

HARRY HAGSTROM, CHAIRMAN
HAROLD FALAN, VICE-CHARIMAN
DEAN JURIK, MEMBER
JIM LEGGETT, MEMBER
ROBERT HILTY, MEMBER

85 WEST HIGHWAY M-115
BOON, MICHIGAN 49618
PHONE 231-775-9731
FAX 231-775-9732
WWW.WEXFORDCRC.ORG

WEXFORD COUNTY ROAD COMMISSION

OUR MISSION IS TO IMPROVE AND MAINTAIN A SAFE AND EFFICIENT ROAD SYSTEM

BID PROPOSAL

Sealed bids will be received at the office of the Wexford County Road Commission, 85 W. M-115, Boon, Michigan 49618 until **2:00 p.m. Monday, November 27th 2023** for

Five (5) new Michigan Scraper Underbodys (or equivalent).

Specifications and bid sheets can be obtained at the above address or by visiting www.wexfordcrc.org.

All bids must be submitted in a sealed envelope bearing the name of bidder, item being bid, and clearly marked as a sealed bid.

The Wexford County Road Commission, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of gender, disability, race, color, or national origin in consideration for an award.

The Board reserves the right to reject any or all bids, waive any defects, and to accept the bid which, in its opinion, is the most advantageous to the Road Commission.

WEXFORD COUNTY ROAD COMMISSION

Harry Hagstrom, Chairman
Harold Falan, Vice Chairman
Robert Hilty, Member
Jim Leggett, Member
Dean Jurik, Member

WEXFORD COUNTY ROAD COMMISSION (WCRC)
Five (5) new Michigan Scraper Underbodys

Bid due @ 2:00 p.m. Monday, November 27th 2023
85 W. M-115, Boon, MI 49618
231-775-9731

This bid sheet must be used for submitting a bid for Five (5) New Michigan Scraper Underbodys (or equivalent), meeting specifications listed below. Please indicate “yes” if bid meets specification, or list the deviation from specification, for each item.

Michigan Underbody Scraper, or equivalent.

These specifications include furnishing and delivering five (5) Michigan Scraper Underbodys, or equivalent. It is intended for this unit to be used on heavy-duty road surface maintenance trucks including but not limited to snow removal operations as well as grading gravel road surfaces during summer months. **To be delivered in 2024.**

The unit to be complete per these specifications. Bidders may recommend options, indicating type and specifications for the options, as supplementary bids to be considered as part of the bid.

New equipment being bid per specifications on following pages:

Make _____ Model _____

Year _____

Mainframe Specifications:

1. Mainframe to consist of a one-piece 9/16" minimum thickness steel plate, of unitized welded construction, with 1/2" minimum thickness steel plate reinforcements.

2. Top plate to be solid, with no cutouts for the center hinge.

3. Top of mainframe must have a minimum of 15.50" (from front to back) of flat-surface-contact with the circle. (Measurement to not include the bend radius on formed top plate units).

4. Circle clamps are to be 1" thick x 20.5" solid steel shaped to the radius of the circle, on top of 3/8" thick poly wear pads to retain the circle to the mainframe. Poly wear pads are to be top-serviceable by one person without reaching under the mainframe to hold the fastener (Encapsulated hardware in a boss).

5. Outer ends of mainframe and outer hinges are to have thrust plates to limit side-to-side movement and wear. Outer hinges to be 9" long minimum and be sealed on the outer ends.

6. Hinge shaft to be 2-1/2" in diameter, 102 linear inches in length minimum, with (6) grease points. A total of (3) hinges attach the hinge-line to the moldboard (One each on the right side and the left side as well as center).

7. To include (4) Heavy-Duty welded and reinforced trunnion arms.

8. To include bolt-on, replaceable, and grease-able 2" diameter shock housing pivot pins with 1/2" minimum thick flanges, each retained by (2) 3/4" grade 8 bolts. Grease passage must go through the pin to fully grease the pivot pin and cup assembly.

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9. Hydraulic actuating cylinder lines to be 3/8" stainless steel hydraulic tubing with flared ends and nuts, held in place with poly line holders and easily accessible along the outer rear edge of the mainframe. Hydraulic hoses to continue out to the cylinders to allow for actuation and shock absorption. A bulkhead connection plate to be provided at the rear for the routing of hoses.
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Circle and Center Pivot Pin Specifications:

1. Must be a one-piece, notch-less circle, 1" solid steel, with replaceable center bushing.

2. Center pin to have a minimum of 6" bearing diameter with (3) separate remote grease ports @ 120-degrees apart directly into the bushing. The pin to be held in place by (6) 3/4" grade 8 bolts.

3. Center pin must have (3) separate grease lines to a remotely accessed grease bank.

4. Center pin is to be sealed top and bottom.

5. Center pin is to be heat treated, sealed, and piloted to mainframe.

6. Circle is to attach to mounting plates via (2) 1" x 3" mounting rails welded to the circle with a welded gusset on the outside of each rail and 3/4" grade 8 bolts.

7. Standard circle mounting plates to be 3/4" solid steel with a window for access during service and cleaning. Optional size mounting plates must available depending on our application.

Actuation and Shock Assembly Specifications:

1. Moldboard is to be actuated by two (2) 3.5" double-acting cylinders with 2" Socatri rods and poly pak seals housed in a formed shock-spring housing assembly. Both hydraulic ports exit to the rear of the housing to prevent hose chaffing and easier service. The rod end of the actuation cylinder must have a hardened, replaceable bushing to replace in the event of wear.
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2. Within the formed shock-spring housing shall be a heavy-duty shock spring with 7/8" diameter wire and 725 pounds per inch minimum deflection for impact absorption.
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3. The cylinder and spring are to be retained in the housing by a flanged retainer and (4) 5/8" grade 8 bolts and lock nuts.
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Moldboard Specifications:

1. Moldboard material is to be 1" thick x 20" tall x 12-ft. long carbon steel, with radius for proper roll and ejection of material.
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2. Bottom edge of moldboard to have integral offset to accommodate curved, or flat beveled cutting edges.
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3. Moldboard is to be manufactured to accept standard 6-foot cutting edges (AASHO top punched) or three (3) 4-foot carbide blades.
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4. The mainframe hinge line shall bolt to the moldboard at the outer hinges and at the center hinge with a total of eighteen (18) grade 8 bolts and locking nuts.
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5. Moldboard must include an integral CNC flame cut grip-step with material-flow-through design, welded on left side of moldboard.
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Scraper Reversing Specifications:

1. The reversing actuation of the scraper shall be accomplished by two (2) 4" double-acting cylinders with 2" Socatri rods and poly pak seals.
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2. Reversing cylinders are to be attached to the mainframe with two (2) 2" diameter pins at each end (fore and aft).
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3. Front pins are to be of the shear-pin design and the rear pins are non-shear, anchor style pins.
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4. The 2" O.D. shear and anchor reversing pins are to be treated and full-floating for corrosion and seizure prevention with three (3) grease fittings for each pin.
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5. The distance between mainframe reversing pins is to be no less than 19" center to center.
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6. Underbody scraper is to have infinite plowing positions up to 45-degrees right and left.
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Paint Specifications:

1. Fabricated parts are to be sandblasted and painted black in color with a DTM High-Solids 2-part catalyzed Polyurethane paint.
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Warranty:

- 1. Underbody scraper to have a minimum of a one (1) year materials, parts (excluding wear parts such as hoses and circle wear pads), and workmanship warranty regardless of application.

Warranty Questionnaire:

Cylinders:	Months: _____	Provider: _____
Moldboard:	Months: _____	Provider: _____
Hangerboard:	Months: _____	Provider: _____
Center Pin:	Months: _____	Provider: _____
Reversing Pins:	Months: _____	Provider: _____
Actuating Pins:	Months: _____	Provider: _____

*All warranty start-up dates to be when completed by body builder and road-ready at WCRC.

*Underbody components must be complete.

*Underbody bid must meet all Federal, State & local safety standards.

*Successful bidder must furnish complete paper book or CD type illustrated parts, operator, & service manuals.

*Bidder must provide descriptive literature with their bid.

*Bidder must indicate any deviations from specifications and mark yes or no at each item bid.

***All bids must be submitted in a sealed envelope bearing the name of bidder, appropriately marked as to the item being bid, and marked as a sealed bid.**

*Price to be F.O.B. Wexford County Road Commission garage, 85 W. M-115, Boon, MI 49618

*Tax exemption certificate will be signed upon request.

Total bid price for new unit according to above specifications: _____

Terms _____

Date of Delivery at Wexford County Road Commission _____

Submitted by:

Company Name

Signature

Address

Name (Typed or printed)

City, State, Zip

Title of person signing (typed or printed)

Telephone

Date

Please contact Travis Smith, Fleet & Facilities Manager, at (616)862-3043, with any questions regarding these specifications.