

BID FORM

To: Mayor and Board of Aldermen
City of Ridgeland
P.O. Box 217
Ridgeland, Mississippi 39158

From: _____
 (Name)

 (Address)

 (Email Address)

 (Phone #)

In accordance with the published Bid Notice, the undersigned does hereby agree to furnish the STREET SWEEPER to the City of Ridgeland, Mississippi, for the price shown on the attached listing. Unless otherwise indicated, prices will be F.O.B. Ridgeland.

Acceptance by the Mayor and Board of Aldermen shall be sufficient to constitute a valid contract.

THIS, the____ day of_____, 20____

 (Bidder)

By:_____

 (Title)

 (Signature)

**ADVERTISEMENT FOR BIDS
FOR
NEW SWEEPER TRUCK
CITY OF RIDGELAND, MISSISSIPPI**

Notice is hereby given that the City of Ridgeland, Mississippi will receive sealed bids for a **NEW STREET SWEEPER**.

UN-PRICED BID PROPOSALS will be accepted until the hour of **11:00 AM, local time, on WEDNESDAY, OCTOBER 3, 2018** in sealed envelopes **CLEARLY MARKED SOLICITATION FOR BID**, at the Ridgeland Public Works Department main office located inside Ridgeland City Hall at 304 Highway 51, Ridgeland, MS 39157, or by electronic bid submission at www.centralbidding.com . Submissions will be evaluated and vendors submitting acceptable offers will be invited to submit priced bids during the electronic reverse auction.

Bidding will be held by electronic reverse auction at **10:00 AM, local time, ON WEDNESDAY, OCTOBER 10, 2018**. Electronic reverse auction bids can be submitted at www.centralbidding.com. Please contact Central Bidding at 225-810-4814 if you have any questions relating to the electronic bidding process.

The Specifications and Contract Documents may be obtained from the Ridgeland Public Works Department main office located inside Ridgeland City Hall at 304 Highway 51, Ridgeland, MS 39157, (601) 853-2027, renee.buckner@ridgelandms.org .The Specifications and Contract Documents may also be downloaded at www.centralbidding.com for a fee. All bids must comply with the specifications provided. The City of Ridgeland reserves the right to amend the specifications and contract documents as necessary prior to bid, and agrees to notify all having requested bid packets. The City of Ridgeland reserves the right to accept or reject any and all bids and to waive any and all informalities.

Contracts for purchase will be made from the lowest and/or best bids submitted, but the Mayor and Board of Aldermen reserve the right to reject any and all bids, and accept or reject any part of a bid.

CITY OF RIDGELAND, MISSISSIPPI

BY: /s/ Paula Tierce
Paula Tierce, City Clerk

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Furnish proof of publication to: Paula Tierce, City Clerk, paula.tierce@ridgelandms.org (601-856-7113)
renee.buckner@ridgelandms.org (601-853-2027)
Ridgeland City Hall
304 Highway 51
Ridgeland, MS 39157

Send invoice to: Paula Tierce, City Clerk,
City of Ridgeland;
P.O. Box 217
Ridgeland, MS 39158
(601-856-7113)

STREET SWEEPER SPECIFICATIONS

Intent

It is the intent of these specifications to describe a street sweeper with hydraulic drives, with minimum 8.0 cubic yard hopper, 90" wide pickup head. Blower shall be belt driven, via single or Auxiliary/dual engine. The unit must be equipped with vertical digger-type gutter brooms, pressurized dust control spray system and an independent or Auxiliary/dual engine to power the sweeping functions. The chassis for this sweeper is to be sufficiently rated to transport a full load of sweeping debris at speeds up to 55 MPH. For Safety and comfort of the operator and for quick, local service along with local availability of repair parts. The chassis shall be equipped with spring suspension on both axles, dual steering, dual operator controls, and an automatic transmission. All tires shall be the same size and have dual tires on each side of the rear axle (six-wheel configuration).

The unit shall be new of current manufacture. No prototype or demo, sweepers will be accepted.

All parts not specifically mentioned which is necessary to provide a complete street sweeper shall be included in the bid and shall conform in strength, quality of materials, and workmanship to what is normally provided to the trade in general.

No deviations to these specifications will be allowed.

The City of Ridgeland will lease purchase this sweeper using five year terms with no payment due the first year and the option for the seller to buy back at the end of the term. The City will set the purchase price for the sweeper through reverse auction using central bidding at www.centralbidding.com

Bidders must indicate compliance for each item throughout the bid by writing "YES" or "NO". Failure to do so may be cause to reject the bid. All "NO" answers must be fully explained on a separate sheet of paper and be attached to and submitted with bid. Failure to explain "NO" answers may be cause to reject bid.

SWEEPER ENGINE

- _____ A. Engine shall be equipped with a full-flow spin-on oil filter, fuel filter and fuel water separator.
- _____ B. Engines to be equipped with a 3-point safety engine shutdown device that shut down the engine for low oil pressure, high coolant temperature, and low coolant level.
- _____ C. Twelve (12) volt electrical system, electrical starter and 90 amp alternator shall be provided. Sweeper shall have resettable circuit breakers and automotive fuses.
- _____ D. Auxiliary/dual engine, muffler, fuel tank, battery box, hydraulic tank and cooler to be protected by a shroud.

HYDRAULIC SYSTEM

- _____ A. Hydraulic power shall be used to operate all broom rotation and lifting functions.
- _____ B. Hydraulic pressure shall be set at 2500 PSI for all hydraulic Functions.
- _____ C. Sweeper shall utilize a multi-stage gear driven hydraulic pump, minimum 25 gallon vented hydraulic reservoir and high pressure hoses and fittings. Hydraulic reservoir to have tank mounted level and temperature indicator. Hydraulic reservoir shall be mounted above the hydraulic pump.
- _____ D. Hydraulic system to have a radiator type hydraulic oil cooler
- _____ E. Hydraulic tank shall have shut-off valves of hydraulic oil filter change.
- _____ F. Hydraulic system shall have quick disconnect relief pressure check ports mounted in the hydraulic manifold(s).
- _____ G. For safety of the operator, no sweeper hydraulic lines to run into or through the cab.

- _____ H. Hydraulic valves shall have built-in diagnostic system lighting for troubleshooting hydraulic flow and electrical power.

DUST SEPERATOR

- _____ A. A centrifugal dust separator with a minimum 29,000 cubic inch volumetric area shall be supplied inside hopper to remove airborne dust from the air stream. The dust separator shall be designed so that it will not plug with normally encountered debris.
- _____ B. The dust separator shall have a clean-out door that opens automatically and discharges debris from the separator when the hopper is raised.
- _____ C. Cable or other manual/mechanical means required for discharging debris in the separator shall not be allowed.

HOPPER

- _____ A. The volumetric capacity of the hopper shall not be less than 8.0 cubic yards. The usable capacity shall not be less than 8.0 cubic yards.
- _____ B. Hopper screen to be carbon steel, two piece saw-tooth design such that airflow will not be interrupted even in difficult sweeping conditions. Flat screens are unacceptable due to premature clogging of the screen.
- _____ C. Hopper screens must have 2 hinges on each screen, allowing the screen to drop down from one side by means of a hand winch system located in the rear tool storage compartment, providing extra safety for the operator during cleanup.
- _____ D. Dumping shall be accomplished hydraulically by tilting the hopper a minimum of 48 degrees. Contents shall be dumped to the rear of the vehicle at a height of 36 inches. Dumping system should include twin dumping cylinders with dimensions of 4"X16" or single telescoping cyclindar. Hopper floor shall be sloped 3 degrees making a total dump angle of 50 degrees minimum.
- _____ E. Hopper roof, sides, floor, rear door, separator, separator screens and bulkheads to be constructed from carbon steel.
- _____ F. Dump door to hydraulically opened, closed, and locked. Operation of

the hopper dump door to be accomplished from inside or outside the cab.

- _____ G. Inspection doors shall be provide on left and right sides of hopper. These doors shall provide an easy way to manually load debris and provide a convenient access for hopper inspection and cleaning.
- _____ H. Hopper shall be airtight through the use of rubber seals on all doors and openings.
- _____ I. Weatherproof dump switches to be located outside directly behind cab for visibility and safety during the dumping process. There shall be one switch for each function: raising and lowering the hopper to the dump position, opening and closing the dump door, and turning the 2 rear bumper mounted flood lights on for night dumping.
- _____ J. The hopper shroud shall also be design to reduce Auxiliary/dual engine noise by having a minimum of 1" thick sound dampening material attached to the inside of shroud in the engine compartment area. Sound deadening material must consists at of at least 48 Square feet of material. Shroud must be an integral part of the hopper and lift when hopper is raised. The shroud shall give the sweeper a neat, well thought out streamlined appearance. In the interest of sweeper protection, public safety and sweeper noise reduction, sweepers that do not meet all of these requirements will not be accepted.
- _____ K. The hopper roof shall be higher at the center to allow water to run off and to reduce corrosion. Hoppers with flat roofs will not be accepted.
- _____ L. The suction tube entering hopper and the pressure tube exiting the hopper shall be bolt on for easy replacement and constructed of abrasion resistant steel.
- _____ M. A hopper door open/closes switch shall be mounted on console to allow rear door to be operated from inside cab.
- _____ N. Hopper floor to be constructed with carbon steel. The roof, bulkhead, rear door, and sides shall be constructed of a minimum of 10 gaug carbon steel. The hopper floor shall minimum slope of 3 degrees

towards the rear door. The Hopper Shall Have a Body Vibrator to Ease in Dumping.

_____ O. The rear door shall include an in-cab door indicator warning light.

_____ P. The hopper shall include an in-cab hopper up indicator warning light.

BLOWER

_____ A. Heavy-duty steel blower shall be used to create air pressure and suction for removing debris from road surface. Sweepers that clean road surfaces by using suction only (pure vacuum) will not be accepted.

_____ B. Blower to be powered by the sweeper single or Auxiliary/dual engine via heavy-duty 5-groove v-belt. A belt safety guard shall be supplied.

_____ C. Blower shall have a minimum rated performance 17,000 CFM.

_____ D. Sound dampening material is required in the area of any, the Auxiliary/dual engine and blower to aid in soundproofing.

_____ E. The blower housing shall be constructed of 10 gage minimum abrasion resistant steel with the inside of the housing covered by a replaceable rubber wear liner.

_____ F. Blower housing shall have a vacuum enhancer for discharging a portion of the blast air for sweeping light materials such as leaves and paper. The vacuum enhancer shall be electrically powered by a DC actuator and controlled from a switch located on the control panel inside the cab. The vacuum enhancer shall be capable of 0-80% air diversion for maximum control.

_____ G. Blower housing shall not be an integral part of the hopper and shall be mounted parallel with the front of the hopper.

_____ H. Blower shall be mounted on sealed self-aligning anti-friction bearings. Blower shaft shall have greaseable bearings requiring ¼ ounce of grease every 250 hours to ensure maximum life expectancy. Non-regreaseable bearings are unacceptable due to sweeper environment. Blower shaft shall be a minimum of 36 inches long and 2 1/4 "diameter to reduce stress or premature bearing wear. Grease points shall be accessible from ground level.

PICKUP HEAD

- _____ A. Pickup head shall be spring balanced all steel fabricated with separate upper and lower chambers where pressurized air is blasted from the Upper chamber through an elongated blast orifice to the lower chamber.
- _____ B. The blast orifice shall be a replaceable and shall have replaceable rubber leading edge and be angled a minimum of 3 degrees towards the suction side of the pickup head. This will ensure a smooth transfer of debris be increasing pressure as the debris moves towards the suction tube. Sweepers with blast orifices that are not angled toward the suction tube will not be acceptable.
- _____ C. The pickup head shall not be less than 90 inches wide and 30 inches long giving a total head area of 2700 square inches minimum.
- _____ D. Pressure and suction hoses shall be fourteen inches in diameter and be constructed form 3/8 inch thick heavy duty molded wire reinforced molded rubber.
- _____ E. Sweeping paths shall be:
Pickup head only= 90 inches
Pickup head and one gutter broom=117 inches
Pickup head and two gutter brooms=144 inches
- _____ F. Pickup head shall be equipped with doublewide full length virgin carbide drag shoes for maximum life. Front and rear of drag shoe to be snowshoe design to follow road contour without damage. Shoes shall be interchangeable from either the left or right side. Sweepers that utilize tool grade carbide drag shoes shall not be considered.
- _____ G. Sweeping head shall be raised and lowered hydraulically by a single switch located in the cab.
- _____ H. Head to have a quick disconnect at the lower section of the head suction tube and shall have a quick connect hydrant flusher attachment to flush the upper chamber of the blast orifice and pick up head..
- _____ I. Suction transition shall include two high volume water nozzles to lubricate the suction tube to reduce clogging during sweeping operations.

_____ J. Head inlet and outlet tubes shall be bolt-in for easy replacement.

GUTTER BROOMS

_____ A. Dual gutter brooms shall be 42" minimum diameter, flattened wire filled vertical digger type for removing debris from gutter area.

_____ B. Gutter brooms to be hydraulic motor driven and shall be positioned laterally and vertically by a hydraulic cylinder and springs.

_____ C. Each gutter broom shall have an adjustment to allow downward compensation for bristle contact, pattern and wear and shall be full floating to follow street contour.

_____ D. Each gutter broom shall have lateral flexibility to swing inward 15" under the chassis when encountering the impact of an immovable object thus avoiding damage to the broom assembly.

_____ E. Each gutter broom shall be held in the up and transit position by use of a Hydraulic cylinder and an electric lock valve attachment.

_____ F. Upward motion for gutter broom storage shall be regulated by an adjustable flow control valve.

_____ G. Gutter broom disk to be recessed to prevent such items as string and small rope like material from being wrapped around and damaging the gutter broom motor shaft seal. Disk shall be designed as to allow water to drain off, therefore eliminating water damage to the gutter broom motor seals.

_____ H. A center deflector shall be provided to direct debris thrown by the gutter brooms into the path of the pickup head. Deflector shall be positioned under the belly of the sweeper and in between the gutter brooms. Deflector shall raise and lower with the pick-up head.

_____ I. Each gutter broom shall additionally incorporate a hydraulically actuated tilt capability of a minimum 27 degrees, remotely controlled from the console in the cab to allow instant adjustment for debris removal from deep gutters (such as those resulting from multiple overlays of blacktop.)

- _____ J. Each gutter broom shall be equipped with Gutter Broom Extension Override (GEO) with in-cab controls to be able to extend and retract while in sweeping mode, This will allow the gutter brooms to scrub the pavement surface in front of the pickup head. This system shall be adjustable from full extension to the curb with in-cab variable adjustments to a full retraction under the sweeper. Sweepers that only have a full extension and full traction without variable in-cab adjustments will not be acceptable. All controls shall be in-cab. At no time shall the operator have to leave the cab to activate this function. The system shall be activated by an electric linear actuator.
- _____ K. Each gutter broom motor shall have a heavy duty seal, seal slinger/protector and heavy duty bearing to extend life.
- _____ L. Each gutter broom shall have an in-cab variable speed control independent of the sweeper Auxiliary/dual engine RPM. This shall include a rocket switch for each gutter mounted on the sweeper console.

DUST CONTROL SYSTEM

- _____ A. The water pumps to produce a minimum of 40 PSI, with a minimum 5.88 gpm each. The water pumps to automatically disengage when the water supply is depleted or the pre-filter is clogged. A pre-filter filter minder shall also be provided. Pumps shall be mounted below water tank bottom level.
- _____ B. Water tank capacity not to be less than 240 gallons) and shall be constructed of polyethylene for strength and corrosion resistance.
- _____ C. A minimum 25-foot long fire hydrant fill hose shall be provided with 2.5" NST coupling to fill water tank. A minimum 2" air gap shall be provided between water fill tube and water tank. Hydrant hose shall include a hydrant wrench and hose storage rack.
- _____ D. Water system to be filtered by a 50 mesh cleanable filter with restriction indicator located between tank and water pump. For ease of cleaning, water filter to be at ground level. Water shut-off valve shall be provided to allow cleaning filter without losing water supply.

- _____ E. A minimum of 2 each adjustable spray nozzles shall be located at each gutter broom.
- _____ F. Dust suppression system to include two spray nozzles at the front axle. Left nozzle to come on when left gutter broom water is in use and right nozzle to come on when right gutter broom water is in use.
- _____ G. Each water spray function to have its own independent on/off cab controlled solenoid valve.
- _____ H. An in-cab water level gauge and an in-cab low water level alarm located on the sweeper console must give operator constant visibility of water system levels.
- _____ I. Water spray nozzles shall be provided as follows: five nozzles at pickup head, two nozzles at right gutter broom, two nozzles at left gutter broom, two nozzles in the suction tube, and two at the front axle.
- _____ J. No part of water system shall be made with ferrous metal.
- _____ K. The water system shall incorporate an air purge system for flushing water lines during freezing conditions.
- _____ L. Sweeper to be equipped with a front spray bar with 7 nozzles. Spray bar to be mounted on front bumper. Sweeper shall also have a high pressure water system with a minimum 50' high pressure hose on a retractable hose reel and handgun.

OPERATING CONTROLS AND DISPLAYS

- _____ A. Sweeper shall be equipped with dual steering and controls for left or right side operation of the sweeper.
- _____ B. Engine control and gauges shall be mounted on the left to right rotating control console inside the cab. Fixed base, non-rotating consoles are not acceptable. They shall consist of: keyed ignition, electronic throttle control, leaf bleeder control, oil pressure gauge, water temperature gauge, voltmeter, tachometer and hour meter. All gauges to be full color, high resolution display. The Display shall include diagnostic gauge with the ability to read and record engine error codes and engine load and fuel consumption.
- _____ C. Hydraulic temperature, dust control water level, leaf bleeder position

indicator, hopper tilt status, parking brake status, and sweeper standby controller status shall be displayed on full color, high resolution display mounted on the sweeper console.

- _____ D. Console to have independent switches for operating left gutter broom, tilt, GEO and variable speed, right gutter broom, tilt, GEO and variable speed, and pickup head. All switches to be lighted and have international symbols for easy identification.
- _____ E. Console to have individual switches water pump on/off switch and low water level warning light. Independent water control switches for left gutter broom, right gutter broom, pickup head, hopper, front bumper, and nozzles at front axles. All switches shall be lighted and have international symbols for easy identification.
- _____ F. Console to have independent switches for each gutter broom light, rear dump light, and safety strobes.
- _____ G. All sweeper main electrical systems to be separately fused at the system locker.
- _____ H. The console shall feature a “stand by” control that allows one touch return to sweeping after equipment selection. The standby feature shall be switch selectable to provide lift in reverse or sweep in reverse.
- _____ I. Instrument readings that are out of range including low hydraulic oil level hydraulic oil filter restriction, communication error, spray water filter dirty, spray water low, high dump angle warning, unsafe dump angle lock out, parking brake not set shall display an warning icon and sound a warning chime. Non safety chimes may be acknowledge for 90 seconds.

HAND HOSE EQUIPMENT

- _____ A. Sweeper to have an Auxiliary/dual hand hose, including engine throttle, for cleaning remote areas inaccessible to the sweeping head and for cleaning out catch basins.
- _____ B. Hand hose to be minimum 8” in diameter, 12 long, with spring boom and 52” long serrated tip collection nozzles. Hand hose shall be stored on the rear of the sweeper. Hand hose shall be rubber.

- _____ C. A block off plate to divert airflow to the hand hose shall be provided. Block off plate to fit in tool box. For operator safety, no sweeper will be accepted that requires the block off plate to be stored in the cab.

SAFTEY EQUIPMENT

- _____ A. Sweeper to meet all federal motor vehicle safety standards. All lighting must be LED.
- _____ B. Sweeper shall include two hopper safety struts that lock hopper in the raised position during maintenance. Safety struts to be permanently mounted to sweeper. Operator to manually engage and disengage struts.
- _____ C. Sweeper shall to be equipped with an LED amber strobe light with limb guard. LED Strobe to be mounted at the highest point at the rear of the sweeper.
- _____ D. The sweeper shall have two lower LED stoplights mounted into the rear bumper at a height of 35 inches. The sweeper shall also have two integral high mounted LED stoplights mounted at a height of approximately 94 inches. For protection of the lights and to make cleanup easier, the lights shall be integrally mounted in the sweeper body.
- _____ E. Two rear high mounted integral yellow alternating LED flashing lights to be provided. Light shall be mounted at a height of approximately 94 inches above the ground.
- _____ F. Sweeper shall be equipped with rear mounted slow moving vehicle emblem, backup alarm, cab mounted 5-lb fire extinguisher, and a warning triangle kit.
- _____ G. Permanent warning labels shall be provided at all hazard areas.
- _____ H. Sweeper shall be equipped with rear view camera and 7" cab-mounted color flat screen monitor with sound. System shall be capable of night vision with auto dimming monitor. Capable of continuous viewing or activated when chassis is shifted into reverse.

ACCESSORIES

- _____ A. Sweeper must have a full width steer rear bumper mounted to frame.
- _____ B. a minimum 8" chrome cab mounted parabolic mirrors shall be provided to aid operator in observing gutter brooms. They shall be mounted below the west coast mirrors on chassis doors.
- _____ C. Lockable toolbox shall be provided. Access shall be from the curb side of sweeper.

PAINT COLOR

- _____ A. The sweeper shall be painted with 1 coat of sealer/primer and 2 coats of DuPont Imron Elite polyurethane paint in the manufacturer's standard white color. Paint shall be lead free.
- _____ B. Gutter brooms, pickup head, sweeper and truck frame to be painted a semi-gloss polyurethane textured black or grey for a long life.

SWEEPER WARRANTY

- _____ A. Per manufacturer's published warranty, sweeper shall be warranted to be free of defective materials and workmanship for a period of 12 months or 1,200 hours from date of delivery. No exceptions.
- _____ B. Sweeper Auxiliary/dual engine shall be warranted for not less than 24 months or 2000 hours, whichever occurs first from date of delivery.
- _____ C. Sweeper hydraulic system (pumps, motors and fittings) shall be warranted for not less than 60 months or 6000 hours, whichever occurs first from date of delivery.
- _____ D. The sweeper dealership or manufacturer will make all repairs up to 60 months from the date of delivery. If repairs take more than 7 calendar days from the date the City notifies the dealership of a breakdown on the 8th day the dealership or manufacturer will provide and deliver a loaner sweeper of equal or greater size, capacity or quality than the one received until such time the leased sweeper is repaired and delivered back to the City. These same provisions also apply to the loaner sweeper. All sweepers delivered to the City must be operational and ready to sweep. If the seller fails to comply with these provisions they will pay to the City \$1,000.00 per day in liquidated damages for each day past the 8 day limit.

_____ E. Natural wear and tear items such as broom, tires, oil changes ect are the responsibility of the City. . If repair parts take more than 7 calendar days from the date the City orders a part from the dealership on the 8th day the dealership or manufacturer will provide and deliver a loaner sweeper of equal or greater size, capacity or quality than the one received until such time the part is delivered to the City. These same provisions also apply to the loaner sweeper. All sweepers delivered to the City must be operational and ready to sweep. If the seller fails to comply with these provisions they will pay to the City \$1,000.00 per day in liquidated damages for each day past the 8 day limit.

Bidder is not responsible to meet these warranty specifications if the sweeper has been wreaked, damaged by act of God, or damaged by City Personnel. This applies to the new sweeper and the replacement sweeper.

DELIVERY

- _____ A. The unit shall be delivered completely assembled, serviced, and ready to operate. The bidder shall have a qualified service representative in attendance with the sweeper during start up operations to make any adjustments needed to give operator instruction on the proper operation of the sweeper.
- _____ B. Bidder to state delivery date. _____
- _____ C. The bidder shall supply a complete sweeper manual. Manual shall include system/component descriptions, sweeper operation, maintenance, troubleshooting, illustrated parts listing with part numbers and schematics for the sweeper. Manual shall also include reproducible periodic maintenance schedules.
- _____ D. Auxiliary/dual engine manuals to be provided. They are to consist of operations & maintenance, maintenance schedules, component technical manual, and an illustrated parts catalog.

TOTAL BID PRICE \$ _____