

INVITATION TO BID

Sealed bids will be received by the City of Auburn, until 10:00 a.m. local time, on May 25, 2006 in the Office of the City Manager, 144 Tichenor Avenue, Auburn, Alabama, and then publicly opened and read for furnishing the following:

Tandem Drive Motor Grader

Bid specifications are attached. The City is requiring bid prices on one (1) Tandem Drive Motor Grader. Please direct any questions to Ray Pratt (334) 501-3095. Bids must be submitted on the attached form within a sealed envelope addressed:

City Manager, City of Auburn
144 Tichenor Avenue, Suite 1
Auburn, Alabama 36830

Envelope must be plainly marked on the outside as follows:

BID: One (1) Tandem Drive Motor Grader
OPENING: 10:00 a.m., local time
DATE: May 25, 2006

The City of Auburn reserves the right, as the best interest of the city may require, to award the purchase contract from any of the bids, to reject any or all bids, and to waive any informalities in bids received. Bid will be good for ninety (90) days after being opened by the City of Auburn, Alabama. The City reserves the right to revert to the State of Alabama Contract if the bid price is higher than the contracted amount through the State.

The successful bidder will note that the City pays by invoice on each Friday of the month. Invoices must be received by accounts payable at least seven working days before the scheduled check write. If you have any questions concerning billing, contact our accounts payable office at (334) 501-7237.

CITY OF AUBURN

Karen S. Broome
Purchasing Office

CITY OF AUBURN
AUBURN, ALABAMA
MINIMUM BID SPECIFICATIONS
Tandem Drive Motor Grader

It is the intent of these specifications to describe a Tandem Drive Motor Grader. These specifications describe and state minimum requirements of this equipment. Bids submitted on equipment not meeting these minimum requirements will be subject to rejection.

The following are intended as guidelines, all equivalent or comparable units will be considered.

All bidders must fill in all blanks: **YES** if meeting or exceeding specifications and **NO** if exceptions are taken. Any exceptions taken must be explained in written detail on bidder's letterhead and attached to the bid submitted. Bidder must attach a copy of factory warranty for Tandem Drive Motor Grader.

		<u>YES</u>	<u>NO</u>	<u>OFFERED</u>
A. GENERAL				
1.	Motor grader bid shall consist of six wheels, four-wheel rear drive and articulated frame.	_____	_____	_____
2.	Must supply (2) two copies of current literature with bid. Successful bidder must supply operator's manual, parts book, and service manual at time of delivery.	_____	_____	_____
3.	Must provide warranty service and parts stocked with in state where unit is to be delivered.	_____	_____	_____
4.	Successful Bidder shall provide a basic operator and service training class at customer's site.	_____	_____	_____
B. SAFETY AND SECURITY				
1.	Unit is to be equipped with and tested and approved ROPS and FOPS protective structure that meets the required ISO/SAE Performance Criteria and be able to produce certification documentation for the following: ISO 3471: 1994, ISO 3449:1992 AND SAE J1040 May'94, SAE J231 Jan'81	_____	_____	_____
2.	Unit must be equipped with vandalism protection of the following criteria: Lockable (all) engine access panels, radiator fill, fuel fill, hydraulic fill and lockable provisions for instrument panel and key switch.	_____	_____	_____

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YES **NO** **OFFERED**

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|----|--|-------|-------|-------|
| 3. | Braking System: Unit must be equipped with foot pedal activated Caliper/Disc braking system. System must consist of a Caliper/Disc assembly on both rear tandem axles (two units), effective on all four tandem wheels and controlled by a dual circuit master cylinder. Depressing brake pedal must neutralize the hydrostatic transmission. System must feature electric motor to supply brake pressure in event of engine stall. Parking Brake System must consist of a hand lever, mechanically activated, cable controlled for Caliper/Disc braking system. Brake system must conform to SAE J1473 Oct'90 and be able to produce documentation. | _____ | _____ | _____ |
| 4. | Engine must not start unless park brake is applied. Operator shall not be able to move machine when park brake is applied and warning buzzer should sound if attempted. | _____ | _____ | _____ |
| 5. | Unit must be equipped with operator activated warning horn and automatic back up alarm. | _____ | _____ | _____ |

C. WEIGHT

- | | | | | |
|----|---|-------|-------|-------|
| 1. | Basic operating weight of unit, without attachments or auxiliary ballasts shall not be less than 15,000 lb. Weight includes all fluids, full fuel tank and 175 lb operator. | _____ | _____ | _____ |
|----|---|-------|-------|-------|

D. ENGINE

- | | | | | |
|----|---|-------|-------|-------|
| 1. | Unit shall be equipped with an in-line 4 cylinder, turbo charged, four-cycle diesel engine, water cooled which delivers a minimum gross power (according to SAE J1995) of 110 hp. Engine must be Tier II Emissions Compliant. | _____ | _____ | _____ |
|----|---|-------|-------|-------|

E. FILTERS

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|----|---|-------|-------|-------|
| 1. | Dual-element, dry type air cleaner with cleanable outer element and air flow restriction indicator. | _____ | _____ | _____ |
| 2. | Engine oil and fuel filters shall be full-flow spin on type and separate spin-on hydraulic and transmission fluid filters are required. | _____ | _____ | _____ |

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	<u>YES</u>	<u>NO</u>	<u>OFFERED</u>
F. TRANSMISSION			
1. A heavy-duty full hydrostatic drive transmission with a neutral start lockout shall be provided. Transmission will allow repetitive forward and reverse shifting without the need of de-clutching the drive train.	_____	_____	_____
2. Top road speed forward or reverse shall be no less than 20 mph and be infinitely controlled. Peak engine torque shall be usable throughout the working speed range.	_____	_____	_____
G. DIFFERENTIAL/FINAL DRIVE			
1. Shall include an automatic locking differential as standard equipment. Tandems shall be supported by tapered roller bearings allowing fully floating non-load carrying drive axles, and oscillation of ± 15 . A heavy-duty two-speed gearbox provides work and travel modes as well as a neutral position for towing.	_____	_____	_____
H. TIRES			
1. Shall be 15.00 x 19.5, 8 PR tubeless mounted on 12.25 inch bolt on rims.	_____	_____	_____
I. FRONT AXLE AND STEERING			
1. Shall have full hydraulic steering of 50 degrees right or left, a minimum oscillation of 35 degrees right or left, and minimum of 22" ground clearance.	_____	_____	_____
2. Shall have minimum turning radius of 19' using articulation and wheel lean and minimum of 25' in straight frame without wheel lean. Measurements are from center to outside front wheel.	_____	_____	_____
3. Shall have hydraulic wheel lean of minimum 15 degrees right and left.	_____	_____	_____

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YES **NO** **OFFERED**

J. FRAME CONSTRUCTION

1. Shall be articulated type, of fabricated, high strength, steel plate. Machine shall have a full front and a full rear perimeter frame sections. No drive train component shall constitute a frame member. Frame must have provisions for future front and rear bolt on attachments. A frame lock shall be provided for transportation and service. _____

K. ARTICULATION

1. Articulation shall be a minimum 24 degrees right or left of center, in front of the cab. Articulation Cylinders must be “clevis” style mounting with replaceable bearings. _____

L. LIGHTING

1. Shall come standard with forward driving lights, turn signals visible from front and rear, brake lights, four way flashers and strobe light. _____

M. ELECTRICAL SYSTEM

1. Shall include 12-volt starting system with a heavy duty 900 CCA battery and minimum 95-amp brushless alternator. Overload protection shall be via individual fuses for all electrical circuits and must be located in a lockable central electrical compartment fully accessible from ground level without use of tools. _____

2. Wiring harness must use sealed connectors and have circuit identification on each wire. _____

3. No part of the electrical harness may be painted. _____

N. HYDRAULICS

1. Uniform response, open center hydraulic system. Low effort, rod operated lever controls. Hydraulic system must function in all ambient temperatures without the need for pump unloading valves during starting function. Hydraulic system must include a fluid level sight glass and temperature gauge. _____

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YES **NO** **OFFERED**

- | | | | | |
|----|---|-------|-------|-------|
| 2. | Must have a dual flow hydraulic system that provides even flow to blade lift/lower circuits for optimum blade response. | _____ | _____ | _____ |
|----|---|-------|-------|-------|

O. CONTROLS

- | | | | | |
|----|---|-------|-------|-------|
| 1. | Hydraulic control levers and steering wheel shall be mounted on an adjustable pedestal to allow for added visibility and convenience to operator. Implement control levers shall be in front of the operator and in the industry standard sequence. Control panel shall include tachometer, fuel level gauge, amp meter, hour meter, engine oil pressure gauge, and engine temperature gauge. Engine speed shall be controlled by a variable speed governor in conjunction with foot and hand operated throttles. | _____ | _____ | _____ |
| 2. | Must have control lever and valve to operate future front or rear mounted attachments. (Not applicable when specification requires front and rear attachment) | _____ | _____ | _____ |
| 3. | Must have foot accelerator pedal for engine RPM. | _____ | _____ | _____ |

P. TRUNNION or BLADE LIFT ARRANGEMENT

- | | | | | |
|----|--|-------|-------|-------|
| 1. | Trunnion assembly must be welded to front frame. | _____ | _____ | _____ |
| 2. | Shall have a minimum blade lift cylinder stance of 48" wide. | _____ | _____ | _____ |
| 3. | Trunnion housings shall be sealed, greasable, and equipped with minimum 2 tapered roller bearings in each housing. | _____ | _____ | _____ |

Q. CIRCLE/DRAWBAR

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|----|--|-------|-------|-------|
| 1. | Circle shall be supported by three fully adjustable and replaceable support shoes. Rotation of circle shall be 120 degrees and be capable of positioning the moldboard within the graders' width on either side for travel. Circle shall be driven at two points by two hydraulic cylinders and be capable of either turning or holding stationary against a fully loaded moldboard. Must have replaceable wear plates on drawbar pad. | _____ | _____ | _____ |
|----|--|-------|-------|-------|

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- | | <u>YES</u> | <u>NO</u> | <u>OFFERED</u> |
|---|------------|-----------|----------------|
| 2. There must be a true pull type drawbar. The moldboard/circle must not be pushed from behind. | _____ | _____ | _____ |
| 3. Shall have circle turn overload protection to reduce risk of cylinder damage. | _____ | _____ | _____ |

R. MOLDBOARD

- | | | | |
|--|-------|-------|-------|
| 1. Moldboard shall be equipped with hydraulic power slide, power tilt and shall be controllable individually for either left or right sides. | _____ | _____ | _____ |
| 2. Lift above ground shall be a minimum of 16” and cut below ground a minimum of 17” | _____ | _____ | _____ |
| 3. Moldboard dimensions shall be: length 10’ x min height 21” x min material thickness 5/8” and equipped with replaceable standard cutting edges and end bits. | _____ | _____ | _____ |

S. CANOPY/OPERATOR’S COMPARTMENT

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|--|--|--|--|
| 1. ROPS/TOPS certified canopy. Seat shall be an adjustable, suspension type with vinyl covering and a seat belt. An inside convex rear view mirror shall be installed, interior dome light and head liner. | | | |
| 2. Front lexan windshield. | | | |

T. PAINT

- | | | | |
|---|-------|-------|-------|
| 1. Grader shall be painted the manufacturer’s standard yellow with grey trim. | _____ | _____ | _____ |
| 2. Finish paint shall be acrylic based enamel, both lead and chromate free, applied over a rust inhibitor primer. All metal to be sand blasted prior to painting process. Hydraulic Hosing and Electrical Harness shall not be painted. | _____ | _____ | _____ |

U. ADDITIONAL EQUIPMENT

- | | | | |
|--|-------|-------|-------|
| 1. Shall include, 39 US gallon fuel tank and rear tow hitch. | _____ | _____ | _____ |
|--|-------|-------|-------|

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V. WARRANTY			
1. Shall provide minimum 1 year full machine coverage warranty.	_____	_____	_____

W. OTHER GENERAL SPECIFICATIONS

1. Standard equipment not mentioned is to be included.
2. Successful bidder must be capable of performing own warranty work in his maintenance department.
3. Vehicle other than new, unless specified, will not meet specifications.

X. DELIVERY

1. Unit to be delivered to the following address:
356 North Donahue Drive
Auburn, Alabama 36832
2. Bid price will F.O.B. Auburn and includes title application.
3. **The city must be sent a copy of the confirmation order within 24 hours after receipt of order.**

