

City of Corinth Mississippi

TOMMY IRWIN, MAYOR
VICKIE ROACH, CITY CLERK
RALPH DANCE, CHIEF OF POLICE
PHONE 662-286-6644
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MUNICIPAL



BUILDING

300 CHILDS STREET
P.O. BOX 669
CORINTH, MISSISSIPPI 38835-0669

ALDERMEN	AT-LARGE
MIKE HOPKINS	WARD 1
ANDREW "BUBBA" LABAS	WARD 2
BEN ALBARRACIN	WARD 3
A.L. "CHIP" WOOD, III	WARD 4
J.C. HILL	WARD 5
MICHAEL McFALL	

March 23, 2017

Potential Bidders

RE: Specs for 14 CY Automated Side Loader Refuse Collection Truck
Bid Opening April 10, 2017, 10:00 a.m.

Dear Bidders:

Please find attached the above referenced bid documents. If you have questions regarding the date, time, and location of the bid opening, please call me at 662-286-6644. If you have questions pertaining to the bid specs themselves, please contact one of the following:

Public Works Director Clayton Mills 662-415-0855
Construction Works Manager John Michael Tucker 662-603-8585
Solid Waste Works Manager 662-643-3703

Sincerely,



Vickie Roach
City Clerk

Attachments

NOTICE TO BIDDERS

The City of Corinth, Mississippi will receive sealed bids for the following described equipment until 10:00 o'clock a.m. on the 10th day of April 2017, and shortly thereafter the bids shall be opened and read aloud.

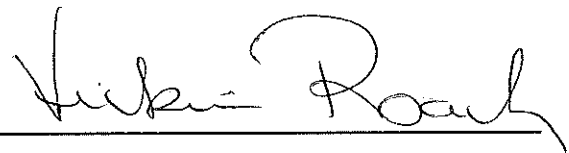
Fourteen (14) Cubic Yard Automated Side Loader Refuse Collection Truck

Complete and detailed specifications may be obtained from the office of the City Clerk, 300 Childs Street, Corinth, Mississippi (662-286-6644 or email cortax@bellsouth.net).

All bid envelopes should be clearly marked "Bid for a **Fourteen (14) Cubic Yard Automated Side Loader Refuse Collection Truck** for the Solid Waste Department."

The City reserves the right to reject any and/or all bids.

Done at the direction of the Board of Mayor and Alderman at February 7, 2017 Board Meeting.

A handwritten signature in black ink that reads "Vickie Roach". The signature is written in a cursive style and is positioned above a solid horizontal line.

Vickie Roach, City Clerk

Publish March 25, 2017 and April 1, 2017

Chassis Specifications

2018 Conventional Cab - Dual Drive – Dual Instrument cluster

Set back axle

18,000 FA

Cummins L9 350 HP @ 2000RPM, 2200 GOV RPM, 1150 LB/FT @ 1400RPM

DR 12V 160AMP 28-SI quadramount pad alternator with remote battery power sense

Cummins turbo charged 18.7 CFM air compressor with integral safety valve

Cummins exhaust brake integral with variable geometry turbo with on/off switch on dash

RH outboard under step-mounted horizontal after treatment system assembly with RH B pillar mounted vertical tailpipe

6 gallon DEF tank

Horizontal drive master advantage on/of fan drive

Cummins spin on fuel filter

1100 square inch aluminum radiator

Phillips – Termo 1100 watt//115 volt block heater

Phillips Termo 150 watt/115 volt oil preheater

Delco 12V 39MT HD/OCP starter with thermal protection and integrated magnetic switch

Allison 3000 RDS Automatic transmission with PTO provision

Magnetic plugs, engine drain, transmission drain, axle(s) fill and drain

Push button electronic shift control

Detroit DA-F-18.0-5 18,000# FL1 71.0 KPI/3.74 drop single front axle

RS – 23 – 160 23,000# R – Series single rear axle

6.14 gear ratio

Driver controlled traction differential – single rear axle

23,000# 52" Variable rate multi leaf spring rear suspension with leaf spring helper

Wabsco SS – 1200 plus air dryer with integral air governor and heater

5750MM (226") wheelbase

Calculated back of cab to rear suspension C/L (CA) – 160.45

Calculated effective back of cab rear suspension C/L (CA) – 157.5

Calculated frame length overall – 312.29

Three piece 14" painted steel bumper with collapsible ends

Front tow hooks – frame mounted

60 gallon rectangular aluminum fuel tank LH side

Detroit fuel/water separator with water in fuel sensor

Bridgestone M806A 315/80R22.5 20 PLY Radial Front Tires

Bridgestone M860A 315/80R22.5 20 PLY Radial Rear Tires

106" BBC flat roof aluminum conventional cab

Air cab mounts

2- ½ inch fender extensions

LH and RH grab handles

Hood mounted chromed plastic grille

Chrome hood mounted air intake grille

Electric air horn

Dual west coast mirrors heated/electric

Dual convex mirrors

1 piece tinted roped in windshield

In dash storage bin

Cup holders (2)

5 lb fire extinguisher

Heat/Defrost/AC

LH/RH reading lights

12V supply in dash

Basic high back air suspension driver seat with mechanical lumbar and integrated cushion extension

Basic high back air suspension passenger seat with mechanical lumbar and integrated cushion extension

Dual arm rests

2" primary and secondary air gauges

Electronic cruise control

2" electric fuel gauge

2" transmission oil temperature gauge

AM/FM/WB world tuner radio with CD player, Bluetooth,
Ipod interface, USB and Aux ports – dash mounted

Speakers (2)

Cab color A: L0006EB white elite BC

Automated Side Loader Refuse Collection Truck Body

SUGGESTED BID SPECIFICATIONS
Bidder Shall Complete the Following
If No, State Specifically the Item being offered

Section 1 APPLICATION:

- 1.1 It is the intent of these specifications to describe the minimum requirements for an auger type Automated Side Loading Refuse Compactor Body.
- 1.2 The capacity shall be 14 cubic yards, exclusive of the hopper.
- 1.3 Features standard to this unit will be furnished by the successful bidder. Body shall conform in strength, quality of material, and workmanship to that provided by the best engineering and manufacturing practices of the industry.
- 1.4 All equipment shall be new model design, assembled and ready for operation at the time of deliver.
- 1.5 Bidders shall attach a statement that the unit meets or exceeds these specifications and/or list any exceptions fully and accurately.

Section 2 GENERAL:

- 2.1 Refuse body will have a capacity of 14 cubic yards, exclusive of the hopper.
- 2.2 Auger packer system capable of packing at least 1000 pounds or more per cubic yard of dry household trash.
- 2.3 Hopper shall have a minimum capacity of 5.7 cubic yards.
- 2.4 Auger mechanism must meet all applicable standards.

Section 3 BODY CONSTRUCTION (The following specifications are minimums.):

- 3.1 The body shall be all welded construction and liquid tight up to 40 inches inside the body

- 3.2 Body wall thickness is 12 gauge A 1011, 80,000 psi strength.
- 3.3 Body roof thickness is 12 Gauge, 80,000 psi.
- 3.4 Body Floor is 3/16" AR 100 100,000 psi.
- 3.5 Sides, front, and rear to be reinforced for strength requirements.
- 3.6 Reinforcement design and characteristics dependent upon construction methods used, but they must be certified to meet the specified compacting requirements without body distortion.
- 3.7 Unit shall have a shovel holder.
- 3.8 Unit shall have a cleanout tool. Unit shall have dual cleanout doors with a dimension of 10 7/16" x 18 5/8" each.

Section 4 BODY DIMENSIONS:

- 4.1 Body height above truck frame is not to exceed 110"
- 4.2 Outside width of the body is not to exceed 96".
- 4.3 Conical body design (height and width)

Section 5 HOPPER:

- 5.1 The hopper shall have a minimum capacity of 5.7 cubic yards.
- 5.2 The hopper floor shall be a minimum of ¼ " Hardox 400 abrasion resistant steel liner.
- 5.3 The hopper bottom shall be rounded and to be a minimum of ¼ 50W resistant steel.
- 5.4 Hopper shall be equipped with 3 ½ X 1 ½ Hardox 400 guiding flat bars
- 5.5 The hopper shall have a minimum material displacement rate of 7 cubic yards per minute.

Section 6 PACKING MECHANISM:

- 6.1 The auger mechanism is to retain compacted material in the body.
- 6.2 Length of the auger mechanism is to be a minimum of 81 inches
- 6.3 Packing cycle shall be automatically activated by the trigger on the arm joystick
- 6.4 Auger RPM shall be 30 RPM by minute
- 6.5 Auger maximum torque shall be 21 000 lb per ft.

Section 7 LIFTING AND GRIPPING MECHANISM:

- 7.1 The lifting mechanism shall be capable of gripping, lifting, raising, and dumping containers from 32 to 110 gallons with the use of a joystick. The joystick shall be conveniently located to the left of the operator. An ergonomically designed padded armrest shall be provided to support the operator's arm during operation.
- 7.2 The arm will consist of two (2) main horizontal mast sections, one (1) lift section with two (2) gripper paddles.
- 7.3 The inner mast section will be 5 ½ X 16 "rectangular section and 43,3 cubic inches a section module
- 7.4 The main outer mast assembly shall be rectangular 17 ½ in height and 10 ½ in width. Main outer mast must be guided by a C shaped channel 11 ½ in width by 3 in height and thickness of 3/8 in and a section module of 62 cubic inch
- 7.5 Lifting and gripping shall be a rack and pinion mechanism for a constant speed

- 7.6 The main vertical mast shall be made from 6" x 3" x 1/4" thick 50W HSS tubing.
- 7.7 The lifting mechanism must be mounted to the chassis. Lifting mechanisms mounted between the cab and the body. Lifting mechanism mounted underneath the hopper is not acceptable
- 7.8 The grabbers shall be spring steel (3/8" X 4 ") and have the capability of gripping containers within the range previously mentioned without having to change grip arm configurations. A 5/8" X 4" 3 ply nylon belt shall be incorporated to the grippers
- 7.9 A minimal gripping force of 1 800 psi is to be applied on the container to provide container retention and also for limiting the radial force applied to prevent container damage.
- 7.10 Lifting mechanism shall be capable of a complete cycle, which includes grip, lift, dump, undump, lower, and ungrip in a maximum of 8 seconds.
- 7.11 The mechanism shall be capable of lifting, raising, dumping, and returning containers from any position within its reach.
- 7.12 The "reach" of the mechanism shall extend a minimum of 144" from its fully retracted position to its fully extended position.
- 7.13 The mechanism will be capable of lifting 500 lbs., at any point to which the arm is extended.
- 7.14 The container shall be tilted a minimum of 45 degrees past horizontal to provide for full dumping.

Section 8 TAILGATE:

- 8.1 The tailgate is to be hinged at or above the roofline using high strength steel hinges. It is to be raised for load dumping by two (2) double acting cylinders mounted on the outside of the tailgate. These cylinders shall be of a design that will prevent rapid lowering of the tailgate in case of a hydraulic component failure.

- 8.2 The tailgate cylinders shall have chrome plated rods with check valves to keep the tailgate closed. Cylinder dimensions will be 2 ½ " bore diameter, 1 ½ " rod diameter, and a 30" stroke.
- 8.3 The tailgate is to be released and locked with no moving parts other than the two (2) primary lift cylinders and associated locking mechanisms.
- 8.4 A P-type Neoprene seal with a Durometer of 70 shall be affixed to the tailgate to provide a watertight seal between the body and tailgate.
- 8.5 The tailgate must be equipped with a tailgate ajar switch with audible and visible warning devices fixed in the cab which comply with ANSI standards and warns when the tailgate is not fully closed.
- 8.6 Tailgate maintenance safety prop shall be provided on one side of the tailgate.
- 8.7 Tailgate bubble is 12 gauge ASTM A715 80,000 psi.

Section 9 EJECTION-DUMPING SYSTEM:

- 9.1 Dumping is to be accomplished by raising the body. Full eject bodies are not acceptable.
- 9.2 Dumping shall be done by means of 2 (two) under body single acting telescoping, side mounted, hydraulic cylinders capable of lifting the box when compacted to maximum capacity.
- 9.3 Hoist cylinders are chrome plated 3 stage cylinders 77" stroke. Bore diameters : 5 ½", 4 ½", 3 ½".
- 9.4 The body dump angle shall be such that all refuse in the box will be removed without sticking or bridging. Body dump angle is 45 degrees.
- 9.5 All dumping controls are cab mounted.
Control panel must be interlocked with a manual override to prevent accidental refuse discharge.
- 9.6 All dumping controls shall be operated from inside the cab.

Section 10 HYDRAULIC SYSTEM:

- 10.1 The hydraulic system is composed of two (2) piston pumps. One (1) for body functions, and one (1) for arm functions. Hydraulic pump model is Sauer Danfoss. Body functions pump maximum flow is 10, 6 gpm @ 700 rpm. Arm function pump maximum flow is 13, 4 gpm @ 700 rpm. Hydraulic system pressure relief for the body is 3000 psi and for the arm it is 2000 psi.
- 10.2 PTO (hotshift) must incorporate an over speed protection @ 1 500 RPM
- 10.3 A 10 micron absolute filter is installed in the return line.
- 10.4 Hydraulic tank is to be frame mounted and equipped with a 10 micron breather element and eye level sight gauge. Tank location will be determined by body configuration.
- 10.5 Hydraulic reservoir tank capacity must be not less than 50 US gallons
- 10.6 Hydraulic system must contain cylinders capable of performing the operation requirements set forth in these specifications.
- 10.7 Hydraulic hoses are to be SAE approved construction with hose burst pressure of 4 times working pressure and have protective coverings.
- 10.8 Hydraulic control assemblies must be located so that at no time or load conditions it becomes necessary to remove the load to service these components.
- 10.9 All cylinders must have the latest design sealing materials.
- 10.10 Unit must have protective cover on pack manifold.

Section 11 CONTROLS:

- 11.1 All compactor operation controls are to be located in the truck cab and mounted for operator convenience and comfort.
- 11.2 A speed sensor must be incorporated within the Auger mechanism allowing the auger to
- 11.3 Automatically engaged in reverse in case of jamming.
- 11.4 Arm rocker controls under the drivers seat for full functional control of the arm

Section 12 LIGHTING AND WIRING:

- 12.1 All lights and reflectors shall be in accordance with Federal and State I.C.C. Motor Vehicle Safety Standards
- 12.2 Provisions will be made for maximum visibility and may include two (2) red stop-tail lights, two (2) red turn-tail lights, and an I.D. cluster. All lights must be L.E.D.
- 12.3 A lighted license plate bracket will be provided.
- 12.4 Unit must include a hopper work light.

Section 13 PAINTING:

- 13.1 All components will be properly cleaned prior to priming. All body components are to be grit blasted.
- 13.2 All burrs and rough spots are to be removed.
- 13.3 Two (2) coats of rust inhibiting primer are to be applied prior to the finish coat.
- 13.4 Final coat to be Axalta (Dupont) Elite high gloss white.

Section 14 CAMERAS:

- 14.1 2 color cameras will be provided. One for backup and one in hopper

******* PLACE THIS PAGE AT THE FRONT OF THE BID PACKET TO ENSURE
STREAMLINED TABULATION UPON BID OPENING *******

Please state delivery in days _____

Please state price of complete mounted unit delivered FOB city of Corinth \$ _____

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