



The Corporation of the Town of Essex

Addendum 1

Request for Tender RFT-ID-23-014

Supply of Backhoe Loader (Environmental)

Closing Information:

Date: May 03, 2023

Time: 3:00.00 PM Local Time

Location: Town of Essex Municipal Offices
33 Talbot Street South
Essex, Ontario N8M 1A8

Announcement

1. The Closing Time has been changed as follows: -

May 03, 2023, at 3:00:00 PM Local Time

The deadline to ask question has been changed to **April 27, 2023.**

2. The Tender specifications have been updated and a revised Appendix D is attached. Please use this Appendix D (Revised) to submit your tender.

Question and Answer

Q.1 Will you consider an inner box dipper design for this RFT?

A.1 Only outerbox design for the dipper will be considered.

Q.2 Can you relay to us why it is being resubmitted for tender?

The previous version of this tender (RFT-ID-23-011) had 3 submissions from Brandt, Toromont and Kucera's

A.2 This is a separate RFT. This RFT(ID-23-014) is for the Environmental Services department with a different specification. RFT-ID-23-011 was tender for the Operations department.

END

24. Appendix D (Revised) - Specifications

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 (Must be returned with Tender)**

Specifications	Yes	No	Detail
Meets all OSHA and EPA Requirements in effect on the date the quotations close and shall have lead free paint			
The mainframe shall be a one-piece unitized construction for maximum strength			
Unit shall have four built-in vehicle tiedowns, two in front and two in rear for safe transport between jobs			
The side plate thickness on the loader boom, backhoe boom and mainframe shall be 4.5 millimeter or greater			
Machine shall be equipped with an exterior mounted, ground level accessed and lockable storage compartment			
Replaceable, bolt-on rubber bumpers to protect the grille frame from severe loading applications			

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GENERAL			
Vandal protection shall cover the instrument panel (canopy only). Engine hood, toolbox, hydraulic reservoir, and fuel filter shall be lockable			
The tilt hood shall have two service positions for easy operation			
Tilt hood that permits access to the engine with the loader arms raised or lowered			
An easy-to-read periodic maintenance and grease chart shall be easily accessible on the machine			

Specifications	Yes	No	Detail
Fuel tank capacity shall be no less than 34 gallons (128.7 L) and shall be accessible from the ground and lockable. DEF tank to be no less than 3.6 gallons (13.6 L) and accessible from the ground and lockable			
Optional factory installed fluid sampling valves will be available			
Operating weight shall be no more than 16,713 lbs (7,580 kg) without optional equipment			
ENGINE			
Diesel engine and shall be designed and built by the manufacturer. Specify			

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Engine shall have an individually replaceable, wet sleeve cylinder liner design to dissipate heat for reduced ring wear and oil breakdown			
Engine displacement shall be no less than 4.5 liters (276 cu. in.)			
Engine net peak power (ISO9249) shall be no less than 100hp (74kW) @ 1600 rpm			
Daily check points shall be accessible from the right side of the engine and shall be done from ground level			
Engine shall have a serpentine belt with automatic belt tensioner reducing required maintenance			
Under-hood engine air cleaner shall be dry type, dual element with evacuator valve, restriction			

Specifications	Yes	No	Detail
sensor and in-cab restriction warning light			
The backhoe shall have a one-piece tilt hood for easy engine access without having to remove engine side shields			
Engine shall have no more than 10-micron rated primary fuel filter with water separator			
COOLING			
Engine coolant shall be rated to -40 degrees (-40 C)			

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The backhoe shall be equipped with and oil-to-water engine oil cooler			
Unit shall have a coolant recovery tank provided			
Unit shall have an electronically controlled, variable rate-suction type fan with fan-guard			
The AC condenser will be swing-out for fast radiator cleanout. Remote mounted transmission and hydraulic coolers will offer better air exchange and fewer stacked cores			
The hydraulic circuit to be air cooled, the transmission circuit will be water cooled for fast winter warm-up for increased productivity			
POWERTRAIN			
The transmission shall be a hydraulically actuated powershift with Autoshift control and a torque converter with maximum transport speed of 22 mph. Clutch free; fully synchronized four forward (automatically shifts between 2 nd and 4 th gear when Autoshift is engaged), two reverse speeds			

Specifications	Yes	No	Detail
The sealed axle, with no breather, will be mechanical – front-wheel-drive with traction control limited –			

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slip differential with electric on/off control			
The machine will disengage MFWD in 4 th gear to allow for longer life of tires and drive train but will engage MFWD when brakes are applied for four wheel braking			
The clutch engaged MFWD can be engaged on the fly during operation			
The transmission shall be isolation mounted to the mainframe to minimize shock load stress			
The rear axle shall have a differential lock, electric foot actuated as standard equipment			
The single electric Transmission Control lever will have gear selection fully integrated in the lever as well as forward, neutral and reverse (FNR power shuttle)			
Transmission oil cooler shall be provided as standard equipment			
The backhoe shall have hydrostatic power steering with emergency manual mode			
The machine will have a dial throttle that will allow the operator to drive the machine on cruise control, Upon engagement of the brake pedal, the engine RPM's return to idle			

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The front axle shall have remote grease bank for front axle for easy access			
The rear axle bearings shall be self-lubricating and shall not need to be greased			

Specifications	Yes	No	Detail
BRAKES			
The loader backhoe brakes shall be a fully Hydraulic, power assist, multiple disc brakes			
The parking brake shall be independent of service brakes, spring applied, hydraulically released, wet multi-disk and sealed from water, mud and dust contamination			
The service brakes shall be inboard, wet-multiple disk, self-adjusting and self-equalizing and hydraulically actuated for a long and trouble-free life, sealed from water, mud and dust contamination			
LOADER			
Lift capacity with 1.25 cu yd at full height shall be a minimum of 6,085lbs (2760 kg)			
Dump clearance @ 45deg. shall be no less than 8ft 9in (2.66m)			
Digging depth below ground, bucket level shall be no less than 2.0 in (50mm)			
Bucket breakout force shall be no less than 8,983 lb (39kN)			

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Single, greaseless bucket tilt cylinder and bucket level indicator			
The loader shall have hydraulic self-leveling and bucket-level indicator			
The loader shall have divergent loader arms for excellent visibility to the bucket			
For truck loading, the loader arms will have a curved-knee design for loading into the center of the truck bed			

Specifications	Yes	No	Detail
Loader shall have a single cylinder and linkages for tilt and curl on bucket			
The loader control will be single lever with electric clutch disconnect			
The loader shall have a nonremovable, hinged loader service lock			
Loader Attachments			
Loader bucket to be 1.25 cu yd with bolt on replaceable cutting edge			
Loader Bucket to have Heavy duty lifting eyes			
Hydraulic quick coupler for bucket, forks, etc. buckets			
Grease pins in the swing tower to boom base			
Heavy duty removable forks for hydraulic quick connect			
BACKHOE BOOM			

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Extendahoe, Outer Box design on the thumb control			
Pilot Controls			
Stabilizer Pads -Reversible			
The backhoe with standard dipperstick digging depth shall be a minimum of 14 ft 1 in (4.29m)			
The boom lift capacity at ground level shall (standard) be no less than 2,859lb lb (1296 kg)			
The machine shall be equipped with a lift mode to increase craning capacity			
Maximum SAE dig depth with optional extendable dipperstick extended shall be no less than 17ft (5.18 m)			
Boom Lift at full height Standard 3,653 lb (1656 kg)			

Specification	Yes	No	Detail
The swing lock pin shall be stored in the operator's station			
extendible dipperstick shall extend no less than 3ft 6in (1.07 m)			
The backhoe boom shall be a curved design			
The backhoe boom shall be a power curve design, hourglass shape for maximum strength and optimized visibility to the work tool			

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Digging force with standard backhoe, bucket cylinder shall be at least 10,844 lb (48.2 KN)			
The backhoe shall be equipped with a rubber bumper/linkage style boom locks to keep the backhoe from vibrating on the swing frame			
Unit shall be equipped with pilot backhoe controls with integral pattern select			
The swing casting shall have dual yokes; on top and the bottom			
Backhoe Boom Attachments			
The backhoe buckets supplied shall be heavy duty and shall be quick connect			
24" digging bucket, bolt on flare teeth			
12" ditching bucket with a bolt on flared teeth			
Hydraulic plumbing for future Thumb Attachment			
OPERATOR ENVIRONMENT			
Deluxe Cab Package must include:			
Ride control – factory installed			
Heater			
Defroster			
Specifications	Yes	No	Detail

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Intermittent wipers front			
Tinted glass			
Floor mats			
Tilt wheel			
Windshield washer front			
Sun visor			
Reduces sound level to 70db (A)			
Insulation for maximum temperature and sound control			
Interior dome light			
Mirror, front and rear			
Deluxe air suspension – cloth seat – factory installed.			
Suspended brake pedals			
Forward/reverse power shuttle lever mounted on steering column			
Console storage area			
Operator warning system that alerts the operator with an audible alarm when the parking brake is applied, and the operator engages the forward/reverse lever			
Step mounted toolbox			
Radio AM/FM with premium speakers and blue tooth compatible			
Dash mounted indicators Specify			
Easy-to-swing seat to access backhoe controls			
Audible alarm to alert operator of transmission engagement when swinging seat			

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1) Backhoe release inside the cab			
2) Air conditioning, 100% filtered air, adjustable roof and floor vents			

Specifications	Yes	No	Detail
Unit shall be equipped with isolation mounted modular design ROPS/FOPS canopy and molded roof			
Access to the cab shall be from the right and left side with protected, wide, rigid, slip resistant steps and ergonomically located handholds. Lockable on each side			
3" (76mm) retractable seat belt shall be provided			
Coat hook, built-in beverage holder, operator manual storage compartment, interior rearview mirror shall be provided			
Machine manufacturer will provide a factory installed onboard security system for total machine integration. System will have the ability to accommodate no less than ten operator codes			
The monitor system shall have audible and visual warnings: engine air restriction, low alternator voltage, engine oil pressure, hydraulic filter restriction, hydraulic oil temperature, parking brake on/off and low brake pressure. The seat belt will have a visual warning			

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The monitor will have a multilanguage (English and French) digital monitor for diagnostics (including diagnostic messages and fault code readings), calibrations and machine information			
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Specification	Yes	No	Detail
The machine will have the option for a cab and air conditioner available from the factory			
The seat shall be cloth with air suspension. Fully adjustable armrests and lumbar support			
ELECTRICAL			
The backhoe shall have a 12-volt system with 145 amp alternator			
Dual maintenance free batteries shall be included, 350-min reserve rated capacity, 1900 CCA with disconnect and jump posts			
The machine shall have a blade type, multi-fused circuits			
The starter shall have a bypass start safety cover			
The cab will be pre-wired for rotating LED beacon and radio-ready			
Include Beacon kit switch and mount on back of cab			
Beacon to be SWS 16156 mini bar			

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Unit shall be equipped with 10 LED driving/working lights, (4) front driving/working; (4) rear; (2) side docking lights.			
Unit shall be equipped with two front and two rear turn signal/flashing and two rear stop and taillights and two rear reflectors			
Unit shall be equipped with a 5year communication systems that can provide fleet management, logistics and remote diagnostics capabilities			
Unit shall have a digital display for: engine rpm, engine hours, system voltage and hydraulic oil temperature			

Specifications	Yes	No	Detail
Unit will have a machine security electronic protection system provided through the monitor or sealed switch module			
The keyless start will have an electric fuel shut-off and ability to have auto shutdown setup in monitor			
Unit shall be equipped with illuminated electronic gauges with audible warning for: engine coolant temperature, oil temperature and fuel level			
Interior to have two 12-volt outlets			
HYDRAULICS			

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Variable flow, axial-piston or tandem			
Auxiliary backhoe boom directional hydraulics, operated for breaker			
Auxiliary loader arms have quick connect hydraulic fittings			
Hydraulic cooler will have an independent reservoir for continuous running of attachments at high ambient outside air temperatures			
The hydraulic fittings shall have "O"-ring face seal connectors to secure a tight, leak-free seal			
Machine shall be equipped with Auto Idle to lower RPM when hydraulics are not active to conserve fuel and reduce noise levels			
Machine shall be equipped with Economy Mode with dual feature that can be applied to backhoe or loader functions separately or together for improved fuel economy			
The hydraulic filter shall be no more than 4 micron and will be vertically mounted, spin on design for ease of installation and leak-free replacement			

Specifications	Yes	No	Detail
An automatic bucket return-to dig control will be standard			

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Hydraulic pump shall be 28 gpm (106 L/MIN) Single gear pump, open-center system			
TIRES			
Michelin XMCL front and Rear			
Fenders for the front wheels			
WARRANTY			
Provide in writing a complete description of warranty	Comply		
The loader backhoe warranty shall include the following:			
Engine warranty of 5,000 hours			
Drive train warranty of 5,000 hours			
Drive train Hydraulic warranty of 5,000 hours			
All warranty work F.O.B. Town Garage			
Extended warranty options (specify)			
DELIVERY			
Expected Date of Delivery			
The vendor shall deliver fully serviced, and ready to operate units. This specification lists only the major details of the units. It is the vendor's responsibility to deliver units fully equipped to Town of Essex tender specifications.	Comply		

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One (1) complete set of all filters air, fuel, coolant, hydraulic, engine oil, to be supplied with unit on delivery	Comply	
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Specifications	Yes	No	Detail
Minimum of one day training session(s) on the unit's operation, maintenance, and safety to be provided by the Vendor's competent service person(s) for the Town's operational, mechanical staff, inclusive of the Driver.	Comply		
Supply training prospectus with bid.	Comply		
Vendor's trainer shall be manufacturer certified	Comply		
Training session shall at minimum include: <ul style="list-style-type: none"> • Operational and safe equipment operations. • Operator equipment inspection procedures. • Operator environment of cab, instruments, and controls. 	Comply		
Operational tips and techniques. <ul style="list-style-type: none"> • Course to include an evaluation test and manufacturer's issued Operator Familiarization Certification upon successful test completion. 	Comply		
State maximum effective number of participants for an operator training session.	Specify		
MANUALS			

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Manuals/CD/keys requirements are listed for <u>EACH</u> unit ordered.	Comply		
One (1) set lot , of service and parts manuals for:			
Tractor unit, diesel engine, and attachments	Comply		
Two (2) , Operator's manuals	Comply		
Specification	Yes	No	Detail
One (1) enlarged electrical schematic.	Comply		
Provisional Items			
Specification	Details		
Item 1#- Hydraulic Thumb Attachment, dealer installed			
Item # 2- 36" Ditching Bucket with Cutting Edge			