BID SOLICITATION

City of Chattanooga
101 East 11th Street, Suite G13
Chattanooga, TN 37402

BID OPENING DATE AND TIME:
10-DEC-15 at 2:00 PM
BID NUMBER: 304021

BUYER:
PHONE #: (423) 643-7230
DELIVERY REQUIRED:

SEALED BIDS

Mail or submit two (2) signed copies of bid form to this office in the enclosed envelope. Retain one copy for your file.

VENDOR
RFQ

MAILTO
City of Chattanooga
101 East 11th Street, Suite G13
Chattanooga, TN 37402

Item	Class-Item	Quantity	Unit	Unit Price	Total

Requisition No. 125927
Ordering Dept.: Public Works
Buyer: William Tucker
Telephone: 423-643-7238
Fax: 423-643-7244
Email: tucker_w@chattanooga.gov
****

Items Being Purchased: CAT 314E Excavator or Equal
****

ATTACHMENTS: Specifications (15 pages)
Insurance Requirements (2 pages)
Instructions to Bidders (1 page)
****

*** BIDS MUST BE RECEIVED NO LATER THAN ***
*** 02:00 PM EST on DECEMBER 10, 2015 ***
****

SEALED BIDS: All Bids must be delivered to the
Purchasing Office in a sealed envelope on or before
the time and date specified above.
DO NOT email or fax your bid; such bids cannot be considered.
****

PRE-SPEC CONFERENCE: A non-mandatory pre-specification
Conference will be held at 10:00 AM on December 3, 2015, in the
Paul Clark Building Conference Room, 900 East 11th Street,
Chattanooga, TN.
****

For delivery to:

City Yards Tool Room
1001 East 12th Street
Chattanooga, TN 37403

Delivery Contact: Sharon Smith, Tel 423-643-6846
****

****** ALL ITEMS MUST BE QUOTED F.O.B. DESTINATION **
****

City of Chattanooga Terms and Conditions are incorporated herein by
Reference, and are posted on the City's Website at
http://www.chattanooga.gov/general-services/purchasing/
standard-terms-and-conditions.
If you cannot download, call buyer for a copy.
****

NOTE: ALL BIDS MUST BE SIGNED
All bids received are subject to the terms and conditions contained herein
and as listed in the above referenced website. The undersigned Bidder
acknowledges having received, reviewed, and agrees to be bound to these
terms and conditions, unless specific written exceptions are otherwise stated.
****

Any manufacturer's names, trade names, brand names, or catalog numbers
used in the specifications arte for the purpose of describing and establishing
general quality levels. Such references are not intended to be restrictive.
Bids will be considered for any brand which meets or exceeds the quality
of the specifications listed for any item.

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The City of Chattanooga reserves the right to reject any and/or all bids, waive any informalities in the bids received, and to accept any bid which in its opinion may be for the best interest of the city.

The City of Chattanooga will be non-discriminatory in the purchase of all goods and services on the basis of race, color, or national origin.

****

Vendor Contact Information:

Vendor Name_____

Contact Person_____

Tel._____

Fax_____

Email_____

Street Address or PO Box_____

City, State, Zip_____

****

NOTE: ALL BIDS RECEIVED ARE SUBJECT TO THE TERMS AND CONDITIONS

The City is Exempt from all Federal and State Tax.
Bids will be received at the above mentioned address.

TERMS OF PAYMENT: _____

TELEPHONE NUMBER: _____

ALL BIDS MUST BE SIGNED – The undersigned offers the above quoted prices under the conditions contained herein.

COMPANY: _____

SIGNATURE: _____

NAME AND TITLE: _____

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MAIL TO
City of Chattanooga
101 East 11th Street, Suite G13
Chattanooga, TN 37402

Item	Class-Item	Quantity	Unit	Unit Price	Total
1	314 Hydraulic Excavator	1	Each	_____	_____

NOTE: ALL BIDS RECEIVED ARE SUBJECT TO THE TERMS AND CONDITIONS

ALL BIDS MUST BE SIGNED – The undersigned offers the above quoted prices under the conditions contained herein.

The City is Exempt from all Federal and State Tax.
Bids will be received at the above mentioned address.

COMPANY: _____

TERMS OF PAYMENT: _____

SIGNATURE: _____

TELEPHONE NUMBER: _____

NAME AND TITLE: _____

City of Chattanooga

Public Works Water Quality Division

R125927 / B304021

Bid Specifications

CAT 314E L Hydraulic Excavator

with factory Heat and Air Conditioning

Or Equal

INTRODUCTION:

(A) These specifications describe the vehicle and accessories to be purchased by the City of Chattanooga City Wide Services Division, Water Quality Section. These specifications consist of three parts: (1) Required Features – these requirements must be met without exceptions for a bid to be considered acceptable; (2) Preferred Features – attributes/performance that the City wants, however exceptions to Preferred Features are allowed with explanation (The more Preferred Features that are met by a bid, the better the bid.); and (3) Options – additional features/conditions that are optional (i.e., may or may not be offered by Suppliers and may or may not be purchased by the City); Options should be priced separately.

(B) The attached specifications describe the requirements for a **CAT 314E L Hydraulic Excavator, or Equal**, and accessories to be purchased by the City Wide Services Division of Public Works, Water Quality Section. The specifications are intended to be flexible enough for all major manufacturers to comply. The uses of names or part numbers are intended to be descriptive only. Such use is not intended to restrict the offer of other brands with specifications equivalent or greater to the specifications herein.

(C) Suppliers are requested to provide prices for new and unused current production equipment; however, a used unit meeting all specifications with 1,000 +/- 400 hours can be bid as an alternative to a new machine with all warranties in effect.

Required Features:

1. The entire vehicle/apparatus is to conform to D.O.T., ANSI, FMVSS, NFPA, and OSHA and to the requirements of all other applicable regulatory agencies.

2. Parts not specifically mentioned that are necessary to furnish a complete chassis or body/apparatus must have been produced using the automotive industries best manufacturing practices. This pertains to design, quality of materials and workmanship.
3. Using the attached specifications, bidders must indicate either "yes" or "no" to all line specifications. Exceptions or "no" responses are to be listed and FULLY Explained on a separate page. Failure to complete the spreadsheet or failure to properly document exceptions to the specifications may result in the bid being declared "non-conforming".
4. Loose and miscellaneous equipment is to be provided only as required by D.O.T or ANSI and specifications.
5. Each bid is to be accompanied by a set of manufacturer's and as applicable, vendor's specifications. These are to consist of a detailed description of the proposed vehicle/apparatus and equipment. The specifications are to indicate size, type, model and make of all component parts and equipment. A CAD drawing of the proposed vehicle/Equipment indicating wheelbase, Cab to axle and Cab to end of frame measurements is desired. All weights and horsepower/torque to transmission ratios to axle ratios shall be approved by engineering per vehicle manufacturer to include all detachable components and operations.
6. All vehicles will be delivered with factory service manuals, wiring diagrams and component locators for cab, chassis & bodies installed on vehicle. CD's or DVD will be accepted.
7. All power train components, assemblies, subassemblies, component parts and so on, will be designed and constructed with due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the vehicle is designed for and to be subjected to when placed in service. All parts of the vehicle will be strong enough to withstand the general service under full load. The vehicle will be so designed that the various parts are readily accessible for lubrication, inspection, adjustment and repair and complete unit engineering approved.
8. All vehicles will be supplied with a line sheet to include as built and current part numbers of any and all components installed on vehicle.
9. The specified vehicle will be capable of reaching and maintaining a minimum speed of 20 MPH (where Applicable) on any grade up to and including 25% or 15 degree grade. The vehicle will be capable of attaining a true speed of 35 MPH in 25 seconds and programmed not to exceed 62 MPH.
10. Training will be provided at no additional charge for proper operation and service requirements.
11. ALL Lighting shall be all LED with Minimum 4,800 Lumen
12. Any special software or hardware needed to perform diagnostics on any computer (Engine, Transmission) mounted on Equipment, cab, chassis and body shall be provided by bidder.

WARRANTY

1. Warranty period shall be for Three (3) years on the Hydraulic Excavator, body and all of its components with no exceptions.
2. All warranties will be listed with specific details as to time, including any and all exclusions. No warranties can be Terminated or canceled for any reason during the warranty coverage as stated in bid where specified. No travel or drive time for repairs will be paid while under any manufacturer's warranty.
3. All warranty registrations shall be completed by the vendor and copies provided upon delivery. All warranties will begin on any and all components on the in service date or delivery date if no special training is needed to begin operating vehicle.
4. Warranty period to be "bumper to bumper" for three (3) years on the Equipment, chassis, engine, transmission and drive train, Hyd. pumps and cylinders excluding wear items.
5. Bidder shall include copy of warranty terms and conditions and a list of any exceptions from the warranty as well as wear items.
6. Provide supplemental bid for 5 year warranty.
7. All wear items shall be listed separately, if not listed shall be a warranty item under warranty terms.
8. Vendor shall have a full service repair facility with a minimum of 10 technicians and 10 Field service technicians certified to make all repairs and adjustments to this machine, including but not limited to Electrical, Hydraulic and mechanical. Vendor must have a service facility within a 50-mile radius of Chattanooga with a minimum of $100,000 dollars of parts in inventory to be able to support a 97% parts fill rate within a 24 hour period. Maximum downtime allowed while under warranty is 48 hours, a loaner unit will be provided at no cost to Chattanooga after this time has expired.

Preferred Features:

BASIC SPECIFICATIONS

Y____ N____ Manufacturer will guarantee fuel burn at a rate of 2.2 gallons per hour (8 liters per hour in Canada) for a term of 3 years or 5,000 hours, whichever comes first by reimbursing the difference between the actual fuel burn (measured by machine system) and the Fuel Guarantee Level at a rate of at least $1 USD per US gallon ($1 CAD per liter in Canada) per hour of operation payable in the form of a parts and service credit.

Y____ N____ Engine flywheel horsepower shall be no less than 91 hp (68 kW) according to SAE J1349

Y____ N____ Engine gross power shall be no less than 95 hp (71 kW)

Y____ N____ Operating weight for a long undercarriage 12"4" (3,750 mm), 15'3" (4.65m) boom, 9'10" (3.0m) stick, 4.0t (3.6mt) counterweight, 0.84 yd^3 (0.65m^3) bucket, 20" (500 mm) shoes, and a front blade shall be no less than 32,600 lb (14,800 kg)

Y____ N____ Lift capacity at 20' (6 m) over the front at ground level shall be not less than 7,750 lb (3600 kg) with 28" (700 mm) shoes, long undercarriage, and 9' 10" (3.0 m) stick.

Y____ N____ Lift capacity at 20' (6 m) over the side at ground level shall be not less than 4,900 lb (2300 kg) with 28" (700 mm) shoes, long undercarriage, and 9' 10" (3.0 m) stick.

Y____ N____ Ground clearance shall be not less than 18" (440 mm).

Y____ N____ Shipping height shall be 9'10" (3000 mm) with a 9' 10" (3000 mm) stick.

Y____ N____ Shipping length shall be 26'3" (8010 mm) with a 9' 10" (3000 mm) stick, long undercarriage, and with a front blade.

Y____ N____ Shipping length shall be 24'5" (7440 mm) with a 9' 10" (3000 mm) stick, long undercarriage, without a front blade.

Y____ N____ Tail swing radius shall be 5'0" (1530 mm)

Y____ N____ Track length shall be 12' 4" (3750 mm) for a long undercarriage.

Y____ N____ Transport width shall be 8' 6" (2590 mm) for a machine with 24" (600 mm) shoes.

Y____ N____ Maximum digging depth shall be 19' 6" (5950 mm) with a 9' 10" (3.0 m) stick.

ENGINE

Y____ N____ Engine shall meet US EPA Tier 4 Interim and EU Stage IIIB emission requirements.

Y____ N____ Four-cylinder diesel engine shall be provided.

Y____ N____ Engine displacement shall be not less than 270 cubic inches (4.4 L).

Y____ N____ Engine bore shall be 4.13" (105 mm) and stroke shall be 5.00" (127 mm).

Y____ N____ Optional cold weather starting package available with a cold weather battery and jump start terminals. For ambient temperatures above -(minus) 25 degrees C (-13 Fahrenheit).

Y____ N____ Machine shall maintain full engine power up to 7,500' (2,300 m) above sea level.

Y____ N____ RPM at rated power shall be not greater than 2,150.

Y____ N____ Machine shall have a one touch low idle system.

Y____ N____ Engine shall have a one piece, forged, induction hardened crankshaft to enhance balance, decrease vibration, and improve abrasion resistance.

Y____ N____ To reduce fuel consumption, the machine shall be equipped with an Automatic Engine Control system that reduces engine speed by 100 rpm if a no load or light load condition is detected for more than 3 seconds. The system shall also have a second stage activated by a cab switch, which reduces engine speed significantly further (almost to low idle) under the same conditions.

Y____ N____ For ease of operation the machine shall only offer two power settings: economy and high power modes. The economy mode shall be used to reduce fuel consumption for light duty applications while still maintaining full breakout force and lift capacity.

Y____ N____ Water separator 4 micron filter in fuel line shall be factory installed standard equipment.

Y____ N____ Alternator shall not be rated at less than 80 amps.

Y____ N____ Machine shall have a key-operated master electrical disconnect switch that cuts all electrical power to all circuits.

Y____ N____ A backup system switch shall be provided for the electronic throttle control.

Y____ N____ All wire harnesses shall be encased in nylon mesh bindings.

Y____ N____ Engine and hydraulic pumps shall be completely separated by a steel wall to reduce the possibility of oil contacting hot engine parts in the event of a hydraulic line rupture.

Y____ N____ An engine air pre-filter shall be available.

Y____ N____ A factory installed high-ambient temperature option capable of working conditions up to 126° F (52° C) shall be available.

Y____ N____ Engine must have the capability of running on either ultra-low sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or biodiesel (B20) fuel blended with ULSD that meets ASTM 6751 or EN 14214 standards.

Y____ N____ Fuel tank must have a standard overfill indicator which rises when the fuel tank is full to help service technicians avoid spilling.

Y____ N____ Engine must have an U.S. EPA tier 4 Interim engine emission system featuring an aftertreatment regeneration solution that ensures the machine works as normal with no operator intervention needed. The regeneration process automatically starts once the filtering system detects soot buildup-with not interruption to machine performance or the work process.

Y____ N____ The engine cooling system must have an air-to-air aftercooler and A/C condenser that tilts up and swings out of the way for easy servicing.

Y____ N____ Engine shall be equipped with a QuickEvac™ option which ensures fast, easy, and secure changing of engine and hydraulic oil.

Y____ N____ Engine shall be equipped with an efficient engine oil filter which eliminates the need for painted metal cans and aluminum top plates. The cartridge-style spin-on housing enables the internal filter to be separated and replaced; the used internal element can be incinerated to help reduce waste.

Y____ N____ Engine shall have a standard electric fuel priming pump.

POWERTRAIN/TRANSMISSION

Y____ N____ Travel speed shall be at least 3.4 mph (5.5 kph)

Y____ N____ Maximum drawbar pull shall be 113 kN (25,400 lb ft.)

HYDRAULIC SYSTEM

Y____ N____ Maximum pressure for the implement circuit shall be not higher than 5076 psi (35,000 kPa).

Y____ N____ Maximum pressure for the travel circuit shall be not higher than 5076 psi (35,000 kPa).

Y____ N____ Maximum pressure for the swing circuit shall be not higher than 3336 psi (23,000 kPa).

Y____ N____ An accumulator shall be provided to allow the boom and stick to be lowered to the ground in the case of a dead engine.

Y____ N____ Factory installed one way/two way; one pump/two pump high pressure hydraulics plus two way medium pressure hydraulics shall be available. Flow settings for up to 10 different hydra-mechanical tools shall be capable of being programmed into the cab monitor to simplify tool selection/changes by the operator.

Y____ N____ Factory installed hydraulics to operate a hydraulic quick coupler shall be available.

Y____ N____ Not less than two main implement pumps shall be provided and pumps shall be variable displacement piston type.

Y____ N____ Total combined flow from the two implement pumps shall not be less than 67 gal (254 L) per minute.

Y____ N____ The hydraulic system shall be of open center type to provide excellent control and modulation.

Y____ N____ Machine shall be equipped with a hydraulic cross sensing system for faster implement speeds and quicker, stronger pivot turns.

Y____ N____ Hydraulic snubbers shall be at the rod-end of boom cylinders and both ends of the stick cylinders to cushion shocks, reduce sound and increase cylinder life.

Y____ N____ A boom and stick regeneration circuit shall be standard to save energy during boom-down and stick-in operation

Y____ N____ Standard boom and available sticks shall have mounting accommodations/bosses already provided for auxiliary hydraulics lines

Y____ N____ An auxiliary hydraulic valve shall be standard for use with optional hydraulic circuits

Y____ N____ Hydraulic system shall be equipped with a QuickEvac™ option which ensures fast, easy, and secure changing of engine and hydraulic oil.

Y____ N____ Machine must regenerate the hydraulic oil flow from the head of the boom cylinder to the rod end of the boom cylinder during a boom down operation to save energy, which helps improve fuel efficiency. It is optimized for any dial speed setting being used by the operator, which results in less pressure loss for higher controllability, more productivity, and lower operating costs.

Y____ N____ Boom cylinder bore shall be 4 .3 inches (110 mm).

Y____ N____ Boom cylinder stroke shall be 40 inches (1015 mm).

Y____ N____ Stick cylinder bore shall be 5 inches (120 mm).

Y____ N____ Stick cylinder stroke shall be 47 inches (1197 mm).

Y____ N____ Bucket cylinder bore shall be 3.9 inches (100 mm).

Y____ N____ Bucket cylinder stroke shall be 39.4 inches (1000 mm).

Y____ N____ Machine shall have a reverse swing dampening valve.

Y____ N____ Machine shall have an automatic swing parking brake.

Y____ N____ Hydraulic system shall have the capability of installing a High Pressure stackable valve and Medium and Quick Coupler valve.

Y____ N____ Hydraulic system shall have the capability of installing an additional auxiliary pump and circuit.

Y____ N____ Hydraulic system shall have the capability of installing a boom lowering control device and stick lowering check valve.

Y____ N____ Hydraulic system shall have a Fine Swing Control available as standard equipment.

Y____ N____ Machine shall have as an option a Control Pattern Quick Changer-two way.

Y____ N____ Machine shall have as an option boom and stick, high-pressure, and medium pressure hydraulic lines.

Y____ N____ Machine shall have as an option a Quick Coupler hydraulic line that is high pressure capable.

Y____ N____ Machine shall have as an option a Boom and Stick lowering control device.

UNDERCARRIAGE

Y____ N____ An idler guard shall be provided to maintain track alignment while traveling or working on slopes.

Y____ N____ Full length track guiding guards shall be available.

Y____ N____ Machine shall have as standard equipment a Grease Lubricated Track GLT2 with resin seals.

Y____ N____ Machine shall have as standard equipment a Towing Eye on the base frame.

Y____ N____ Machine shall have as standard equipment a Swivel Guard.

Y____ N____ Machine shall have as an option 500 mm (20 inch) triple grouser shoes

Y____ N____ Machine shall have as an option 600 mm (24 inch) triple grouser shoes

Y____ N____ Machine shall have as an option 700 mm (28 inch) triple grouser shoes

Y____ N____ Machine shall have as an option 770 mm (30 inch) triple grouser shoes

Y____ N____ Machine shall have as an option a Heavy-duty bottom guard.

Y____ N____ Machine shall have as an option a Center track guiding guard.

Y____ N____ Machine shall have as an option a Segmented (2 piece) track guiding guard.

OPERATORS STATION

Y____ N____ Machine shall have a Certified ROPS cab meeting ISO 12117-2 specifications.

Y____ N____ Machine shall have a ROPS Certified cab that allows an Operator Protective Guard (OPG) to be bolted directly to it.

Y____ N____ A rotary dial shall be provided to control engine speed.

Y____ N____ Machine shall have a system that checks the following fluid levels upon machine start-up and warns the operator if the levels are not within acceptable ranges: Engine oil level, engine coolant level and hydraulic oil level.

Y____ N____ Machine shall have a monitor located in front of the operator with gauges indicating fuel level, engine coolant temperature, hydraulic oil temperature and governor setting.

Y____ N____ Machine shall have a monitor located in front of the operator with ability to display text messages as well as symbols.

Y____ N____ Machine shall have a monitor located in front of the operator with ability to display working hours for the engine, pumps, travel motors and work tools.

Y____ N____ Machine shall have a monitor located in front of the operator with ability to provide diagnostic information such as fault codes, engine speed, main pump pressure, main pump powershift pressure and main pump negative flow control pressure when the tool control system is being used.

Y____ N____ Machine shall have a monitor located in front of the operator with ability to provide maintenance interval information for engine oil and oil filter, fuel filter, swing drive lubricant, pilot oil filter, case drain filter, main hydraulic oil return filter, final drive lubricant, hydraulic oil and engine coolant.

Y____ N____ Machine shall have a monitor that is programmable to provide information in a choice of 44 languages.

Y____ N____ Cab monitor shall include a clock with the capability of holding its setting for two weeks with the machine power shut off or battery removed.

Y____ N____ Machine shall have a 7 inch Color LCD monitor display with indicators that identify the filter. Fluid change intervals and the working hour information.

Y____ N____ Machine shall offer an optional rear view camera that displays the image directly on the cab monitor.

Y____ N____ For ease of operation, boom and swing priority shall be automatically provided based on operator input to joysticks.

Y____ N____ Operator's manual for the machine shall be permanently attached to the seat and stored in a pocket in the rear of the seat.

Y____ N____ Machine sound performance in the cab for the Operator shall not exceed the following sound measurements:

1. Operator in the cab with the doors and windows closed according to ANSI/SAE J1166 OCT98 per ISO 6396: 69dB(A).

2. Spectator-ISO 6395: 100 dB(A).

These Sound Performance tests meet the OSHA and MSHA requirements for operator sound exposure limits in effect at the time of manufacture.

Y____ N____ Cab monitor written language shall be changeable by the operator to allow display of messages in English, French, Spanish, Portuguese, German, Italian and Japanese.

Y____ N____ Cab air conditioner shall have a primary filter that can be removed for inspection without any tools

Y____ N____ Cab HVAC system shall allow the user the choice of recirculated air or filtered outside air and the machine shall have a separate air filter for the outside air inducted in the cab.

Y____ N____ Cab HVAC system shall have the capacity, with its fan on, to pressurize the cab sufficiently to meet ISO specification for a "pressurized cab".

Y____ N____ Machine shall have a windshield wiper mounted in the right front cab pillar to improve visibility and not require the wiper motor wires to be disconnected when raising the front window.

Y____ N____ Cab shall have an automatic climate control system featuring five outlets with positive filtered ventilation, which make working in the heat and cold more pleasant.

Y____ N____ A transparent skylight shall be provided for improved overhead visibility and shall be supported by gas cylinders during opening and closing. Skylight shall have built-in sliding sunshade.

Y____ N____ A fully enclosed storage space shall be provided within the cab.

Y____ N____ The rear window shall be easily removed for escape in the event of emergency.

Y____ N____ Machine shall not be capable of being started with the hydraulic lock lever in the "live" or "run" position.

Y____ N____ Storage for the upper and lower windshields shall be provided within the cab.

Y____ N____ Cab shall have a beverage holder capable of holding a standard 12 oz (340 g) soft drink can.

Y____ N____ Factory installed, automatic climate control air conditioning shall be standard.

Y____ N____ Factory installed AM/FM stereo radio shall be standard.

Y____ N____ Windshield wiper shall have a choice of 2 "intermittent" settings (3 sec or 6 sec delay)

Y____ N____ Machine shall have a 3" (76.2 mm) wide retractable seat belt as standard.

Y____ N____ A suspended four-way adjustable seat with vertically adjustable armrests shall be standard.

Y____ N____ Seat and consoles shall slide forward and backward independently, so they can be adjusted to comfortably fit any operator.

Y____ N____ A straight travel pedal shall be available from the factory for ease of operation.

Y____ N____ A 12V, 10 amp power supply with TWO power outlets shall be available for use of cell phones and two-way radios.

Y____ N____ Machine shall be capable of accepting a bolt-on FOGS system without further cab reinforcement.

Y____ N____ A pattern control changer shall be available.

Y____ N____ A bolt-on front window mesh guard for hammer use shall be available.

Y____ N____ A seat with a heater and air suspension shall be available for operation during cold weather.

Y____ N____ A washer/wiper for the lower front windshield shall be available.

Y____ N____ Rain protector shall be available for the front windshield to prevent rain from entering the cab when operating with the front window open.

Y____ N____ Sun visor for the front windshield shall be available.

Y____ N____ Vandalism guards shall be available from the factory for the glass cab windows and shall have a secure storage location on-board the machine

Y____ N____ Cab shall have a coat hook, beverage holder, and literature holder.

Y____ N____ Machine shall have an MP3 auxiliary audio port.

Y____ N____ Machine shall have two 12V stereo speakers.

Y____ N____ Machine shall have as standard equipment adjustable arm rests and height adjustable joystick consoles to ensure maximum operator comfort.

Y____ N____ Machine shall have a cab hatch emergency exit.

Y____ N____ Machine shall have seat options that include high-back air suspension with heater, high-back mechanical suspension, and high-back air suspension with heater and cooling.

Y____ N____ Machine shall have an air pre-filter, left foot switch, left pedal, straight travel pedal, rain protector, cab mirror, and ashtray as options for the cab.

Y____ N____ Machine shall have available for all seats a reclining back, upper and lower seat slide adjustments, and height and tilt angle adjustments to meet operator needs for comfort and productivity.

Y____ N____ Machine shall have Halogen lights as standard equipment and HID lights available as an option for greater visibility.

Y____ N____ Machine shall have a Monitor Warning System which features a buzzer in the monitor that tells the customer when critical events such as a plugged filter or low hydraulic pressure needs to be immediately addressed.

STICK AND BOOM

Y____ N____ SAE Bucket digging force shall not be less than 19,200 lbf (85 kN) with a 9' 10" (3.0m) stick..

Y____ N____ SAE Stick digging force shall not be less than 12,800 lb (60 kN) with a 9' 10" (3.0m) stick.

Y____ N____ Machine shall allow for the use of one boom, three sticks and two bucket-types (General and Severe Duty) for versatility

Y____ N____ Maximum reach at ground level shall be at least 28' 6" (8680 mm) with a 9' 10" stick.

Y____ N____ Maximum loading height shall be at least 23'7" (7190 mm) with a 9' 10" stick.

Y____ N____ Machine shall offer a 4.65m reach boom (15'3"), and a choice of four sticks: 2.5m (8'2") stick, 2.8m (9'2") stick, 3.0m (9'10") stick and a 3.0m (9"10") thumb ready stick.

SWING SYSTEM

Y____ N____ Swing torque shall be at least 22,791 lb-ft (30.9 kN m)

Y____ N____ Swing speed shall be at least 11.5 rpm.

WORK TOOL OPTIONS

Y____ N____ The bucket linkage shall include a lifting eye on the power link.

Y____ N____ A bucket-flop mechanism shall be standard when ordering buckets from the machine manufacturer, allowing the operator or service person to reduce the side play at the bucket to stick-nose connection.

Y____ N____ Machine shall have available a Hydraulic Quick Coupler with a superior designed patented locking system.

Y____ N____ The excavator manufacturer shall have available an extensive range of work tools which would include buckets, compactors, grapples, scrap and demolition shears, pulverisers. Hammers, and thumbs. These work tools must be designed to optimize the versatility and performance of the machine.

Y____ N____ Machine shall have available numerous types and sizes of buckets all able to be either pin-on or can be used with a quick coupler. These buckets are to be designed for specific uses and are to be classified as General Duty (low abrasion digging), Severe Duty (high abrasion digging), and Specialty Buckets for ditch cleaning, quick coupler performance, and wide tip use.

Y____ N____ Machine shall have available three Front Blade width options to match the track widths

Y____ N____ Machine shall have a Front Blade with a hydraulic float capability to perform soil leveling operations.

SERVICEABILITY

Y____ N____ Fuse box shall be located inside the cab.

Y____ N____ Anti-skid steel plates shall cover the entire normal walking surface of the upper structure to help prevent the operator from slipping during maintenance or inspection. Sandpaper style, stuck-on anti-skid material is not acceptable.

Y____ N____ Track rollers and carrier rollers shall be lifetime lubricated for increased service life.

Y____ N____ Grease lubricated track shall be provided for increased service life.

Y____ N____ Machine shall have a swing-out condenser for easy access and cleaning of the radiator and oil cooler cores.

Y____ N____ Scheduled oil sampling ports for the main hydraulic system and pilot hydraulic system shall be provided for hydraulic oil to simplify sampling.

Y____ N____ An engine coolant sampling port shall be provided to allow engine coolant to be tested for antifreeze and additive strengths.

Y____ N____ Radial seal air filter with double layered filter core shall be provided for better filtration.

Y____ N____ A clogged hydraulic return filter alert shall be provided through a monitor located in front of the operator.

Y____ N____ A clogged engine air filter alert shall be provided through a monitor located in front of the operator.

Y____ N____ Two separate valves shall be used for track tension adjustment on each side of the machine, one valve shall be dedicated as a grease inlet fitting and the other as a relief valve (allows grease to escape during adjustment)

Y____ N____ The rear side of the swing bearing shall be greased through a remote fitting located together with the fitting for the front side of the swing bearing to facilitate quick and easy maintenance.

Y____ N____ Hydraulic system pressure taps shall be included for quick, easy, efficient system diagnostics.

Y____ N____ A capsule style hydraulic return filter shall be accessible from outside the hydraulic tank to prevent contamination.

Y____ N____ The engine fan guard shall fully enclose (360°) the engine fan.

Y____ N____ Engine shall have a standard electric fuel priming pump.

Y____ N____ The left rear service door shall allow access to the engine radiator and the hydraulic oil cooler.

Y____ N____ A service door on the right side of the upper structure shall allow ground-level access to the pump and pilot filter

Y____ N____ Engine shall be accessible from the upper structure or from under the machine.

Y____ N____ Machine service doors shall have sturdy hinges, latches, superior sealing to prevent debris entry, and easy access to the engine and cooling compartments.

MINIMUM SERVICE FILL CAPACITIES

Y____ N____ Fuel tank shall have a capacity of 47.0 gal (178 L)

Y____ N____ Cooling system shall have a capacity of 7.40 gal (28 L)

Y____ N____ Engine oil shall have a capacity of 3.57 gal (13.5 L)

Y____ N____ Swing drive shall have a capacity of 0.63 gal (2.4 L)

Y____ N____ Each final drive (each) shall have a capacity of 0.79 gal (3 L)

Y____ N____ The hydraulic system (including hydraulic oil tank) shall have a capacity of no less than 42.3 gal (160 L) of hydraulic oil.

Y____ N____ The hydraulic oil tank shall have a capacity of no less than 22.2 gal (84 L).

OWNING AND OPERATING COSTS

Y____ N____ Factory-fill long life coolant with a minimum life of 3,000 hours or three years, rated to –34° F (–37° C), shall be standard. Factory fill long-life coolant with a minimum life of 6,000 hours or three years, rated to –58° F (–50° C), shall be optional.

ADDITIONAL FEATURES

Y____ N____ Counterweight shall have built-in lifting eyes.

Y____ N____ A Standard Counterweight and an Optional Heavy Duty Counterweight shall be available.

Y____ N____ Crane lifting points shall be clearly identified by decal on the machine.

Y____ N____ A heavy-duty bottom guard shall be available.

Y____ N____ Machine shall have a superior designed cellular communicated machine monitoring system available. This monitoring system shall be capable of monitoring machine and diagnostic codes as well as hours of use, fuel consumption, idle time, machine location, and other detailed information that is transmitted to a secure web based application.

Y____ N____ Machine shall have available as an option a grade control depth and slope operating system which minimizes the need and cost for traditional grade checking and enhances job site safety. This system would allow the operator to complete the job in fewer cycles and therefore reduce fuel expense.

Y____ N____ Machine shall have a rear view camera available with the ability to view from the cab monitor.

Options: (Please price separately)

(A) Optional Heavy Duty Counterweight

(B) Grade control depth and slope operating system

(C) Heavy-duty bottom guard

REQUIREMENTS FOR INSURANCE COVERAGE

The Contractor shall not commence work under these Contract Documents until he has obtained all insurance required herein nor shall the Contractor allow any Subcontractor to commence work on his subcontract until similar insurance required of the Subcontractor has been obtained by the Subcontractor. Insurance shall be placed by the Contractor with one or more insurance carriers licensed to do business in the State of Tennessee. Each insurance policy shall be renewed ten (10) days before the expiration date of the policy.

Certificates of insurance shall be filed with the City prior to commencement of the work. These certificates shall contain a provision that coverage's afforded under the policies will not be changed or canceled unless at least fifteen (15) days' written notice has been given to the city. The Contract shall not be binding upon the city until the insurance coverage required herein has been obtained and certificates have been filed with the City.

Adequate insurance coverage shall be maintained by the Contractor at all times. Failure to maintain adequate coverage shall not relieve the Contractor of any responsibilities or obligations under these Contract Documents. In the event any insurance coverage is canceled or allowed to lapse, the Contractor will not be permitted to prosecute the work until adequate and satisfactory insurance has been obtained and certificates of insurance furnished to the City. Failure to keep insurance policies in effect will not be cause for any claims for extension of time under these Contract Documents.

All such policies shall be subject to approval by the City Attorney. Should the City Attorney at any time in his sole discretion determine that the insurance policies and certificate provided may not be sufficient to protect the interests of the City because of the insolvency of the insurance company or otherwise, the Contractor shall replace such policies with policies meeting his approval.

The Contractor shall procure and maintain at his own expense, during the Contract Time, insurance as hereinafter specified:

Workmen's Compensation Insurance that shall protect the Contractor against all claims under applicable state workmen's compensation laws shall be maintained. The Contractor shall also be protected against claims for injury, disease or death of employees which, for any reason, may not fall within the provisions of a workmen's compensation law. This policy shall also include an endorsement providing coverage in all states in which work is performed. The Contractor shall require all the Subcontractors to provide similar Workmen's Compensation Insurance for all the Subcontractors' employees on the work unless such employees are covered by the protection afforded by the Contractor. The liability limits shall not be less than that required by statute.

General Public Liability and Property Damage Insurance that shall be written in comprehensive form and shall protect the Contractor against all claims arising from injuries including death, to members of the public or damage to property of others arising out of any act or omission of the Contractor or his agents, employees, or Subcontractors. In addition, this policy shall specifically insure the contractual liability assumed by the successful bidder to defend and indemnify the City of Chattanooga against such claims or suits.

To the extent that the work may require blasting, explosive conditions or underground operation, the comprehensive general public liability and property damage coverage shall contain no exclusion relative to blasting, explosion, collapse of buildings, or damage to underground property.

The comprehensive general public liability and property damage coverage shall also protect the Contractor against all claims resulting from damage to:

1. Private driveways, walks, shrubbery and plantings;
2. Public utility facilities; and
3. U.S. Government monuments.

The liability limits shall not be less than:

Bodily Injury	$ 500,000 each person $1,000,000 each occurrence
Property Damage	$ 250,000 each occurrence $ 500,000 aggregate

The general public liability and property damage insurance shall carry an endorsement in form satisfactory to the City to the effect that the Contractor shall save harmless the City from any claims and damage whatsoever, including patent infringement. General public liability and property damage insurance shall be kept in force at all times during the course of the work until such time as the work covered by these Contract Documents has been completed and accepted by the City.

Comprehensive Motor Vehicle Liability and Property Damage Insurance that shall be written in comprehensive form and shall protect the Contractor against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on or off the site of all motor vehicles licensed for highway use, whether they are owned, non-owned, or hired.

The liability limits shall not be less than:

Bodily Injury	$ 250,000 each person $ 500,000 each occurrence
Property Damage	$ 100,000 each occurrence

Instructions to Bidders

(1) Bid documents can be downloaded from the City's website, at www.chattanooga.gov. At the left side of that page is a link labeled "Bid Solicitations." Click that link, and a page will open with search results related to Bid Solicitations. One of the top results will be a link that will display a page listing the current Bid Solicitations, with links that will display a PDF version of the bid documents suitable for printing.

(2) Any Addenda will be published in the list of Bid Solicitations mentioned above. Bidders should check this list before submitting their bids, to see whether any Addendum has been issued.

(3) Bid documents should be submitted to the Purchasing Office at the following address:

Purchasing Office, Suite G13
City Hall
101 East 11th Street
Chattanooga, TN 37401

(4) Sealed Bids should be submitted in a sealed envelope. No particular envelope is required, but the Bid Solicitation number should be noted on the outside of the envelope. This is a six-digit number starting with a "3".

(5) Any questions regarding the specifications or bidding process should be directed to the Buyer, **preferably by email** to the following address:

wtucker@chattanooga.gov.

The Buyer will, if possible, find answers to the submitted questions and will issue an Addendum, so that all potential bidders will have access to the answers.

(6) Alternate Bids: Any Vendor wishing to submit an Alternate Bid should contact the Buyer in advance of the bid date. The City has specific requirements for the submission of Alternate Bids, and a cover sheet which should be used to indicate an Alternate Bid.