



CITY OF WEST FARGO

**SPECIFICATION SHEETS
FOR**

**(3)-2016 AUTOMATED SIDE LOADING REFUSE
COMPACTOR**

BID DATE: February 24, 2016 at 10:00 A.M.
BID LOCATION: City of West Fargo Public Works
810 12th Avenue Northwest

Bidders are required to submit their bids in accordance with the following conditions.

Only bids which are made on the original bid forms attached hereto will be considered. All blank spaces in the bid form must be filled in correctly and clearly with ink. For each and every item for which a quantity is given, the Bidder must state the price, in numbers, which he proposes for each item of work contemplated. If the proposal form is set up for alternate bidding, each bidder must bid on each alternate and shall submit only one bid.

The Owner may waive any informalities or minor irregularities in the bids or bidding, and may reject any and all bids. Any bid may be withdrawn prior to the established time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within thirty (30) calendar days after the actual date of the opening thereof, unless a different time period is specifically noted. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the successful Bidder.

The Owner will provide to bidders prior to bidding, all information which is pertinent to, and delineates and describes, the equipment to be bid upon.

The Contract Documents contain the provisions required for the bidding and delivery of the equipment. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Bidder or relieve him from fulfilling any of the conditions of the contract.

A conditional or qualified bid will not be accepted.

Each Bidder shall indicate on the Specification form whether each indicated condition is met with the equipment the Bidder is bidding. The Bidder **must** meet all items as indicated in the Specifications. Failure to meet all items will result in the bid being classified as not responsive.

Award will be made to the lowest responsive responsible bidder. The Owner reserves the right to cancel the award of any Contract at any time before the execution of said Contract by all parties without any liability against the Owner.

Each Bidder is responsible for reading and becoming thoroughly familiar with the Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any bidder from that obligation in respect to his bid.

The bid shall include the cost of furnishing all labor, materials, equipment, and supplies necessary to furnish the equipment in accordance with the Specifications.

Each Bidder shall include a list of five (5) units sold by the bidder, in the last three years. List names, phone number and contact person.

Bid envelope must clearly be marked on the outside "Automated Side loading Refuse Compactor"

(Sanitation)

CITY OF WEST FARGO
SPECIFICATIONS

2016 CHASSIS/AUTOMATED SIDE LOADING REFUSE COMPACTOR

The City of West Fargo is requesting proposals for three (3) Auto Side Load Refuse Trucks. Sealed proposals will be received by Eric Hanson, Fleet and Facilities Manager, at 810 12th Ave NW. West Fargo, ND. Upon completion of the evaluation by the selection committee an order may be placed.

The equipment shall be standard production of the latest model with standard accessories and in addition meet or exceed the following minimum specifications. No prototype, demo, used will be accepted.

***Please contact Eric Hanson at 701-306-7057 or Tom Clark (Sanitation Manager) at 701-306-8922 if there are any questions.**

Please have RFP submitted by 10:00 A.M. February 24th, 2016 at which time quotes will be opened. The address of bid opening is as follows:

West Fargo Public Works
810 12th Avenue Northwest
West Fargo, ND 58078
Attn: Eric Hanson

**Compliance or
Bidders spec.**

GENERAL

- Successful bidder shall supply a complete unit (truck and refuse body) equipped with at least a 26 yd³ capacity, exclusive of the hopper, right side loading. Automated lift arm shall be capable of lifting ANSI approved container ranging from 45 to 100 gallons. The hopper itself shall have minimum capacity of 6 yd³ _____
- The automated arm and packer shall be operated from the right side of the cab. The cab will be acceptable if it is right hand steer only _____
- The automated arm unit shall also have the ability to be operated from the ground level outside the cab _____
- Grip arms shall be pad style. _____
- The preferred reach of the arm shall be a minimum of a 144” from its full retracted position. _____
- Grease points shall be remote with centralized location for operator convenience _____

Safety

- Refuse body shall meet OSHA regulations with proper shielding and visible warning labels. _____
- Complete unit shall meet all applicable standards and regulations in effect at the time of manufacture _____
- Reflective safety tape shall run the entire length of the hopper, both sides at headlamp level. Confirm with City of West Fargo about color and size of tape _____
- The rear of the body (tailgate) shall have reflective tape coverage on the entire tailgate. Confirm with City of West Fargo about color and size of the tape _____
- Audible backup alarm _____
- All lights shall conform to federal/state standards _____

Cab and Chassis

- Cab shall possess a Cab-over design, configured for an Automated Side Loader Refuse application _____
- Cab tilt feature assisted by air or hydraulics _____
- The chassis frame shall be straight frame. _____
- Chassis bumper channel painted. _____
- Door grab handles for aiding entry/exit into/from cab _____
- Battery jumper terminals mounted externally on the battery box _____
- Battery disconnect switch _____
- Cab shall have a driver/passenger cloth air ride seat with armrest. _____
- Cab shall have air conditioning and high output heater _____
- Cab shall have tilt/telescoping steering column _____
- Cab shall have remote adjustable, heated mirrors with extra convex mirrors for additional visibility _____
- Frame shall have front and rear tow hooks. _____
- Air horn _____
- Power steering, dual type _____
- Front frame shall have the capability of mounting an engine driven hydraulic pump. _____
- Instrument panel shall have full instrumentation including hour meter, transmission temperature and air filter restriction gauge _____
- AM/FM radio. _____
- A color camera monitoring system with cameras monitoring the automated arm, hopper, and rear of truck. _____

- Zone Defense #ZD-SYS-323-1-1 or approved equal _____
- Monitor shall be mounted inside the cab. Contact the City of West Fargo for proper placement _____
- Bidder shall work with chassis manufacture(s) to ensure proper chassis specifications are complete _____

Engine

- Diesel engine shall be a wet sleeve design. _____
- Engine shall be a minimum of 320 HP _____
- Engine shall have a 120v block heater _____
- Engine shall have a front PTO provision _____
- All coolant hoses must be silicone _____
- Clutched radiator fan. _____
- 70 gallon aluminum fuel tank _____

Transmission

- Allison 6 speed 3000 series RDS transmission, auto neutral function _____
- Heavy duty oil cooler. _____
- Synthetic fluid _____

Differential

- Minimum capacity of 40,000 lb. with synthetic gear lube _____

Suspension, Tires, and Wheels

- Suspension system shall be Hendrickson HMX 46,000 lb. rear axle _____
- Front axle with 20,000 lb. taper leaf springs shall be 20,000 lb. _____
- Front tires shall be 20 ply 315/80R 22.5, steel wheel painted white _____
- that is pilot mounted _____
- Rear tires shall be 16 ply 11R22.5, Steel wheel painted white _____
- Spare tire/rim – 1 each for front and rear _____

Refuse Body

- Refuse body shall be all welded construction with curved shell design capable of retaining liquid to thirty inches _____

- All major wear items shall be made out of high abrasion resistant steel with a Brinell rating of 400 and tensile strength of 180,000 psi. This shall include such items as floor, guides, rollers, slides, channels, or any other component that will receive high wear _____
- Hopper floor and sides shall be ¼” thick _____
- Refuse body shall have a minimum capacity of 26yds³. _____
- Hydraulic crusher plate _____
- Packing mechanism (packer, cylinders, etc) shall be of adequate strength for compacting garbage to 900 pounds per yard of household waste _____
- Cycle times shall be approximately 20 seconds at idle speed _____
- Work lights for both the hopper area and picking area for automated arm _____
- Ladder with grab handles shall provide access to the hopper area _____
- Hopper shall have broom and shovel brackets preferably on the inside of a compartment door _____
- Hydraulically controlled tailgate and latches operated from inside the cab by a protected switch _____
- Tip to dump for unloading material is preferred _____
- Lift arm restraint and/or buzzer to prevent arm movement when in transit _____
- Packer body capable of packing 900 pounds per cubic yard of dry household trash. _____
- Body wall thickness shall be 10 gauge Hardox 450 _____
- Body roof thickness shall be 10 gauge, 80,000 psi _____
- Body floor is 7 gauge AR 235, 70,000 psi _____
- Dumping is to be accomplished by raising the body _____
- Dump angle shall be no less than 45 degrees _____
- Tailgate shall have a tailgate ajar audible and visual warning alarms in the cab _____
- Tailgate shall have safety props _____
- Tailgate shall have a locking mechanism to ensure door tightness other than relying on hydraulic cylinder tension _____

Lifting/Gripping Mechanism

- Gripping mechanism must be adjustable for optimum retainer retention to minimize container damage _____
- Cycle time from grip/lift to dump and back to ungrasp/original placement shall be approximately 8 seconds _____

- Grease points shall be accessible by remote centralized area _____
- Bearings shall be serviceable with minimal disassembly _____
- Mechanism shall be mounted to the chassis rather than to the body _____
- Full extension of reach shall be a minimum of 140 inches from the fully retracted position _____
- Container shall dump at no less than a 45 degrees past the horizontal position _____

Controls

- Joystick control inside the cab for automated arm system. _____
- Controls located on the lower right side of the seat for plenum and automated arm system. Controls can be reached from ground level _____
- Pack on the go _____
- Operator shall have the ability to feather the control lever to vary the speed of the arm. _____
- Operation of arm, after gripping container, will dump and return the container to the original location _____
- All dumping and ejection operations from inside cab _____

Hydraulic System

- Unit shall have a front mounted, engine driven hydraulic pump _____
- Hydraulic system shall have low level warning indicators, visual and audible _____
- Hydraulic tank shall have a capacity of 75 gallons _____
- All lift arm hydraulic controls shall be electric over hydraulic. _____
- Unit shall have the ability to work at idle. _____
- Hydraulic system shall have a suction strainer of 140 microns and return filter with a 10 micron rating. _____
- The return filter shall have an audible and visual filter bypass monitor, which shall alert the operator when the filter is in by-pass. _____
- A hydraulic pump shut down system shall also be included which shall prohibit prolonged operation of hydraulics when return filter is in by-pass mode. _____

Lighting and Electrical

- All lighting except headlight shall use LED _____

- Flashing warning system shall use signal lights and automatically switch to signals when turn signal is activated _____
- All electrical connections to be soldered and weatherproof. _____
- Peterson Smart Light system or approved equal. _____
- Electronic back-up alarm. _____
- Shall have remote start jumper studs and master cut-off switch. _____
- Unit must have arm, hopper and side mounted work lights _____
- Unit must have 2 tailgate work lights _____

Air System

- Air dryer shall be a Rockwell Wabco system saver 1200, mounted outside frame rail. _____
- Air tank shall have a heated drain valve, DV-2 or equal. _____

Maintenance

- 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. _____
- One operator and parts manual from the truck and refuse body manufacture. _____
- One complete repair manual including electrical schematics for the refuse body and all subcomponents. _____

Weight Restrictions

- Vehicle must comply with the City of West Fargo weight restrictions _____

Warranty

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

Accessories

- Fire extinguisher and triangles. _____

- Rear fenders that cover both axles, front and rear mud flaps with anti-sale brackets. _____
- One Whelan L31 LED strobe light. Confirm with City of West Fargo for proper location _____
- AIM (fuel master) system shall be installed (O'Day Equipment is the dealer for this equipment for quotes) _____

Miscellaneous

- One (1) complete service manual, digital or printed _____
- One (1) complete parts manual, digital or printed _____
- One (1) operator's manual _____
- One (1) training video (if available) _____
- Paint of truck shall be white _____
- Paint color of body shall be Bengal Tan (Heil color) _____
- Power supply and ground shall be provided for the installation of a digital 2-way radio. Installed 45 watt VHF (the latest digital version) quarter wave antenna, and the frequency to conform with the City of West Fargo. Mid States Wireless is the contact for pricing/installation. **Radio and antenna shall be supplied by the City. Call City of West Fargo for mounting locations** _____

This unit shall be delivered F.O.B. to the City of West Fargo and deemed road ready as determined by the City of West Fargo.

Packer Make: _____ Model _____
Chassis Make: _____ Model _____

Delivery time: _____ Days from order (estimate)

Bidder _____

Signature _____

Price of Auto Side Load Refuse Truck bid \$ _____ ea.

TOTAL EQUIPMENT PRICE OF 3 UNITS \$ _____

Warranty

Auto Side Load Refuse Truck:

Base Manufacture _____

Hydraulics _____

Engine

Other Warranties that apply:
