

INVITATION TO BID

BID DATE: 01/11/18

PLEASE REFER TO BID NO. 2018-003

QUOTE NOT LATER THAN: 01/31/2018 BY 4:00 PM
(EST)

TO:
VENDOR NAME:
ADDRESS:

CONTACT:
TELEPHONE #:
EMAIL:

FROM:
PURCHASING DEPARTMENT
COUNTY OF BERRIEN, MICHIGAN
ADMINISTRATION CENTER
701 MAIN STREET
ST. JOSEPH, MICHIGAN 49085
FAX #: 269-982-8668

PLEASE INDICATE “**BID NO. 2018-003**” ON OUTSIDE OF SEALED ENVELOPE TO INSURE PROPER BID PLACEMENT. DELIVERY REQUIREMENTS: AS PER SPECIFICATIONS

The Berrien County Board of Commissioners reserves the right to reject any and all bids or make any deviations deemed in the best interest of Berrien County.

Quality: All materials/services furnished must be the best of their respective kinds (unless otherwise specified) and will be subject to our inspection and approval after delivery. If materials are rejected it will be held for disposition at your risk and expense.

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
	<u>REQUEST FOR BID ON THE FOLLOWING:</u>		
2	WHEEL LOADERS 3YD BUCKET, QUICK COUPLER PLEASE SEE ATTACHED SPECIFICATIONS, INCLUDING TRADE IN DESCRIPTIONS <u>TOTAL COST OF LOADERS :</u> <u>PLEASE SEND TWO (2) COPIES OF BID PROPOSAL</u>		
	PURSUANT TO MICHIGAN PUBLIC ACT 517 OF 2012, AN IRAN-LINKED BUSINESS IS NOT ELIGIBLE TO SUBMIT A BID FOR THIS RFP. FURTHER, EACH BID SUBMISSION <u>MUST</u> INCLUDE WRITTEN CERTIFICATION BY THE BIDDER THAT THE BIDDER IS NOT AN IRAN LINKED BUSINESS (SEE ATTACHED FORM). A BID SUBMISSION WITHOUT THE REQUIRED WRITTEN CERTIFICATION MAY BE REJECTED AS INCOMPLETE AND VIOLATIVE OF LAW. A SUSTAINED DETERMINATION BY THE		

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
	<p>COUNTY THAT A BIDDER HAS SUBMITTED A FALSE CERTIFICATION OF BEING AN IRAN LINKED BUSINESS MAY RESULT IN THE CANCELLATION OF AN EXISTING CONTRACT, A CANCELLATION OF INTENT TO ENTER INTO A NEW CONTRACT, AND/OR REPORTING OF THE BIDDER TO THE STATE ATTORNEY GENERAL, AND POSSIBLE FINES AND COSTS, AND BAR FROM FURTHER BIDDING ON COUNTY RFP'S FOR AN ADDITIONAL 3 YEARS, AS PROVIDED UNDER P.A. 517 OF 2012.</p> <p>MEMBER OF HPS (HOSPITAL PURCHASING SERVICES), STATE OF MICHIGAN MIDEAL PURCHASING PROGRAM, AND NATIONAL JOINT POWERS ALLIANCE</p> <p>ANY QUESTIONS REGARDING BID SPECIFICATIONS, PLEASE CONTACT DON GEISLER AT dgeisler@bcroad.org</p> <p>ALL OTHER QUESTIONS REGARDING THE BID PROCESS, PLEASE CONTACT THE PURCHASING DEPT. AT 269-983-7111 EXT. 8020</p>		

CHERYL VANCE
 ACCOUNTING COORDINATOR
 PHONE: 269-983-7111 EXT. 8020
 (cvance@berriencounty.org)

BIDDERS NAME: _____

BIDDERS PHONE NUMBER: _____

BID DATE: _____

BERRIEN COUNTY ROAD DEPARTMENT

PROPOSAL AND SPECIFICATIONS

FOR

TWO (2) WHEELED LOADERS

**BOARD OF COUNTY COMMISSIONERS
OF THE COUNTY OF BERRIEN
2860 EAST NAPIER AVENUE
BENTON HARBOR, MI 49022**

Wheel Loader Specifications

Bid Spec Sheet
Wheel Loaders
3 yd. Bucket, Quick Coupler

YES	NO	Comments
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GENERAL INFORMATION

The wheel loader must be new, unused current production model with an articulated frame, Parallel Z-bar loader linkage front frame.			
It shall have all standard equipment as shown in the manufacturer's printed literature.			
Modifications of existing models to meet these specifications will not be permitted.			

WORK EQUIPMENT

The Parallel Z-bar loader linkage must provide parallel movement while lifting the bucket in both fork and bucket applications.			
The machine will have a quick coupler with hydraulic pin engagement. The pins will be engaged or retracted by the operator from within the cab. The quick coupler will be compatible with Manufacture's attachments.			
The machine will have a 3-spool valve mono lever control for boom and bucket controls			

BASIC SPECIFICATIONS

The advertised operating weight of the base wheel loader, including standard equipment, lubricants, coolant, full fuel tank, coupler, bucket, counterweight and operator shall be no less than 29,079 lb (13190 kg). The operating weight shall not include fluid filled or solid rubber tires, optional equipment, or other optional counterweight or ballast.			
Tire Size shall be 20.5-R25 tires on construction equipment type steel rims at all four corners.			
The SAE rated general purpose Bucket Capacity shall be no less than 3.0 yd ³ (2.3 m ³) cubic yards and shall have a bolt on cutting edge.			
The forks shall have a 60" coupler fork frame carriage w/ 60" tines, rated to machine lifting capacity.			
Static tipping load with 0 degrees of articulation shall be no less than 21,528 lbs (9765 kg).			
Static tipping load with 40 degrees of articulation (full turn) shall be no less than 18,794 lbs (8525 kg).			
Bucket breakout force (with a 3.0 yd ³ bucket and hydraulic quick coupler) shall be no less than 25,067 lbs (11370 kgf).			
Shall be equipped w/ Scales and Printer			
Dump clearance with a general purpose bucket and hydraulic quick coupler shall be no less than 95" (2865 mm) at full height and the bucket at a 45 degree dump angle.			

ENGINE SPECIFICATIONS

The engine shall be manufactured by the loader manufacturer.			
Engine shall have six cylinders in an inline configuration, a variable geometry turbocharger with an air-to-air after-cooler.			
Engine shall have a minimum power rating of 149 HP (111 kW) when rated according to ISO 9249/ SAE J1349 standards.			
Engine shall be EPA TIER 4 Final emissions certified and use cooled EGR technology.			
The engine shall be equipped with a common rail high pressure injection system.			
Engine displacement shall be at least 408 cubic inches (6.69 L).			
Standard equipment shall include variable geometry turbocharger, air to air aftercooler, air cleaner with two stage filtering, water pump, fuel pump with electronic fuel primer, secondary engine shutdown switch, exhaust pipe with rain cap.			
The variable geometry turbocharger must be hydraulically actuated for long life and precise air control.			
The engine emissions aftertreatment system shall NOT have a "burner" device with a spark			
The engine shall have an auto idle shutdown feature that turns the engine off after a prolonged period of inactivity.			
Engine bore shall be 4.21" (107mm) and stroke shall be 4.88" (124 mm).			
Engine air will be filtered by a dry element, two stage radial sealed air cleaner with a dust indicator and evacuator.			
The engine cooling system shall use a hydraulic driven fan that can be reversed for radiator cleaning both manually and via an automatic reverse mode through the use of a single switch during operation. The fan reverse mode and timing will be controlled through the monitor			
The engine shall have a cold weather starting system consisting of an electric intake manifold pre-heater.			

ELECTRICAL SYSTEM

The engine shall be equipped with a 24 volt starting and charging system with a 90 amp alternator and dual 12V batteries (92Ah, 680 CCA). A battery disconnect switch shall be provided.			
That cab shall have two 12V power outlets and a 24V cigarette lighter			

The lighting system shall include two front halogen high/low beam cab mounted headlights with a high beam indicator on the instrument panel, two front halogen work lights on cab, two front halogen working lights fender mounted, two rear halogen work lights grill mounted, two rear combination stop and tail lights, rear back up light, two front and two rear turn signals with hazard flasher switch, instrument panel illumination and interior dome light.			
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TRANSMISSION

The transmission shall be hydrostatic with one engine driven pump and two drive motors (high and low speed), with dynamic braking, inching pedals and a control panel for travel speed control.			
The transmission shall have four speed ranges forward and four speed ranges reverse. The forward and reverse direction shifts will be controlled by a switch on the mono lever.			
Maximum travel speed, both forward and reverse, shall be 23.6 mph (38.0 kph).			
The hydrostatic transmission will feature an in-cab controlled variable traction control system that shall reduce torque to the wheels at low speeds to reduce wheel spin. The traction control system shall include a special mode for snow covered surfaces.			
An audible alarm shall indicate when the machine is in reverse travel mode.			

HYDRAULIC SYSTEM

The loader shall employ a closed center load sensing hydraulic system which shall be equipped with an oil cooler.			
Maximum hydraulic system relief valve pressure shall be a maximum of 3,000 psi (30.4 Mpa).			
All hydraulic flow shall pass through a three (3) spool control valve. The first spool shall feed the steering circuit. A second spool will control flow to the loader circuits. The third spool shall provide flow for any attachments such as a multi-purpose bucket. All necessary piping on the loader arm shall be provided for the attachment circuit.			
The hydraulic system shall employ two (2) piston type pumps as well as a pilot control pump.			
Hydraulic cycle time, with the bucket carrying a load not exceeding its maximum, shall be 6.0 seconds to raise, 2.0 seconds to dump, and 3.2 seconds to lower when empty, for a total cycle time of 11.2 seconds.			
Ride control shall be included as standard equipment			
The hydraulic system shall have a total hydraulic flow (including work equipment and steering) of 39.6 gallons/minute (150 L/min) supplied by a piston pump.			

STEERING

The wheel loader shall have a minimum of 40 degree full turn articulation steering angle both right and left of center.			
The steering system shall be a full hydraulic type and shall perform consistently and independently of engine speed variations.			
The turning radius at the outside of the bucket at carry position with a bolt on cutting edge shall be no more than 20'0" (6110 mm)			

BRAKES

The loader shall be equipped with (4) wheel, hydraulic, inboard mounted, wet disc type service brakes. The service brakes shall be controlled by two pedals. Both pedals shall be used for braking.			
The parking brake shall be an electronically actuated wet multi disc type and shall neutralize the transmission when applied.			

DRIVELINE / FINAL DRIVE

The differentials shall be torque proportioning and not require manual locking / unlocking.			
The final drive shall be an inboard planetary type.			
The rear axle shall be semi-floating, supported by a center pin with a total minimum oscillation of 24 degrees.			

OPERATOR COMPARTMENT

The operator compartment shall protect the operator from the environment and feature an integrated R.O.P.S. (roll-over protection system) F.O.P.S. (falling object protection system) Level 2 that meets OSHA requirements.			
The operator compartment shall have a standard dedicated rear-view monitor which can be set to either turn ON when the machine is in reverse, or to be ON at all times. The monitor shall be full color with machine guidelines which can be adjusted or turned off. The rear view camera shall be standard and mounted on the rear of the machine.			
The operator compartment shall have full vision safety glass, one inside rearview mirror and two outside mounted West Coast type rearview mirrors.			

The operator compartment shall be mounted on multi-layer viscous mounts for comfort and noise reduction.			
The seat shall have a high back rest and be fully adjustable for height, weight, fore/aft, seat back, and armrests, have air suspension, heated and be equipped with 3 inch wide seat belt.			
The cab shall include a tilt and telescoping steering wheel, and sun visor.			
Both front and rear windows shall have wipers and washers. The rear window shall have an integrated heating system for removing ice, frost and fog.			
The floor of the cab shall have a full size, rubber floor mat that shall be flush with the sills of the doors for easy cab cleaning.			
The cab shall have lock-outs for the hydraulic controls that do not allow for boom or bucket operation while engaged.			
The cab shall be a two (2) door walk through design with access ladders and handrails			
The left hand side door of the cab should be easily opened and closed from both the operators seat and while standing with both feet at ground level.			
The operator compartment shall have an automatic climate control system for heating and air conditioning operated by an electronic control panel.			

INSTRUMENTATION

The wheel loader shall have the following gauges: Hour meter, speedometer, tachometer, fuel level, DEF level, hydrostatic oil temperature, and engine coolant temperature.			
The instrument panel shall include the following indicator lights: battery charge, engine preheat, engine coolant level and temperature, engine oil level, parking brake warning, low brake pressure, brake temperature, transmission oil temperature, fuel level, DEF level, transmission oil filter clogging, air cleaner clogging, ECO lamp and a full maintenance monitor system that will store and display service intervals and fault codes. Diesel particular filter restriction indicator.			

SERVICEABILITY

The hydraulic tank shall have an oil level sight gauge that allows checking the fluid level without removing the filler cap.			
The DEF tank shall have an level sight gauge that allows checking the fluid level without removing the filler cap.			
A cartridge-type hydraulic return filter shall be located outside of the hydraulic tank for easy service and to avoid system contamination.			
All daily engine checks will be performed on the right engine side and easily reachable or viewable from one position.			
Rear engine access doors shall lock into two positions for safety and to allow for operators and technicians of varying heights and be hinged at the top for easy engine compartment access.			

GUARDS AND VANDALISM PROTECTION

An emergency exit door shall be on the right side of the machine to allow operator exit in the event that the machine is tipped over onto the left door, or the left door is otherwise damaged to the point that it cannot be opened.			
Rear view monitoring system with a separate monitor.			
An engine cooling fan guard must be installed to protect the operator from the engine cooling fan.			
Heat shields shall be installed over the exhaust manifold, turbo and other components heated by exhaust gases to decrease the likelihood of severe burns due to accidental contact.			
Vandalism protection should include: cap locks and cover for fuel tank filler, padlocks for the battery box, hydraulic oil tank, engine hood side panels, radiator cap cover, radiator tank and transmission oil filler cover.			

WIRELESS EQUIPMENT MONITORING SYSTEM

The wheel loader shall be equipped with a wireless equipment monitoring system to provide the owner with SMR readings, machine location via a GPS system, operating times, operator ID, fuel consumption, engine coolant temperature monitoring information, dashboard cautionary information, maintenance reminders, load and frequency data, and the ability to lock out the engine start ability. A user friendly web site with customized access to your machine, e-mail and text alerts plus monthly summary reports as well as a mobile app shall be included.			
The wireless monitoring system shall provide this information to the owner at no cost for the life of the machine.			

SERVICE FILL CAPACITY

The fuel tank shall have a diesel fuel capacity of at least 49.1 US gallons (186 L).			
The engine cooling system shall have a coolant / antifreeze capacity of at least 8.8 US gallons (33.3 L).			
The engine crank case shall have an oil capacity of at least 6.1 gal (23 L).			

Front axle shall have an oil capacity of 4.9 US gallons (18.5 L).			
Rear axle shall have an oil capacity of 4.8 US gallons (18.0 L).			
The DEF tank shall have a capacity of 3.7 US gallons (14 L).			
The hydraulic system shall have a hydraulic oil capacity of 21.1 US gallons (80 L).			

PM Agreement:

The Machine shall come standard w/ 3 years or 2000 hours to include all oils, fluids, filters and drive time. If DPF needs to be changed it shall include 2 filters.			
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Trade in:

Berrien County Road Department will be trading in two (2) Case 621 D Loaders
Loaders can be inspected prior to Bid opening by contacting Scott Evans @ 269-925-1196 ext. 4409

BERRIEN COUNTY ROAD DEPARTMENT

Bid Offer Form

Vendor: _____

Line #	Description	Quantity	U/M	Unit Price
1	Wheel Loaders	2	Each	
2	Trade in of 2003 Case 621D with 4224 hours	1	Each	
3	Trade in of 2003 Case 621D with 4052 hours	1	Each	

Total Price _____

Lead time for delivery of product is _____ days after receipt of order

Product literature is included? Yes _____ No _____

Warranty information is included? Yes _____ No _____

Vendor may contact Road Department to schedule site visit to inspection trade-in loaders.