City of Arkansas City - Department of Environmental Services, Supervision Division Mini Excavator Bid, January 2025

BID FORM

To the Mayor and City Commissioners Arkansas City, Kansas

1. The undersigned, in compliance with your invitation to bid for furnishing, equipping and delivering a new production mini excavator or a used model with less than 500 hours FOB, City of Arkansas City, Kansas, having examined the purchase specifications and being familiar with all of the conditions surrounding the furnishing of this equipment and accessories in accordance with the purchase specifications at the price stated below. This price shall cover all expenses incurred in performing the work required under the documents and of which this proposal is a part:

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MINI EXCAVATOR BID SPECIFICATIONS

	Yes	N	0
Minimum Horsepower 30 Hp	. (🗸)	()
Engine Turbo Charged.	(🗸	()
Horn	(🗸)	()
Spark Arrestor Muffler	. (🗸)	()
2 Speed Travel	(✔)	()
Auxiliary Hydraulics	(🏑)	()
Minimum 65" Dozer Blade	(🗸)	()
Front push blade up, down, float	(🗸)	()
Air Conditioned Cab	(🗸	()
Control Console Locks	(🗸)	()
Control Pattern Selector Valve (ISO/STD)	(🗸)	()
Engine & Hydraulic Monitor with shutdown	(🗸)	()
TOPS/ROPS canopy	(🗸)	()
ROPS Meets requirements of SAEJ1040C	(~)	()
TOPS Meets requirements of ISO/DIS	(🗸)	()
Retractable Seat Belt	(🗸)	()
Suspension Seat	(🗸)	()
Work Lights	(🗸)	()
Quick Change Attachment Mounting System	(v)	()
ZERO to MINIMAL Tail Swing	(🍫)	()
Boom Swing	(🗸)	()
Hydraulic Thumb	(🗸	()
16" & 24" quick change bucket	(🗸)	()
Quick change breaker	(🗸)	()
Minimum Dig Depth 11 feet or 132"	(🗸)	()
Maximum Operating Weight 10,000 lbs.	(🛂	()
Minimum 5 Vear 1 250 Hour Warranty	(🗸	(



Quotation Number: EC987994 Quote Sent Date: Jan 31, 2025 Prepared By: Edi Clark

Phone: 316-712-8723

Email: eclark@whitestarmachinery.com

62,346.00

Customer Contact Dealer City of Arkansas City White Star Machinery & Supply **Environmental Services** Price Each Total Item Number Quantity Item Name **E40 R2-Series Bobcat Compact** M3415 **Excavator Standard Equipment:** 40.4 HP Fingertip Boom Swing Control Turbocharged, Bobcat 1.8L, Tier 4 Diesel Engine, Non-DPF Horn Hydraulic Joystick Controls Auto Idle **Keyed Ignition** Auto-Shift, Two-Speed Travel Auxiliary Hydraulics with Selectable Flow Lift Eye w/ Arm Mounted Flush Face Quick Couplers Long Arm Rubber Tracks Canopy /Cab Includes: Cup Holder, Retractable Seat Belt, Vinyl Suspension Spark Arrestor Exhaust System Vandalism Protection Seat Roll Over Protective Structure (ROPS) - Meets Requirements of LED Work Lights X-Change Attachment Mounting System ISO 12117-2: 2008 Tip Over Protective Structure (TOPS) - Meets Requirements of Minimal Tail Swing LT 2.00 Inches Telematics with 2-year Machine IQ Basics Subscription +90-Day ISO 12117: 2000 Machine IQ Health & Security Trial Falling Object Protective Structure (FOPS) - Meets Requirements of ISO 10262:1998 Control Console Locks Control Pattern Selector Valve (ISO/STD) Standard Instrument Panel Dozer Blade with Float Engine/Hydraulic Monitor with Shutdown Fingertip Auxiliary Hydraulic Control Cab Plus Package M3415-P11-C07 1 Included: Enclosed Cab with Auto HVAC, 3yr Machine IQ Health and Security Subscription, Deluxe Instrument Panel with Keyless Start, Cloth Suspension Seat, Travel Motion Alarm, Radio 1 Hydraulic Clamp - w/ Diverter Valve M3415-R08-C15 Hydraulic X-Change - Long Arm M3415-R06-C04 16" MX3 XCHG TEETH 7324830 24" MX3 XCHG TEETH 7323530 NB160 Nitrogen Breaker with Nail Point 7234536 X-Change Mounting Cap -7113657 **Loader X-Change Mounting Frame** 7141800

Quote Total - USD

 $\bigcirc R$

60 Month/2000 Hour Full Warranty

Lease Program – 60 Month Agreement \$8750.00 annually With first right of refusal at term end

9986418

Purchase Order:	
Sign:	
	Tax Exempt: Y □ / N □

Bobcat

E40R2 40.4 HP – Long Arm

COMPACT EXCAVATOR

Effective September 11, 2023

These bid specifications are to be used as guidelines when assisting purchasing agents and governmental specification writers in writing specs for excavators.

It is not the intent of these specifications to cover all details of design or construction. The unit shall be fully equipped to perform the work intended and shall be a new, current production model.

- Where applicable, specification conform to SAE or ISO standards and are subject to change without notice.
- Specifications(s) are based on engineering calculations and are not actual measurements. Specification(s) are provided for comparison purposes only and are subject to change without notice. Specification(s) for your individual Bobcat equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors.

For individual assistance in preparing detailed specifications, contact the Product Management Department in the West Fargo, ND office at 701-241-8700.

For the most up-to-date Bid Specs go to BobcatNET >>Excavators>>E40R2>>Resources>>Bid Specs

COMPACT EXCAVATOR BID SPECIFICATIONS (4 TON)

OPERATING WEIGHTS & GROUND PRESSURES

Operating Weight (Includes Standard Equipment, fluids full and 24 in. Bu	cket)
- With Canopy	9180 lbs. (4164 kg)
- Add for Cab with HVAC	+ 284 lbs. (129 kg)
- Add for Steel Tracks	
- Add for Optional Angle Blade	+ 346 lbs. (157 kg)
Ground Pressure with 13.8" (350 mm) rubber tracks:	
Ground Pressure with 11.8" (300 mm) steel tracks:	5.13 psi (35.4 kPa)

WORKING RANGE & DIGGING FORCES

Minimum Arm Length (pin to pin)	64 in. (1625 mm)
Minimum Boom Length (pin to pin)	96.5 in. (2450 mm)
Maximum Dig Depth	130.4 in. (3312 mm)
Maximum Depth of Vertical Wall which can be excavated	85.7 in. (2178 mm)
Maximum Reach at Ground Level	215.2 in. (5465 mm)
Maximum Radius of Working Equipment	220.3 in. (5594 mm)
Maximum Dump Height	
Maximum Bucket Tooth Height	196.9 in. (5001 mm)
Maximum Working Equipment Radius with Boom at Maximum Height	92.5 in. (2349 mm)
Minimum Bucket Pivot Angle	184°
Maximum Blade Lift	14.4 in. (365 mm)
Maximum Blade Depth	
Swing Clearance, Rear of Upper-structure - w/ standard counterweight.	
Tail Swing Overhang – w/ standard counterweight	
Slew Speed	8.6 RPM
Boom Swing (Left)	
Boom Swing (Right)	55°
Arm Digging Force	4074 lbf. (18120 N.)
Bucket Digging Force	
	,

DIMENSIONS

Cab Height	98.7 in. (2507 mm)
Overall Length in Transport Position	192.3 in. (4884 mm)
Minimum Radius in Transport Position	149.5 in. (3798 mm)
Clearance, Upper structure to Groundline	23.8 in. (604 mm)
Groundline to Top of Engine Cover	63.8 in. (1621 mm)
Length of Track on Ground	71.1 in. (1806 mm)
Overall Length of Track Assembly	89.1 in. (2263 mm)
Machine Centerline to Front of Blade	67.0 in. (1701 mm)
Blade Height	14.4 in. (367 mm)
Blade Width	72.8 in. (1850 mm)

HYDRAULIC SYSTEM		
Number of Pumps		
Hydraulic Function Times Bucket	2.7 Seconds 2.9 Seconds 4.6 Seconds 6.8 Seconds 2.9 Seconds Lower Extend 5.8 Seconds Right 7.5 Seconds Lower 4.2 Seconds	
	DRIVE SYSTEM	
Final Drive Each track is independently driven by a hydraulic axial piston motor Type of Reduction		
Engine/Electrical		
Make/Model/Tier1.8 L Bobcat Tier 4 Final (Non-DPF)Fuel/CoolingDiesel/LiquidAir InductionTurbochargedHorsepower (Gross)40.4 hp (30.2 kW)Rated Engine Speed2400 RPMTorque @ 1600 RPM (Gross)129.8 ft.—lbs. (176 Nm)Number of Cylinders3Displacement109.5 in.³ (1.794 L)LubricationForced FlowFilterCartridge Type - Full FlowAir CleanerDual Dry Replaceable Paper Cartridge w/ Safety ElementAlternator12 volt, 90 ampsBattery12-volt, 650 cold cranking amps @ 0°F (-18°C)Starter12-volt, Gear Reduction Type; 2.7 HP (2.0 kW)		

CONTROLS

Excavating Functions Two ny	ydraulic joysticks control boom, arm, bucket & house slew;
	Boom swing controlled by fingertip switch on left joystick;
	The blade is controlled by a separate lever
Engine Speed Control	Rotary Dial with Auto-Idle
Auxiliary Function Controlled by	switches on right-hand joystick – variable flow with detent
Service Brake (Travel)	Hydraulic lock on motor
Parking Brake (Travel)	Hydraulic lock on motor
	Hydraulic lock on motor
	Spring applied multi-disc brake

CAPACITIES

Fuel Tank	13.7 gal. (52 L)
Engine Cooling System	
Engine Oil & Filter	
Hydraulic System1	
Hydraulic Reservoir	

UNDERCARRIAGE

Undercarriage	Crawler-Type Tractor Design
No. of Track Rollers	4 each side
Track Rollers	Sealed, with Reinforced Box-Section Track Roller Frame
Track Adjusters	Grease-Type with Shock Absorbing Recoil Springs
Track Type / Width (Standard)	
Track Type / Width (Optional)	Steel Shoe, 11.8 in. / (300 mm)
Ground Clearance (per SAE J1234)	8.3 in. (212 mm)

INSTRUMENTATION

- The standard excavator instrumentation panel shall be positioned forward of the operator for optimum visibility.
- Standard Instrumentation shall consist of:
 - Gauges for engine coolant temperature and fuel level
 - Warning lights for fuel level, seat belt, engine coolant temperature, engine malfunction, hydraulic system malfunction, general warning.
 - Indicator lights for 2-Speed travel mode, engine preheat
 - Data display for operating hours, engine RPM, maintenance clock, battery voltage, service codes, engine preheat countdown.
- The system shall alert the operator of monitored excavator malfunctions by way of an audible alarm and visual warning light.
 - The system shall have engine shut down provisions to prevent damage to engine and hydraulic system.
- A Deluxe Display panel shall be available as optional equipment. In addition to features provided in the standard instrumentation, the deluxe panel shall provide:
 - Digital clock and resettable job clock.
 - Keyless start system that provides one Owner Code and eight Operator codes.
 - Owner and Operator codes shall be (5) digit, programmable at owners discretion.
 - System shall provide real time data including engine coolant temperature, engine oil pressure, battery voltage, hydraulic oil temperature.
 - System shall provide input capability and visual feedback for depth guidance system.

SAFETY FEATURES & TRAINING RESOURCES

- Cab shall meet Rollover Protective Structure (ROPS) in accordance with ISO 12117-2 and Tip Over Protective Structure (TOPS) in accordance with ISO 12117 and FOPS Level 1.
- Retractable seat belt shall be provided as standard equipment.
- Additional operator protection shall be provided by deactivating ALL excavator functions when the operator console is in the upright position.
- An automatic spring applied multi-disc brake shall be provided to lock the upper structure to the undercarriage for transporting purposes.
- Grab handles to assist the operator in entering and exiting the excavator will be provided as standard equipment.
- Front working lights for indoor use and low light operation will be standard.
- A weather resistant operator handbook written in English will be attached to inside of cab, providing operational instructions and warning by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish.
- Lift Capacity Charts shall be affixed to the machine, within the operators line of sight.
- A comprehensive Excavator Service Safety Training Kit shall be available.
- A comprehensive Excavator Operator Training Kit shall be available.

AVAILABLE OPTIONS/ACCESSORIES:

- Angle Blade with bolt-on replaceable cutting edge (Hydraulic Activated, +/- 25°), shall be available.
- Mirror Kit shall be available.
- Beacon Light shall be available.
- Enclosed cab with heat & air conditioning shall be available as optional equipment without changing excavator profile.
- Front cab window shall be frameless.
- Hydraulic activated attachment quick change mounting system shall be available as optional equipment.
- Auxiliary hydraulics with diverter valve shall be available as optional equipment.
- Secondary Auxiliary Hydraulic circuit shall be available as optional equipment.
- Keyless start system shall be available as factory option.
- Steel Tracks shall be available.
- Top guard and front guard in accordance with ISO 10262 Falling Object Protective Structure (FOPS) Level I for top guard shall be available.
- Travel motion alarm shall be available as optional equipment.

STANDARD FEATURES SHALL INCLUDE:

- 3yr Machine IQ Basics Subscription with 90-Day Machine IQ Health & Security Free Trial
- Auto-Idle
- Auto-Shift, Two Speed Travel
- Auxiliary Hydraulics with Selectable Flow
 - W/ Arm Mounted Flush Face Quick Couplers
- Canopy (ROPS & TOPS & FOPS certified)
- Control Console Locks all Machine Functions
- Control Pattern Selector Valve (ISO/STD)
- Cup Holder
- Dozer Blade with Float
- Engine & Hydraulic Condition Monitor with Return to Idle and Shutdown
- Fingertip Auxiliary Hydraulic Control Joystick Mounted
- Fingertip Boom Swing Control Joystick Mounted
- Horn
- Hydraulic Joystick Controls
- Keyed Ignition
- LED Work Lights
- Lift Eye
- Long Arm
- Rubber Tracks
- Spark Arrestor Exhaust System
- Standard Instrument Panel
- Suspension Seat, Vinyl with Retractable Seat Belt
- Turbocharged Tier 4 Diesel Engine, Non DPF
- Vandalism Protection
- X-Change™ Attachment Mounting System
- Warranty: 2 years, or 2000 hours whichever occurs first
- Minimal Tail Swing

ATTACHMENTS

Attachment Requirements:

- Attachment Quick Change Mounting System shall be available.
- Hydraulic Activated Quick-Change Mounting System shall be available.
- Attachment Quick Change Mounting System shall be compatible with Hydraulic Clamp.
- Excavator arm shall be Clamp ready & control valve shall have auxiliary port relief installed.

Attachments Available:

- Auger

- Buckets: Grading and Trenching

- Breakers: Hydraulic and Nitrogen

Hydraulic Tilt Grading Bucket

- Hydraulic Clamp

- Plate Compactor

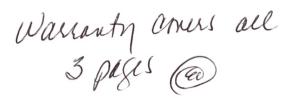
- Ripper

- Flail Mower

SERVICEABILITY

- Access to the following items shall be gained by opening the side and / or center access hood:
 - Air cleaner with restriction indicator
 - Battery
 - Cooling system (engine oil and hydraulic oil coolers) for cleaning
 - Coolant recovery bottle
 - Engine oil and fuel filters
 - Engine oil level
 - Sight gauge for hydraulic oil level
- Access hoods and fuel fill shall have locking provision for vandal proofing.
- Centralized grease point for slew bearing and slew pinion.
- The base end of the boom swing cylinder must not require grease or routine maintenance.

COVERAGE DETAILS



FULL COVERAGE

All components listed under powertrain and powertrain + hydraulics, plus the following components:

ENGINE:

- Air cleaner
- Alternator
- · Coolant reservoir
- · Crankshaft damper/pulley
- · Engine mounts

- · Flywheel & ring gear
- · Fuel tank(s)
- · Hoses/lines & fittings
- Pullevs
- Radiator

Starter

- Thermostat
- · Water pump

HVAC COMPONENTS:

- · Clutch & pulley
- Coils
- Compressor
- Condenser
- Ducts

- Evaporator
- Fan
- Harnesses
- · Heater core
- Hoses/fittings

- Hoses/seals/gaskets
- Motors
- · Receiver dryer
- Switches
- Valves

MAINFRAME COMPONENTS:

- · Articulated joint
- Blade
- Bob-Tach® system assembly
- Boom
- · Boom swing frame
- Bucket link
- Chaincase
- · Counterweight (MX)
- Dipper arm

- · Door & cover assembly
- Fenders
- Lift arm
- · Main frame
- · ROPS operator cab
- · Seat & seat bar assembly
- · Slew ring & bearing
- Suspension control links
- Suspension shocks

- Tailgate
- · Track frame
- Track tensioner
- Tractor hood assembly
- Undercarriage
- Upper structure
- X-Change[™] system

ELECTRICAL COMPONENTS:

- · Control panels/displays
- Controllers
- Gauges

- Horn/alarm
- · Main power relay
- Switches

- Telematics components
- Wire harnesses

HYDROSTATIC/DIFFERENTIAL/TRANSMISSION:

- Axle seals
- Brake system

- Hydrostatic mounts
- Levers & pedals

- Pulleys
- · Shift & control linkage

OTHER COMPONENTS:

- · Steering column & wheel
- · Tie rods
- · Windshield wiper motor & assembly





Scan the code to see full Protection Plus extended warranty terms and conditions.

COVERAGE DETAILS

WHAT'S COVERED?

POWERTRAIN COVERAGE

ENGINE:

- · Air temp & pressure sensors
- Camshaft
- · Camshaft bearing
- · Camshaft gear
- · Camshaft housing assembly
- · Camshaft roller/follower/lifter
- · Catalytic converter
- · Charge air cooler
- · Connecting rod
- · Connecting rod bearing
- · Crankcase relief valve
- Crankshaft
- · Crankshaft front seal
- · Crankshaft gear
- · Crankshaft main & rod bearings
- · Crankshaft rear seal
- · Cylinder block main bearing bores
- · Cylinder head
- · Cylinder head gasket
- Cylinder liner
- DEF/DOC/DPF/SCR sensors
- · Diesel exhaust fluid (DEF) dosing module
- · Diesel exhaust fluid (DEF) pump
- · Diesel exhaust fluid (DEF) tank
- · Diesel oxidation catalyst (DOC) system
- Diesel particulate filter (DPF)
- · Differential pressure ratio regulator
- · Dosing control unit (DCU)

- · Electronic control unit (ECU)
- · Emissions-specific air lines/pipe
- · Engine block
- · Engine oil cooler
- · Engine oil filter housing/base
- · Engine oil pan & gasket
- · Engine oil pressure relief valve
- · Engine oil pressure sensor
- · Engine oil pump
- · Engine speed sensor
- · Exhaust combustion lines
- Exhaust gas recirculation cooler
- · Exhaust gas recirculation pipe
- · Exhaust gas recirculation valve
- · Exhaust manifold & gasket
- · Front & rear cover
- Fuel cooler
- · Fuel injection lines
- · Fuel injection pump
- · Fuel injection pump metering valve
- · Fuel injector
- Fuel pressure sensor
- · Fuel shutoff solenoid
- Fuel transfer pump
- Governor group
- · Horsepower fuel common rail & sensors
- Inlet/exhaust valve
- Intake air heater

- Intake manifold & gasket
- · Liner seat/insert
- · Mass air flow & temp sensor
- · NOx sensor
- Particle sensor
- Piston
- · Piston rings
- Push rod
- Rack/control shaft
- Rocker arm
- · Rocker shaft assembly
- Selective catalyst reduction (SCR) system
- · Throttle actuator
- · Throttle valve & body
- Timing/accessory gears
- Timing gear housing
- Timing position sensor
- Turbocharger
- · Unit injector control linkage
- · Valve cover & gasket
- · Valve guide
- · Valve seat/insert
- · Valve spring
- Water/coolant temperature sensor
- Wiring harness specific to engine controls

HYDROSTATIC/DIFFERENTIAL/TRANSMISSION:

- 2-Speed valve
- Axle housing assembly (excludes chaincase weldment)
- · Axle shaft & bearings
- · Bevel gear, case, shaft & bearings
- · Clutch components (except dry clutch parts)
- · Differential housing
- · Differential pinion gear/ring gear
- Drive axle
- · Drive belt tensioner assembly
- · Drive shaft & universal joints
- . Drive shift fork & rod

- · Enclosed oil immersed chains & sprockets
- · Engine output drive assembly/coupling
- · Final drive assembly
- · Front differential
- Hub/gear assembly
- · Hydraulic piston pump (MX)
- · Hydrostatic control module
- Hydrostatic lines & hoses (pump to travel motor)
- Hydrostatic motor
- · Hydrostatic pump
- · Motor carrier assembly
- Planetary final drive carrier

- Planetary gear carrier
- PTO shaft group
- · PTO shift fork & rod
- · Range shaft group
- Rear differential
- Reduction gear box
- Track idler
- Track roller
- · Track roller suspension spring
- Transaxle
- Transmission/hydrostatic case & components within

POWERTRAIN + HYDRAULICS COVERAGE

All components listed under powertrain, plus the following components:

HYDRAULIC COMPONENTS:

- ACS/SJC controller
- ACS/SJC harnesses
- ACS/SJC sensors
- · Hydraulic accumulators
- · Hydraulic cooling fan
- · Hydraulic cylinders
- · Hydraulic gear pump
- Hydraulic hoses, tube lines & fittings

- · Hydraulic manifolds
- · Hydraulic motors
- · Hydraulic oil cooler
- · Hydraulic oil temp sensor
- · Hydraulic pumps
- · Hydraulic reservoir
- · Hydraulic valves
- · Joystick assembly

- Lift & tilt actuators
- Pilot controls
- · Relief valves
- · Steering cylinders & valve
- · Swing/slew motor & gear box
- Swivel





Rec. 1/31/2025 2:50pm 2. Parsons

Lyle Blubauch Co Arkawas City Mini Excavator Poid