

**NOTICE FOR SEALED BIDS**  
**ONE OR MORE NEW DIESEL POWERED, ARTICULATED, SIX WHEEL DRIVE**  
**MOTORGRADERS**

The Board of County Commissioners of McKenzie County, North Dakota, will receive bids at the County Auditor/Treasurer's Office at 201 5<sup>th</sup> ST NW Suite 543, Watford City, North Dakota, until the hour of 10:00 AM CT, April 15, 2025, for one (1) or more NEW diesel powered, articulated, six wheel dive motorgraders for the Road & Bridge Department.

Bids will be submitted on the specification form furnished by the Auditor/Treasurer's Office, and will be available on the County's website: <https://mckenziecountynd.gov/bid-and-rfp-rfq-notices/> A Bid Bond in the amount of 5% (five) percent of the amount bid must accompany each bid in a separate envelope. Please specify "Motorgrader" on the envelope.

The Board reserves the right to reject any or all bids as allowed by law, or to accept such bids as may be determined to be in the best interests of the county.

McKenzie County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in its solicitation of bids.

Dated at Watford City, North Dakota, this 11th day of March, 2025.



A handwritten signature in black ink, appearing to read "Erica Johnsrud".

Erica Johnsrud

McKenzie County Auditor/Treasurer

Publish March 19, 26, and April 2, 2025

**MCKENZIE COUNTY  
ROAD DEPARTMENT  
WATFORD CITY, NORTH DAKOTA**

**SPECIFICATIONS FOR ONE OR MORE NEW  
DIESEL POWERED, ARTICULATED, SIX WHEEL DRIVE MOTORGRADERS**

This attachment shall be considered a continuation of the call for bids, and by reference made a part thereof.

The Board reserves the right to reject any or all bids, as allowed by law, or to accept such bids as may be determined to be in the best interest of the county.

BASIS OF THE AWARD shall be dependent on the most responsible bid submitted. Consideration will be given to purchase price, repurchase price, delivery date, equipment service guarantees, parts and service availability, parts and service facilities location, analyses and comparison of equipment specification details, and past experience of McKenzie County with similar or related equipment.

No bid will be accepted without a five (5) year or five thousand (5000) hour full machine warranty.

**Machine(s) bid must be new factory order machines.**

Pursuant to the call for bids, the following minimum requirement shall be met:

- A. Motor Grader shall meet OSHA requirements and specifications on the date of the bid opening.
- B. No bid will be considered unless accompanied by a bid bond, in the amount of not less than five (5) percent of the total amount of the bid.
- C. Delivery shall be F.O.B. McKenzie County Shop, Watford City, North Dakota.
- D. The bid shall include all operating, service, parts, and technical repair manuals.
- E. Bidders must specify delivery date.
- F. Motor Grader shall be a 2024-25 advertised model, with all the latest changes and features offered as standard whether or not called for in the specifications; except where this specification requires a substitution in lieu of the manufacturer's standard equipment.
- G. Bids will not be considered that do not include a copy of the manufacturer's literature/specification material and an incomplete specification portion of the bid sheets.

- H. Motor Grader shall come with all hydraulics, electronics, controls, etc. to fully operate all functions stated or asked for in bid.
- I. Bids will not be considered that do not include a **GUARANTEED REPURCHASE PRICE-PER MACHINE AGREEMENT** for the years 2 through 5.

Please indicate in the following if the machine offered can meet the desired configuration. Any “no” should be clarified on a separate sheet if the bidder desires support for an alternate specification. Failure not to do so may result in non-acceptance of the bid.

**YES NO**

- Typical operating weight no less than 45,000 lbs.
- Automatic dual path hydrostatic six wheel drive. Separate left and right systems
- Engine and Transmission must be designed and built by machines manufacturer.
- Blade pull at maximum operating weight must be a minimum of 49,000 lbs.

**ENGINE**

- a. Minimum displacement of 9.0 L (548 cu.inch)  
Manufacturer \_\_\_\_\_.
- b. Four stroke, six cylinder, direct injection, water cooled, turbo charged diesel engine.
- c. Low temperature starting system.
- d. Ether starting aid.
- e. Block heater, 120 volt.
- f. 100 gallon fuel capacity, minimum
- g. Pre-screener.
- h. Dry-type air cleaner with pre-cleaner, automatic dust ejector and air cleaner, cyclone pre-cleaner
- i. Cooling on demand, hydraulic-driven, variable speed fan with auto reversing, and swing out rear fan door and fold out coolers.
- j. Anti-freeze -35 degrees (Fahrenheit), extended life.

**(engine cont.)**

**YES NO**

- k. Oil filter, cartridge.
- l. EPA final tier 4 compliant
- m. Engine shall have variable horsepower starting in 1<sup>st</sup> with a net HP of 240, and ending in 8<sup>th</sup> gear with a HP of 300 or greater.
- n. Engine will automatically increase idle speed to compensate for any voltage drop resulting from an extended idle time.
- o. Fuel filter, cartridge.
- p. Full engine side cover panels with lockable compartment doors.
- q. Fueling shall be easily accessed from ground level.
- r. All cartridge filters shall be easily accessed from engine compartment.
- s. Left and right engine compartments must have factory installed lights for servicing and daily checks. Lights must automatically go off if voltage drops.
- t. Net peak engine torque must be 1,000 lb.-ft or greater.
- u. Net peak engine torque rise must be 45% or greater.

**TRANSMISSION**

- a. Power shift with electronic automatic shift, direct drive.
- b. Transmission to provide eight speeds forward and eight speeds reverse.
- c. Single lever for both direction and speed changes.
- d. Differential lock/unlock shall be electro-hydraulically controlled
- e. Transmission will be such that machine won't move even if engine is started with transmission engaged.
- f. Electronically controlled over speed protection.
- g. Minimum top speed 28 mph or greater.

**(Transmission Cont.)**

**YES NO**

- \_\_\_ \_\_\_ h. Transmission filter, cartridge
- \_\_\_ \_\_\_ i. Precision mode must be standard in gears 1-3.

**FINAL DRIVE**

- \_\_\_ \_\_\_ a. Inboard-mounted planetary sealing in cooled, filtered oil.
- \_\_\_ \_\_\_ b. Minimum distance between center of tandem wheels shall be 60 inches.

**BRAKES, WHEELS & TIRES**

- \_\_\_ \_\_\_ a. Service – brakes shall be multi-disc, oil cooled and completely sealed, tandem mounted.
- \_\_\_ \_\_\_ b. Parking brake - multiple oil disc, spring applied, hydraulically released, adjustment free, sealed, and integrated into the transmission
- \_\_\_ \_\_\_ c. Tires - Michelin X - Sno Plus radial tires, 17.5 x R25
- \_\_\_ \_\_\_ d. Rims –three piece steel, interchangeable between all six wheels  
If rims are not interchangeable, include price of spare rim and tire.  
  
Front 3 piece rim and Michelin tire \$\_\_\_\_\_
- \_\_\_ \_\_\_ e. Engagement of parking brake control lever shall neutralize transmission

**STEERING, FRONT AXLE & WHEELS**

- \_\_\_ \_\_\_ a. Front wheels shall have 47 degrees left or right minimum steering range.
- \_\_\_ \_\_\_ b. Steering shall be hydraulic.
- \_\_\_ \_\_\_ c. 24 ft. maximum turning radius outside front tires.
- \_\_\_ \_\_\_ d. Front axle, height to center not less than 22 inches ground clearance.
- \_\_\_ \_\_\_ e. Hydraulic leaning front axle minimum 20 degrees right or left.

**(Steering, front axle & wheels cont.)**

**YES NO**

- \_\_\_ \_\_\_ f. Front axle shall have not less than 32 degrees total oscillation, 16 degrees up, 16 degrees down.
- \_\_\_ \_\_\_ g. Main frame shall be articulated.
- \_\_\_ \_\_\_ h. **Due to safety reasons in snow plowing applications, unit must have a steering wheel.**

**ARTICULATION JOINT**

- \_\_\_ \_\_\_ a. Articulation joint with mechanical lock.
- \_\_\_ \_\_\_ b. Frame angle to be minimum of 22 degrees.
- \_\_\_ \_\_\_ c. Articulation indicator in operator's compartment.
- \_\_\_ \_\_\_ d. Bottom joint must have double taper roller bearings.

**HYDRUALICS**

- \_\_\_ \_\_\_ a. Full hydraulic controls.
- \_\_\_ \_\_\_ b. Hydraulic system shall be closed center, load sensing design, with variable displacement, axial piston type pump.
- \_\_\_ \_\_\_ c. Separate hydraulic lock valves shall be provided in each hydraulic circuit in in all control valves
- \_\_\_ \_\_\_ d. Hydraulic tank shall be non-vented, separate of power train oil.
- \_\_\_ \_\_\_ e. Industry standard lever style hydraulic controls. Must have additional valves And levers to operate ripper, front hitch, and snow wing. Plus an additional valve & lever for an auxillary function (6 aux. valves).
- \_\_\_ \_\_\_ f. Implement valves shall be proportional priority pressure compensating for consistent response when multi-functioning any combination of implement controls.
- \_\_\_ \_\_\_ g. All blade controls obtainable from operator's seat.
- \_\_\_ \_\_\_ h. Hydraulic plumbing, etc. which is compatible with front lift groups, rear rippers, snow wing, etc.

**(hydraulics cont.)**

**YES NO**

- i. Hydraulic filter, cartridge.
- k. Float position on blade lift, rear ripper, front lift group, and snow wing hydraulics.

**CIRCLE AND DRAWBAR**

- a. Circle shall be supported by the drawbar with at least six support shoes.
- b. Circle construction shall be heat treated, welded and machined steel.
- c. Circle must be capable of 360 degrees rotation with **no need for adjustment.**
- d. **Circle must be a fully sealed bearing and pinion. Guaranteed for life of the machine.**
- e. Circle drive shall be adjustable slip clutch.
- f. Circle must be a fully sealed and lubricated roller element slewing bearing.

**BLADE**

- a. High carbon moldboard with hydraulic sideshift.
- b. Size 16' x 27" x 1" with standard highway bolting, and hydraulic tilt, ¾ inch cutting edge bolting.
- c. Depth of cut maximum 29 inches.
- d. Lift above grade minimum 17 inches.
- e. Blade lift accumulators.
- f. Moldboard shall have a high bank angle of at least 90 degrees to both sides
- g. Moldboard side-shift cylinder shall be left-hand sided with 31" side shift.
- h. Blade lift and center shift cylinders shall have replaceable wear inserts in the ball sockets with removable shims.
- i. Moldboard end bits reversible overlay.

**(blade cont.)**

**YES NO**

\_\_\_ \_\_\_ k. Moldboard slide shall have quick change replaceable wear inserts and quick-adjust jack screw adjustment.

**OPERATOR COMPARTMENT**

\_\_\_ \_\_\_ a. ROPS cab with heater, defroster, and air conditioning. Heater 40,000 BTU.

\_\_\_ \_\_\_ b. Glass laminated safety tinted –front, rear and doors

\_\_\_ \_\_\_ c. Inside mounted rear view mirror.

\_\_\_ \_\_\_ d. Exterior glare proof convex mirrors. heated (approx. 60 sq.inches).

\_\_\_ \_\_\_ e. Doors lock shut and latch open.

\_\_\_ \_\_\_ f. Air-ride adjustable contour series suspension (leather/cloth) seat fore and aft with seat belt and armrest.

\_\_\_ \_\_\_ g. Electric wiper/washer front, rear, bottom and side with intermittent control.

\_\_\_ \_\_\_ h. AM-FM-weather band radio with Bluetooth, speakers, antenna, and installed noise suppression filter to eliminate strobe or beacon interference. Must be XM Satellite Radio ready.

\_\_\_ \_\_\_ i. Cab shall be sound suppressed and pressurized with a filter. 75 DB (A) maximum.

\_\_\_ \_\_\_ j. Front and rear auxillary defroster fans.

\_\_\_ \_\_\_ k. Low profile cab

\_\_\_ \_\_\_ l. Lunch box storage, mug holder, and coat hook.

\_\_\_ \_\_\_ m. Toolbox

\_\_\_ \_\_\_ n. Front and rear sun shades

\_\_\_ \_\_\_ o. High-resolution rearview camera with dedicated monitor must be included.

\_\_\_ \_\_\_ p. LED dual beacons mounted on flip down brackets, each side.



## ELECTRIC SYSTEM

YES NO

- a. Heavy Duty 200 amp hour, 1400 CCA batteries.
- b. High and low bar headlights with front turn signals
- c. Halogen mid-frame toe lights shall be installed to illuminate moldboard and surrounding area.
- d. LED heel work lamps mounted underneath the cab.
- e. LED ripper work lamps.
- f. LED front mounted cab lights.
- g. LED roof mounted on the right-hand side of car roof bar to illuminate a snow wing. Dealer must supply machines with all the lights that are factory available.
- h. An instrument cluster shall be provided that includes a speedometer, tachometer, coolant temperature, fuel and articulation angle gauge.
- i. Incandescent white reversing lamps and LED stop lamps
- j. Back-up light and sounding alarm standard when reverse gears are selected.
- k. Interior cab lights and engine compartment service lights.
- l. 200 amp alternator.
- m. 24 volt direct electric start.
- n. A 24V to 12V convertor with 30 amp capacity with circuit to turn on and off with ignition switch.
- o. Yellow strobe lights installed.
- p. Electronic throttle control –cruise control
- q. Electronic inching control

## OTHER FEATURES

### YES NO

- |     |     |   |
|-----|-----|---|
| ___ | ___ | a. Rear ripper shall have five ripper shank holders and 3 included shanks, 9 scarifier shank holders, and rear tow hitch.   |
| ___ | ___ | b. Option Balderson style lift group must be included.  |
| ___ | ___ | c. A snow wing frame ready option shall be included   |
| ___ | ___ | d. Option of New Little Falls Machine 12' postless snow wing must be included and installed by the successful dealer. Must be 3 function w/ hyd extension.              |
| ___ | ___ | e. Front and rear fenders shall meet ISO-3457 requirements and shall not interfere with the ability to fully open any cab or engine enclosure, or service access doors. |
| ___ | ___ | f. Option of 24 volt "Espar" fuel fired heaters installed by dealer must be included.   |
| ___ | ___ | g. Option of factory installed "Topcon" ready GPS pre-wiring must be included.  |

## ALL WHEEL DRIVE

- |     |     |   |
|-----|-----|---|
| ___ | ___ | a. All-wheel drive system – Each front wheel shall be powered utilizing a dedicated variable axial piston pump and variable axial piston motor. Both pumps and motors shall be infinitely variable to provide maximum torque in every gear. |
| ___ | ___ | b. All-wheel drive system shall automatically vary individual front wheel speeds by up to 50% during a turn, improving front wheel traction and reducing turning radius.  |
| ___ | ___ | c. All-wheel drive system shall provide a hydrostatic mode neutralizing the transmission for precise low-speed performance. The ground speed shall be infinitely variable between 0 and 5 mph.  |

**Please list explanations to any “no” answers to specifications below.**

**BIDDERS CERTIFICATION**

It is hereby understood that McKenzie County (owner) has the right to evaluate this bid upon many bases of criteria, and the trade-in machines are available for appraisal at their present work site.

The County Commissioners reserve the right to hold the bids for a period of not to exceed 30 days.

Upon acceptance of any bid, the McKenzie County Road Department shall withhold ten (10) percent of the bidder's net bid for at least thirty days after the delivery of said bid item to insure compliance with all agreed upon specifications.

Machine will be available for delivery on the \_\_\_\_\_ day of \_\_\_\_\_, 202\_\_.

We hereby certify that the foregoing is a responsible bid. Any variations from the specifications are noted or attached. Copies of machine warranty guarantees are attached along with the required bid bond for the machine bid.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2025.

\_\_\_\_\_  
Dealer Name

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Representative Signature

\_\_\_\_\_  
Fax

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, Zip Code

## **MACHINE WARRANTY & AVAILABILITY GUARANTEE**

The intent of this clause is to guarantee the cost of repairs and downtime to McKenzie County. Therefore, all bidders shall include with their bid:

Machine bid must have a full machine warranty for five (5) years or five thousand (5000) hours of operation, whichever occurs first from date of delivery. This warranty is to include travel time and mileage. The only exclusions are to be wear items such as tires, cutting edges, wear slides, glass, etc.

Annual machine inspection and adjustments as prescribed in the maintenance guides shall be performed in the field, unless convenient prior arrangements are made, and all costs covered by the **dealer**.

Warranty related machine transport costs to the repair facility or travel time and mileage will be provided by the dealer for 5 years or 5,000 hours.

Ninety-five (95) percent guaranteed machine availability (computed on a 2000 hour work year). After any continuous downtime greater than 40 work week hours, a replacement comparable machine shall be provided or an hourly assessment of \$60 per hour shall be charged to the dealer to cover a replacement rental machine. \$200 per day shall be charged the dealer at the anniversary date for downtime in excess of 5%.

McKenzie County will make the machine available for repairs and inspections as requested by the successful dealer.

**BID PROPOSAL**

Manufacturer \_\_\_\_\_

Model \_\_\_\_\_

**PURCHASE ONLY**

**Net purchase Price per Unit, No Trade**                      \$ \_\_\_\_\_

**Add additional options:**

**Option 1:**  
**Electric over hydraulic controls (joystick)**  
**In lieu of manual over hydraulic controls.**  
**Includes automatic cross slope functions.**  
**Must have a steering wheel.**    \$ \_\_\_\_\_

**Option 2:**  
**Fully sealed bearing and pinion circle.**  
**Adjustment free and guaranteed for**  
**the life of the machine.**    \$ \_\_\_\_\_

**Option 3:**  
**New 12' Little Falls Machine postless wing.**  
**3 function hydraulic.**    \$ \_\_\_\_\_

**Option 4:**  
**New Balderson style lift group included on**  
**the machine.**    \$ \_\_\_\_\_

**Option 5:**  
**Factory installed integrated 3D GPS**  
**Total machine control. Fully waranteed by**  
**Manufacturer. No mast system.**    \$ \_\_\_\_\_

**TRADE VALUE**                      **UNIT 315**                      \$ \_\_\_\_\_

GUARANTEED RE-PURCHASE PRICE - PER MACHINE  
BASED ON 1000 HOURS / YEAR

Year #2 \_\_\_\_\_

Year #3 \_\_\_\_\_

Year #4 \_\_\_\_\_

Year #5 \_\_\_\_\_

**OPTION 5: Option 5:**  
**Factory installed integrated 3D GPS**  
**Total machine control. Fully waranteed by**  
**Manufacturer. No mast system,**

GUARANTEED RE-PURCHASE PRICE WITH INTEGRADED 3D GPS IN LIEU OF  
ABOVE OPTION

GUARANTEED RE-PURCHASE PRICE - PER MACHINE  
BASED ON 1000 HOURS / YEAR

Year #2 \_\_\_\_\_

Year #3 \_\_\_\_\_

Year #4 \_\_\_\_\_

Year #5 \_\_\_\_\_