

NOTICE AND INFORMATION
FOR BIDDERS



**Compact Excavator
Request for Proposals**

1122 S. BURCHARD AVENUE
P.O. BOX 417
FREEPORT, IL 61032

BID DUE: 10:00 am, Thursday, April 28, 2022

The Freeport Park District invites your proposal to supply:

- (1) New Compact Excavator.

Proposals will be evaluated based upon the following criteria:

- If a State contract administered by Illinois Department of Central Management Services has been awarded for this vehicle, that price will be considered along with locally submitted proposals.
- Acceptance will be for the low bid submitted by a responsible bidder.
- Freeport Park District reserves the right to accept or reject any or all bids as it determines to be most advantageous to the Freeport Park District.

Sealed proposals will be received until **10:00 am, Thursday, April 28, 2022** at the Freeport Park District, 1122 S. Burchard Ave., PO Box 417, Freeport, IL, 61032, at which time they will be publicly opened and read.

Each bid must be submitted on the proposed form provided, and placed in a sealed envelope marked "Compact Excavator Bid". Attach to your bid a printout showing the equipment specification for the vehicle you are bidding to supply.

- Bid price is delivered price to Freeport, Illinois.
- Bid price shall not include Federal excise tax or State sales tax. An exemption certificate will be furnished by the Park District upon request of the successful Bidder.

The Board of Park Commissioners reserves the right to waive technicalities and to reject any or all bids.

Contact Bruce Cubberley, Superintendent of Parks, at bcubberley@freeportparkdistrict.org or 815-801-8703 for additional information concerning this bid.

COMPACT EXCAVATOR BID SPECIFICATIONS (6 TON)

MACHINE WEIGHTS & PERFORMANCE – MUST MEET THE FOLLOWING SPECIFICATIONS

Operating Weight (Includes Standard Equipment and 24 in. Bucket)	
- With Cab, Heat/Air Conditioning.....	12618 lbs. (5723 kg)
- Add for Segmented Tracks	+ 536 lbs. (243 kg)
- Add for Add-On Counterweight	+ 528 lbs. (239 kg)
- Add for Angle Blade Option	+ 387 lbs. (176 kg)
Arm Digging Force.....	6446 lbf. (28674 N.)
Bucket Digging Force.....	10261 lbf. (45642 N.)
Rated Lift Capacity (3000mm @ ground level, blade down).....	6411 lbs. (2908 kg)

WORKING RANGE– MUST MEET THE FOLLOWING SPECIFICATIONS

Maximum Radius of Working Equipment.....	251.2 in. (6381 mm)
Maximum Reach at Ground Level.....	246.3 in. (6256 mm)
Maximum Working Equipment Radius with Boom at Maximum Height.....	99.6 in. (2531 mm)
Maximum Blade Lift Height	15.3 in. (390 mm)
Maximum Blade Lift Height w/ Angle Blade Option	18.3 in. (465 mm)
Maximum Blade Drop Depth	21.5 in. (547 mm)
Maximum Blade Drop Depth w/ Angle Blade Option.....	26.6 in. (675 mm)
Maximum Height of Working Equipment with Arm Retracted Down	171.1 in. (4347 mm)
Maximum Bucket Tooth Height.....	233.3 in. (5926 mm)
Maximum Dump Height	171.1 in. (4347 mm)
Maximum Depth of Vertical Wall which can be excavated	112.9 in. (2867 mm)
Minimum Range of Motion – (Optional Hydraulic Angle Blade).....	25° Left / 25° Right
Maximum Dig Depth shall be no less than.....	156.7 in. (3981 mm)
Minimum Bucket Pivot Angle	185°

DIMENSIONS – MUST MEET THE FOLLOWING SPECIFICATIONS

Clearance, Upper structure to Groundline	24.7 in. (627 mm)
Groundline to Top of Engine Cover.....	65.3 in. (1660 mm)
Length of Track on Ground	78.9 in. (2004 mm)
Machine Centerline to Blade – Standard Blade.....	70.2 in. (1784 mm)
Machine Centerline to Blade – w/ Angle Blade Option	81.3 in. (2066 mm)
Machine Width	77.2 in. (1961 mm)
Blade Height.....	16.4 in. (416 mm)
Blade Width	77.2 in. (1960 mm)
Minimum Radius in Travel Position.....	168.5 in. (4280 mm)
Overall Length of Track Assembly	99.3 in. (2523 mm)
Overall Length in Travel Position.....	218.3 in. (5545 mm)
Overall Height.....	100.0 in. (2543 mm)
Minimum Turning Radius.....	80.8 in. (2054 mm)
Rear Swing Clearance	49.8 in. (1264 mm)
- Tail swing overhang shall be no more than 11.2 in. (285 mm)	
- There shall be no protrusion from swing cylinder casting during boom swing left.	
- Boom swing left shall be no less than 75°	
- Boom swing right shall be no less than 50°	

HYDRAULIC SYSTEM – MUST MEET THE FOLLOWING SPECIFICATIONS

- System shall utilize a load sensing, torque limiting variable displacement piston pump.
- Total hydraulic pump capacity shall be capable of providing no less than 36.6 GPM (138.5 L/min)
- Primary auxiliary circuit shall be capable of providing no less than 20.0 GPM (75.7 L/min) for attachment operation.
- Auxiliary system relief pressure shall be set at 3916 PSI (270 bar).
- Second auxiliary circuit shall be capable of providing no less than 12.0 GPM (45.4 L/min) for attachment operation.
- Hydraulic reservoir tank shall be made of resin.
- Variable flow auxiliary hydraulics shall be standard equipment.
 - Shall include flush-face quick couplers.
- Control valve shall be a 9 spool, closed center, individually compensated valve.
 - Shall include detent position for blade float function.
- Cylinders shall be a double-acting type.
- Boom and Arm cylinders shall have end of stroke cushioning.
- Cylinders shall have inertia welded rods and bases at the ends of the cylinders.
- Hydraulic system shutdown shall be provided as standard equipment and shall monitor hydraulic oil temperature and hydrostatic charge pressure.
- A hydraulic oil cooler shall be standard equipment.
- Auxiliary quick couplers shall be flush faced couplers and mounted on the top of the arm.
- Drive motors shall be 2 axial piston motors.
- Slew motor shall be axial piston motor.
- Slew speed shall be no less than 9.0 RPM

DRIVE SYSTEM – MUST MEET THE FOLLOWING SPECIFICATIONS

- Each track shall be independently driven by a hydrostatic axial piston motor.
- Shall utilize a two-stage planetary gear reduction of 58.9:1
- Maximum drawbar pull shall be no less than 12171 lbf. (54138 N).
- Maximum grade-ability (tractive effort) shall be 25°.
- Travel Speeds shall be no less than:
 - Low 1.8 mph (2.8 km/hr)
 - High..... 2.8 mph (4.5 km/hr)

ENGINE/ELECTRICAL – MUST MEET THE FOLLOWING SPECIFICATIONS

- Excavator shall have a 4-cylinder, liquid-cooled, diesel producing no less than:
 - 55.7 hp (41.6 kW) at 2200 RPM rated engine speed. (SAE Gross)
 - 55.0 hp (41.0 kW) (SAE Net)
- Engine shall produce no less torque than 140.1 ft.–lbs. (190.0 N-m) at 1600 RPM.
- Engine displacement shall be no more than 146.0 in.³ (2.392 L).
- Engine must meet Tier 4 Emission Standards.
- Engine shall meet Tier 4 compliance without the aid of a diesel particulate filter (DPF).
- Engine shall utilize forced lubrication.
- Automatic glow plugs shall be standard equipment.
- Air cleaner shall be a dual dry replaceable paper cartridge with safety element.
- Air filter shall be a full flow cartridge type filter.
- Alternator shall be 12 volts, delivering no less than 90 amps.
- Battery shall be 12 volts, delivering no less than 650 cold cranking amps @ 0°F (-18°C)

- Starter shall be a 12-volt, gear reduction type delivering 2.7 hp (2.0 kW)
- Engine coolant shall include propylene glycol anti-freeze with freeze protection to -34°F (-37°C)
- Excavator shall be equipped with an Engine Control Unit to electronically monitor and control the performance of the engine.
- The fuel injection system shall include a High-Pressure Common Rail (HPCR).
- Machine Protection shall be provided as standard equipment and shall monitor engine coolant temperature, engine oil pressure, and engine RPM to help prevent engine damage.
- Engine block heater shall be provided as optional equipment to provide easier starting during cold weather.
- Engine accessory belt shall not require adjustments.

CONTROLS – MUST MEET THE FOLLOWING SPECIFICATIONS

- Excavator direction, steering, and travel speed shall be controlled by two hand or foot levers.
 - Thumb buttons control auxiliary hydraulics and boom swing
 - Blade control shall be a separate lever with float function
- Excavator slew, bucket, boom and arm functions shall be controlled by two joysticks.
- High and Low travel speed shall be controlled by a push button on the blade lever
- Excavator Functions shall be selectable between ISO and Standard controls.
- Engine speed control shall be a rotary dial with auto-idle feature.
- Excavator primary auxiliary function shall be controlled by switches on right-hand joystick.
- Service brake (Travel) shall be a hydraulic lock on the motor.
- Parking brake (Travel) shall be a hydraulic lock on the motor.
- Service brake (Slew) shall be a hydraulic lock on the motor.
- Holding brake (Slew) shall be an automatically applied slew brake integrated in motor.
- Engine starting and shutdown functions shall be controlled electrically with a key switch or optional keyless start.

CAPACITIES – MUST MEET THE FOLLOWING SPECIFICATIONS

- Fuel Tank shall be made of polypropylene and have a minimum capacity of 19.0 gal (72.0 L).
- Cooling System (radiator) shall have a minimum capacity of 2.5 gal (9.5 L).
- Engine oil capacity (with oil filter) shall be a maximum 9.8 qts (10.35 L).
- Hydraulic System capacity shall be no more than 14.5 gal (54.9L).
- Hydraulic Reservoir shall have a maximum capacity of 4.0 gal (15.1 L).

UNDERCARRIAGE – MUST MEET THE FOLLOWING SPECIFICATIONS

- Undercarriage shall be a crawler-type tractor design.
- Track Rollers shall be sealed, with reinforced box-section track roller frame.
- Track Adjusters shall be grease-type with shock absorbing recoil springs.
- Half pitch rubber track shall be standard equipment.
- Track width (rubber) shall be no more than 15.7" (400 mm).
- Each side will utilize 5 track rollers.
- Excavator shall have multiple tie down points available along the track roller frame.
- Rubber track ground pressure shall not exceed 4.58 psi (31.6 kPa).

INSTRUMENTATION

- The excavator shall be monitored by a combination of gauges and warning lights in front of the operator that monitor the following functions. The system shall alert the operator of monitored excavator malfunctions by way of an audible alarm and visual warning light.
- A standard 5" Display operated by jog shuttle with integrated keyless start, including one owner code, and 4 user codes, shall be available.
- Auxiliary Hydraulics shall be activated/ deactivated from the display panel or jog shuttle.
- Auxiliary Hydraulic flows can be selected in increments of 10% from 0-100% of max flow in the standard display.
- Auto-idle on/off is available via the standard display panel.
- An Eco/fuel savings mode shall be incorporated in the standard display panel.
- Auxiliary Hydraulic pressure shall be released using the standard display.

Gauges

- Engine Coolant Temp
- Fuel Level (with audible alert)

Warning Lights

- Engine Coolant Temp
- Engine Oil Pressure
- Fuel Level
- General Warning
- Hydraulic Malfunction
- Battery Warning
- Engine Warning
- Service Due
- Hydraulic Warning

Indicators

- Auto Idle
- Aux Mode (with Boom Swing Indicator)
- Pre-Heat Glow Plug Auto Countdown
- Two Speed (High Range)
- Seat Belt Reminder Indicator (with time out)
- Control Console Raised
- Fuel Priming
- Eco Mode

Data Display LCD

Screen

- Hour meter
- Job Clock
- Tachometer
- Code Retrieval
- Engine RPM
- Navigation Handle

STANDARD FEATURES MUST INCLUDE:

- Excavator shall feature an Auto-Idle function.
- Excavator shall have Battery Run-down protection.
- Excavator engine throttle shall be located on the right side next to the operator.
- Excavator shall have Auxiliary Hydraulics with Arm-Mounted Flush Face Quick Couplers
- Excavator shall have Selectable Flow Auxiliary Hydraulics
- Excavator shall have Control Console Locks
- Excavator shall have Control Pattern Selector Valve (ISO/STD) located under the seat.
- Excavator shall have a left-hand mirror installed.
- Excavator Dozer Blade with Float shall be standard equipment.
- An integrated 5" Display with jog shuttle shall be standard.
- Engine/Hydraulic Monitor with Shutdown shall be standard equipment.
- Fingertip Auxiliary Hydraulic Control shall be standard equipment.
- Fingertip Boom Swing Control shall be standard equipment.
- Bucket link with integrated lift eye.
- Excavator shall utilize steel reinforced composite engine panel.
- Excavator shall have a horn as standard equipment.
- Excavator shall have front and rear LED operating lights.
- Hydraulic Joystick Controls shall be standard equipment
- Rubber track shall be standard equipment.
- 12-volt power port shall be available.
- Spark Arrestor exhaust system shall be standard equipment.
- Vinyl Suspension Seat shall be standard equipment.
- A retractable seatbelt shall be standard equipment.
- Adjustable arm rests shall be standard equipment.
- Cup holder shall be standard equipment.
- TOPS/ROPS/FOPS Canopy shall be standard equipment.
- Two-Speed Travel with Auto-Shift shall be standard equipment.
- Vandalism Protection shall be standard equipment.
- Standard warranty shall be 24 months or 2000 hours, whichever occurs first.
- A Quick-Change (Attachment Mounting System) shall be standard equipment.

ACCESSORIES MUST INCLUDE:

- Angle Blade with bolt-on replaceable cutting edge (Hydraulic Activated, +/- 25°).
- Counterweight Kit.
- Beacon Light.
- 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
- Auxiliary hydraulics with diverter valve
- Secondary Auxiliary Hydraulic circuit
- Top guard and front guard in accordance with ISO 10262 Falling Object Guard Structure (FOGS) Level I for top guard shall be available.
- Travel motion alarm.

ATTACHMENTS MUST INCLUDE:

Attachment Requirements:

- All attachments must be mounted on a quick-change mechanism.
- Quick-change mechanism will maintain original bucket to arm geometry.
- Quick-change shall not diminish published bucket or arm digging forces.
- A hydraulic powered quick-change mechanism shall be available as optional equipment.

Attachments Included:

- 12" MX5 Trenching Bucket
- 24" MX5 Trenching Bucket
- 36" MX4 Grading Bucket
- Hydraulic Clamp
- Exchange interface to run the Bobcat Auger 15

SAFETY

- A four-post canopy or optional enclosed cab shall be provided.
- Four post canopy and cab shall meet Rollover Protective Structure (ROPS) in accordance with ISO 12117-2 and Tip-Over Protective Structure (TOPS) in accordance with ISO 12117.
- Retractable seat belt with reminder indicator (located on dash panel) 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.
- Grab handles to assist the operator in entering and exiting the excavator will be provided as standard equipment.
- Front LED 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.

SERVICEABILITY

- Access to the following items shall be gained by opening the rear hood or side access hood:
 - Air cleaner with indicator
 - Battery
 - Cooling System (engine oil and hydraulic oil coolers)
 - Cooling coils must be separable without aid of tools for cleaning
 - Engine oil and fuel filters
 - Engine oil level
 - Sight gauge for hydraulic oil level
 - Starter
- Rear hood and fuel fill shall have locks for vandal proofing.
- Easy access to all grease points.
- Central grease point for slew bearing and slew pinion.
- Greaseless composite bushings on offset cylinder

BIDDERS PROPOSAL

FREEPORT PARK DISTRICT
1122 S. BURCHARD
P.O. BOX 417
FREEPORT, IL 61032
815-235-6114



BID DUE: 10:00 am; Thursday, April 28, 2022

We hereby propose to sell to the Freeport Park District the specified machine for the amount(s) set forth as follows:

BASE BID: One (1) Compact Excavator as specified	\$ _____
DELIVERY	\$ _____
TOTAL BID FOR COMPACT EXCAVATOR	\$ _____

The price is guaranteed for _____ calendar days from the bid due date.

Indicate Order Cutoff date: _____

Indicate the estimated number of calendar days for delivery after receipt of order: _____ days.

Attach a printout showing the manufacturer, model, and equipment specification for the vehicle you are bidding to supply. Low bid may be required to conduct an on-site demonstration that will need to run our auger attachment before purchase can be approved.

SUBMITTED BY:

BUSINESS NAME _____

BIDDER ADDRESS _____

STATE _____ ZIP CODE _____

AUTHORIZED AGENT (Print) _____ TITLE _____

SIGNATURE _____ DATE _____

PHONE _____ EMAIL _____