

CITY OF DULUTH
MINIMUM SPECIFICATIONS FOR
ARTICULATING 6-WHEEL ALL WHEEL DRIVE MOTOR GRADER
LEASE/PURCHASE 20 UNITS

Contacts: Technical questions-Tom Anderson 218-730-4449
About the bid-Dennis Sears-218-730-5003

All bids are to meet or exceed specifications listed and described as follows:

General

It is the intent of these specifications to describe an all-wheel drive articulated diesel powered motor grader in sufficient detail to secure bids on comparable equipment. All parts not specifically mentioned, which are necessary in order to provide a complete grader shall be included in the bid and shall conform in strength, quality of material and workmanship to what is usually provided the trade in general.

Any units not conforming to these specifications as outlined in this invitation will be rejected and it will be the responsibility of the bidder to conform to the requirements unless deviations have been cited in the bid and acceptance made on that basis.

Any additional, deletions or variations from the following specifications must be stated. Reason for variations and deviations must also be stated. These specifications shall be construed as minimum. The manufacturer shall furnish evidence upon request of its demonstrated ability to build equipment of the type described in these specifications. Evidence shall be furnished upon request that the equipment built by the manufacturer has been tested and proven in the market place. Specifications also require that the bidder furnish descriptive literature, complete specifications, and all other necessary data on the equipment proposed to furnish. (Use attachment, if necessary) Furnish copy of manufacturer's warranty.

Location of parts outlet and service practices will be used in the evaluation of bid proposals.

Failure to complete all information on questionnaire and bid request form may be cause for rejection of bid.

Parts and Services

Because maintenance of this equipment in good operational condition without protracted time out for repair is very important, it is essential that repair parts and service be adequate and readily available. Response time for necessary repairs must be less than one (1) hour; seven (7) days per week, 24 hours per day. State location of bidder's service and repair parts facility.

FIRM NAME _____

Date: MARCH 31, 2015

A monthly "Repair Log" must be provided to Fleet Services detailing repairs (warranty or otherwise), including unit number/serial number, repair order numbers, and detailed description of repair/service provided.

Bi-Annual maintenance/repair inspections by vendor, with detailed reports of findings.

Furnish name, address and telephone number of the nearest parts and service outlet/depot. Attach list of additional parts outlets/depots, if any.

For Parts Contact:

For Service Contact:

NAME:

ADDRESS:

TELEPHONE:

Delivery

Motor graders are to be bid F.O.B. Destination, Fleet Service Division, 4825 Mike Colalillo Drive, Duluth, Minnesota. Each unit is to be delivered in first class operating conditions with acceptance subject to purchaser's inspection and approval.

Basic cost of one new will be part of determining costs of the grader award but not the sole determining factors. Please state a quantity discount of new graders as a %. All options will be added after the award is made and as determined by the end user.

Manufacturer:

Model:

FIRM NAME _____

Date: MARCH 31, 2015

<u>Description</u>	<u>Specification</u>	<u>Bid Response</u>
Type	All-wheel drive, articulated frame	_____
Operating Weight	33000 lbs. SAE minimum (without scarifier, add-on weights or wheel ballast)	_____
Engine	6 cylinder turbo charged diesel must be EPA Tier IV certified . Rated not more than 2100 RPM and not less than 436 cu. in. displacement with minimum of 50% Torque rise Variable HP w/ min 210 Net HP in all wheel drive.	_____
	HP ingears 1 and 2	_____
	HP in gears 3 – 5	_____
	HP in gears 6 – 7	_____
	HP in gear 8	_____
Electrical System	24 to 12 volt converter for accessories	_____
	Heavy duty 75 AMP alternator	_____
	Batteries rated at 1300 CCA	_____
Cooling System	Anti-freeze solution to -40° F, extended life	_____
Transmission	Direct Drive, Electronic controlled with auto, shift, transmission reversal without clutch and over speed protection.	_____
	5 working speeds below 10 MPH	_____
	Max transport speed shall be no less than 25 MPH	_____
	Min reverse speed shall not be less than 20 MPH	_____
Hydraulic System	Maximum pressure not less than 2,750, standby PSI, pressure compensated load sensing system with 54 GPM flow rating	_____

<u>Description</u>	<u>Specification</u>	<u>Bid Response</u>
Tandem Drive Axles	No spin, foot or electric operated hydraulically actuated rear axle differential lock and unlock able on-the-go under full engine RPM in any gear	_____
Front Wheel Drive (FWD)	Ability to engage front wheel drive on the go in any direction and under full engine RPM and load. Front wheel drive on demand, selectable from a dead stop.	_____
	Manual or auto torque adjustable FWD operated from inside the cab for operator management. FWD shall be effective from 0 to 13 MPH in reverse gears.	_____
Steering	Joystick primary steering. Auxiliary Steering wheel optional.	_____
	Full hydraulic power steering with separate reservoir or priority hydraulics for safety in the event of hose failure.	_____
	Maximum turn radius shall be no greater than 24' 6"	_____
Brakes, Parking, Service	Air or Hydraulic actuated, four wheel oil disc brakes for (air dryer required, if applicable)	_____
	Park brake to be independent of service brake, automatically or manually actuated transmission neutralizing for safety on hills	_____
	Braking system must meet SAE J/ISO 3450 standards	_____
Moldboard and impact Protection	Circle drive must have a slip clutch	_____
	Blade lift cylinders must have crossover relief valve or approved blade impact system	_____
Moldboard	Fully hydraulic controlled moldboard 12 ft. long, 24 inches tall, 1 nominal inch thick with 8 inch cutting edge	_____
	Fully hydraulic controlled moldboard 14 ft. long, 24 inches tall, 1 nominal inch thick with 8 inch cutting edge	_____

FIRM NAME _____

Date: MARCH 31, 2015

<u>Description</u>	<u>Specification</u>	<u>Bid Response</u>
Lights	LED turn, brake and warning Strobe light with guard (blue)	_____
	Front Bar 2 drive, low beam 2 drive, high beam	_____
	Mid Frame 2 work circle	_____
	Under Cab 2 work blade	_____
	Rear grill 2 work backup	_____
	Front roof 2 drive (inner) 2 work (outer)	_____
	Rear roof 2 work rear	_____
	RH side roof 2 work RH side	_____
	Work lights to be switched separately	_____
Cab	Low profile, sit down cab	_____
	Interior sound level 75 dba or less	_____
	Front (upper & lower) & rear windshield wipers and washers	_____
	Rear window defrost	_____
	Back up camera system	_____
	Outside heated mirrors (2)	_____
	Air-suspension cloth seat with lumbar support, arm rests and headrest	_____
	Tinted safety glass ½ deep tint	_____
	AM/FM radio with weather band	_____
	Heavy-duty 40,000 BTU heaters & defrost for winter use	_____

FIRM NAME _____

Date: MARCH 31, 2015

<u>Description</u>	<u>Specification</u>	<u>Bid Response</u>
	Air-conditioned	_____
Gauges & Monitoring	All gauges to be lighted	_____
	Hour Meter	_____
	Electronic control module w/ data storage and diagnostic capabilities for engine, transmission and 6 wheel drive systems	_____
	Three level electronic warning system for all critical machine functions	_____
Fuel System	Minimum of 100 Gallons	_____
Safety	Slow moving vehicle sign vandalism protection (lockable doors & compartments), back-up alarm and tool box	_____
Tires	14:00 x R24, Michelin x-snow plus or Bridgestone v-steel snow wedge	_____
	2 front spare tires and 2 rear spare tires	_____
Special Equipment Snow Wing	Falls Snow Wing or Approved Equivalent	_____
	All hydraulic 12 ft. snow wing to include heel, toe, mid height post, and rear post.	_____
	Integrated wing controls to be mounted on the right hand control surface / or (opposite of steering control)	_____
	Wing to be punched AASHO standard	_____
	One stage cylinder on the wing	_____
	Minimum 12" Float detent on the wing	_____
	Hydraulic stiff arm on wing	_____
	Rear fenders that are snow wing compatible	_____

FIRM NAME _____

Date: MARCH 31, 2015

<u>Description</u>	<u>Specification</u>	<u>Bid Response</u>
Front Attachment	Hydraulic parallel lift quick attach/detach front lift group to pick up existing V-plows and dozer blades	_____
Manuals	Each unit to include owner/operator manual	_____
	One parts manual & one service manual in book form or CD format	_____
Training	Vendor/manufacture agrees to provide a Training program for the City of Duluth Maintenance & Operator employees in sufficient scope to assure efficient and economical performance of the equipment. Training to commence at a reasonable time(shortly after acceptance) agreeable to both parties.	_____
Optional Equipment:	List cost in addition to proposed monthly lease, per unit, per month.	
	Front fenders List Manufacturer Lease: 5 year/monthly rate	_____ _____
	Rear fenders (<u>Must be snow wing compatible</u>) List Manufacturer Lease: 5 year/monthly rate	_____ _____
	Dozer Blade, 9ft & must couple to City's existing attachments List Manufacturer Lease: 5 year/monthly rate	_____ _____
	Laser leveling, grade and slope control provisions. List Manufacturer Lease: 5 year/monthly rate	_____ _____

The City of Duluth reserves the right to accept or reject any options included in bid.

Bidders shall list deviations from bid specifications (additions or deviations of requested equipment). All questions shall be directed to Arlen Bordenkircher at abordenkircher@duluthmn.gov or John McIntyre at jmcintyre@duluthmn.gov. Questions must be communicated no later than seven (7) days prior to the bid opening date in order to facilitate the response for all potential bidders.

All rates bid shall be for a total of 2500 hours over the entire length of the five winter season lease.

The City of Duluth reserves the right to cancel any agreements resulting from this bid for non-performance of equipment or failure of the City Council to approve sufficient appropriations for the portions of the rental period beyond 2015

The City of Duluth will be responsible for daily operator checks and inspections of graders (prior use). Routine maintenance and check points at ground level for safety purposes

The successful vendor will supply any required maintenance and repairs at no cost to the City, including tire repairs, and all scheduled maintenance as per the manufacturers' recommendations. The vendor will not be responsible for any damage done by City use which is beyond what is considered normal wear and tear.

However, if more than 6 moldboards are broken during a season, the vendor will bear responsibility for replacements. The replacements must be within the time frame for repairs.

The City of Duluth is responsible for cutting edges and applicable nuts and bolts.

The successful vendor shall respond to all 'unit down time' service requests **within 1 hour of notification**. The City of Duluth reserves the right to terminate the lease agreement if vendor does not comply with service requirements.

If a leased unit is down for repairs in excess of 12 continuous hours from notification (including nights, weekends and holidays), a like 6 wheel drive unit with wing is required as a replacement (at no additional cost to the City of Duluth). The vendor will not be required to provide a replacement unit for any 'down time' resulting from damage done by City use that is beyond what is considered normal wear and tear.

The City of Duluth has the right to charge liquidating damages in the amount of 10% of the monthly lease/rental cost if supplied grader differs from above agreement

At the time of the bid opening, each vendor will be presumed to have read and to be thoroughly familiar with the bid documents, including any and all addendums, and to understand the City's needs with regard to snow removal and the proper equipment required to complete such removal.

FIRM NAME _____

Date: MARCH 31, 2015

Vendor Contact Name/Phone Numbers

Repair Contact Name:	_____	Phone:	_____
		Cell:	_____
Sales Person Name:	_____	Phone:	_____
		Cell:	_____
Local Manager Name:	_____	Phone:	_____
		Cell:	_____
District Manager Name:	_____	Phone:	_____
		Cell:	_____