, and body on CD, if available. These manuals are to include information on all systems of the equipment, including but not limited to: electrical and hydraulic systems diagrams and diagnosis guides, engines emission systems, and any accessories. This requirement shall not delay delivery of the equipment, but payment cannot be made until all requirements are met.

WARRANTY:

Bid price to include standard manufacturer's warranty on truck chassis and body. Please describe warranty:

Include a list of all parts that are under warranty.

The bidder at the time of contracting is advised of the particular purpose for which the goods are required and that the City of Norman is relying on the bidder's skill or judgment to select or furnish suitable goods; bidder warrants that the goods shall be fit for such purpose. The City of Norman wishes to be placed on the manufacturer's mailing list to receive all special bulletins and supplements pertaining to services, repairs, problems, etc. Please provide information regarding the necessary procedure to accomplish this task.

MANUFACTURER'S BROCHURES:

Manufacturer's brochures and literature giving full detailed information on the truck chassis and body proposed by the bidder shall be included with this proposal.

TRAINING:

A manufacturer's representative of the successful bidder shall provide one (1) full working day of instruction and training upon delivery of unit for each of the following: operator, body maintenance, chassis maintenance, including drive train.

90 DAY INSPECTION:

Subsequent to the aforementioned training program, the successful bidder shall provide a trained mechanic to inspect the unit and correct any warranted deficiencies. This shall occur approximately 90 days after the training program.

ADVERTISING:

Except for emblem installed by manufacturer identifying manufacturer and model, no emblem, logo, tag or other device or design promoting the dealer or contractor may be affixed in any manner to any vehicle delivered under this contract.

ACCEPTANCE:

Delivery of a vehicle to a purchaser does not constitute acceptance for the purpose of payment. Final acceptance and authorization of payment shall be given only after a thorough inspection indicates that the unit meets contract specifications and conditions. All equipment, options and features provided must be designed, constructed, and installed to be fully suitable for its intended use and service.

If awarded the contract on the basis of the above bid, we agree to deliver the units to the City of Norman **within 120 days from the date the Purchase Order is received.** Every day, starting with the 121st day, a penalty of \$50.00 (fifty dollars) will be assessed against the company or corporation that the bid has been awarded, that the units have not been delivered. This penalty will stay enforce until the City of Norman accepts the units. The ability of the vendor to meet this delivery date will be a major factor in the award of this bid.

SIGNED: _____ BUSINESS NAME: _____

ADDRESS: _____

PHONE: _____ FAX: _____

These specifications have been reviewed and approved by:

Mike White, Fleet Management Superintendent

VENDOR LIST

Rush Truck Centers

5200 I-40 West
OKC, OK 73137
Phone: 947-2391
FAX: 946-5489
ATTN: STAN CLARK

J and R Equipment

25c North Council Road
Oklahoma City, OK 73127
Phone: 495-5110
FAX: 495-5112
ATTN: Rodney Womack

Bridgeport Truck Manufacturing, Inc.

P.O. Box 217
Bridgeport, TX 76426
FAX: (940) 683-5475
ATTN: Tony Kouri

Waste Research, Inc.

P.O. Box 998
HWY 69 South
Chouteau, OK 74337
Phone:(800) 880-9278
FAX: (918) 476-8508
ATTN: Wayne Fields

Crane Carrier Company

P.O. Box 582891
Tulsa, OK 74158
Phone: (918)836-1651
FAX: (918) 832-7348
ATTN: Butch Butler

Bruckner's Truck Sales

P.O. Box 75758
Oklahoma City, OK 73147
Phone: 942-4800
FAX: 942-4940
ATTN: Ken Schmitz