



**Request for Bids**  
**Backhoe/Loader (life cycle costing)**  
**Bid No.: B16-023**  
**Issue Date: January 4, 2016**

**Purchasing Department**  
**73 Harlow Street**  
**Bangor, Maine 04401**  
**207-992-4282**

## **I. Introduction**

The City of Bangor requests bids to furnish and deliver one (1) heavy duty, four wheel drive, backhoe/loader to the Fleet Maintenance Facility, FOB destination, 481 Maine Avenue, Bangor, Maine. The equipment must be furnished and delivered in accordance with the attached specifications and following conditions. This bid request incorporates the "total cost" or "life cycle" bidding procedure that will be used in evaluating the bids received. The City will accept an unsold 2015 model that is currently in production if it meets or exceeds the requested specifications.

*All Bidders must be able to guarantee that the loader will be delivered no later than March 1, 2016.*

## **II. General Information**

General information is available on the City's website at the following web address: [www.bangormaine.gov/proposals](http://www.bangormaine.gov/proposals). By submitting a response to this solicitation, the proposer accepts the responsibility for downloading, reading and bidding by the terms and conditions set forth in the City's "General Information for Vendors".

## **III. Submission**

To be considered, *return entire bid packet* in an envelope clearly marked "**Bid No.: B16-023: Backhoe/Loader**" by **2:00 PM, Wednesday, January 20, 2016** to the Purchasing Department, City Hall, 73 Harlow Street, Bangor, Maine 04401.

Bids may also be submitted via email by using the link at the top of this page or by sending to: [bids@bangormaine.gov](mailto:bids@bangormaine.gov). If emailing bid, please reference "**Bid No.: B16-023: Backhoe/Loader**" in the subject line. Bids will be publicly opened at the time stated above.

It is the responsibility of the Bidder(s) to see that their bids have sufficient time to be received by the Purchasing Department before the submittal deadline. Any bid, portion of a bid, or unrequested bid revision received at the City of Bangor Purchasing Department after the time and date specified, will be return to the Bidder(s) unopened.

#### **IV. Questions**

Any questions must be directed in writing to [bids@bangormaine.gov](mailto:bids@bangormaine.gov) no later than **4:30 PM, Monday, January 11, 2016**.

The City will issue a response to any questions or inquiries submitted in writing by the date above, on or before **4:30 PM, Wednesday, January 13, 2016**. The response will be in the form of an addendum, which will be available on the City's website.

Any addenda must be acknowledged and included with the proposal submission. All signatures on offers, amendments, or related correspondence must be by persons who are authorized to contractually bind the offerors.

#### **V. Award**

The bid award will be based on one or more of the following:

1. Cost of ownership of the equipment per the life cycle/total cost.
2. Quality and performance of equipment offered.
3. Availability of equipment and parts.
4. Prior history or experience with the Bidder and equipment (if no history or experience, references will be requested).

#### **VI. Exceptions**

Any exception to the provisions in the specifications must be marked in the body of this document and itemized on a separate page titled "Exceptions", referenced by section number and paragraph, along with a detailed explanation of the exception. If any unapproved exceptions are found in the unit upon delivery, payment will be withheld until such exceptions are corrected. The entire unit and all attached equipment must be thoroughly inspected, serviced and ready for use upon delivery.

#### **VII. Intent**

The intent of these specifications is to describe the overall minimum requirements for a heavy duty, rubber tire, four wheel drive backhoe/loader equipped with an extendable boom that meets or exceeds all Federal, State and EPA regulatory standards for the construction industry. This equipment shall be new, unused and the manufacturer's current year production model. The City will accept an unsold 2015 model that is currently in production if it meets or exceeds the requested specifications. The principal operation of the unit will be to dig ditches for installation of culverts and piping, to perform other construction duties, as required, and plow snow.

## VIII. Total Cost Bid Conditions

1. The successful Bidder must post a Fulfillment Bond in the amount of the guaranteed "buy back" of the equipment. This will ensure that the successful Bidder will fulfill all of his/her obligations. The cost of the bond shall be reflected in the prices noted on the Bid Form. **The Fulfillment Bond must be received by the City before payment is issued.**
  - Does the Bidder comply with the requirements of Section VIII, Subsection 1?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials
  
2. It is understood that the backhoe/loader purchased will be operated by City personnel for general construction work and other purposes for which the equipment is designed, including snow removal.
  - Does the Bidder comply with the requirements of Section VIII, Subsection 2?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials
  
3. The City will assume responsibility for all repair costs resulting from damage due to fire, windstorm, flood waters, lightening, theft, vandalism, accidents and operators' or mechanics' negligence. Total cost of the repairs due to the above circumstances will not be included in computing the guaranteed maximum total cost of repairs covered.
  - Does the Bidder comply with the requirements of Section VIII, Subsection 3?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials
  
4. The successful Bidder shall pay for all repairs (including parts and labor) to the equipment covered by the manufacturer's warranty, and these costs shall not be included in the total cost of repairs.
  - Does the Bidder comply with the requirements of Section VIII, Subsection 4?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials
  
5. The City will assume, at its expense, all costs to repair or replace all parts and components normally consumed in day-to-day operations such as: lubricating oil, filters of all types, grease, fuel, anti-freeze, cutting edges, batteries, headlights, glass breakage, belts, brake lines, cleaning and painting, tires, tubes or tire repairs. The City will maintain the equipment in accordance with the manufacturer's recommendations.
  - Does the Bidder comply with the requirements of Section VIII, Subsection 5?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

6. The successful Bidder has the right to inspect the equipment during normal working hours and make recommendations for repairs or maintenance, to comply with the requirements stated by the manufacturer in the manual.

➤ Does the Bidder comply with the requirements of Section VIII, Subsection 6?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

7. The successful Bidder shall be fully responsible for the total cost of all repairs (other than repairs as defined in Section VIII, Subsection 3) in excess of the guaranteed maximum cost of repairs (as indicated on the bid form) for the time of operation in hours, or period of time in years, from the date of delivery, whichever occurs first. These costs shall be paid by the successful Bidder upon receipt of the invoice from the City.

➤ Does the Bidder comply with the requirements of Section VIII, Subsection 7?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

8. In determining the guaranteed total cost of such repairs, and in the enforcement of Section VIII, Subsection 7, the following rules shall apply:

a. In the event that the cost of repairs, including parts and labor as computed by Fleet Maintenance is less than \$500.00 for an individual repair, the City shall have the right to have the repair made in the Fleet Maintenance facility; and need not give notice to the successful Bidder prior to the repair being made. All work performed by Fleet Maintenance under these terms, will be reported to the successful Bidder within thirty (30) days of its completion.

b. In computing the cost of repairs, all City labor and equipment charges will be actual costs, including travel time. The City will bear the cost of transportation of the equipment from the field to the maintenance headquarters to which the equipment is assigned. Costs of transportation of the equipment to and from any other repair site will be part of the cost of repairs. Repair parts shall be purchased from the successful Bidder.

c. If the cost of repairs is in excess of \$500.00, as estimated by the City, then the successful Bidder will be promptly notified so that he/she may prepare an estimate of the repairs and determine where the repairs are to be made. Such repairs may be made by the service department of the successful Bidder and billed to the City at the Bidder's prevailing rate. However, if the Bidder agrees, then such repairs will be made at the Fleet Maintenance facility, in which event the cost of such repairs shall be computed on the same basis as that set forth in Section VIII, Subsection 8b.

- d. Repairs may be made in service departments other than that of the successful Bidder and the City, if mutually agreed upon.
  - e. During the period which may exceed the guaranteed maximum repair cost, repairs made at the Fleet Maintenance facility will be computed in accordance with Section VIII, Subsection 8b and be billed to the successful Bidder. Repairs made by the successful Bidder will be billed to the City of Bangor at "No Charge".
  - f. Loaner Provisions: If the equipment cannot be properly used for the purpose for which it is designed due to repairs which cannot be completed within three (3) normal working days (Sundays and holidays excluded), for any reason during the warranty period, the successful Bidder, at the request of the City of Bangor must provide a comparable piece of equipment at "No Charge" until such time as the equipment has been returned to service.
  - g. During the period that exceeds the maximum cost of repairs, provisions of Section VIII, Subsection 8f will apply.
    - Does the Bidder comply with the requirements of Section VIII, Subsection 8; a-g?    \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials
9. The successful Bidder guarantees that he/she will buy back the loader from the City at the end of 4,000 hours of operation as recorded by the engine service meter or five (5) years after receipt of the equipment whichever occurs first.
- Does the Bidder comply with the requirements of Section VIII, Subsection 9?    \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials
10. In the event of a disagreement as to the interpretation or application of this agreement, an arbitration board shall be set up to arbitrate and resolve any disagreement and/or help interpret as the need may arise. This arbitration board shall have one (1) person appointed by the City, one (1) appointed by the successful Bidder, and a third person to be selected by the two (2) previously named. The ruling of any two members of the arbitration board will be binding on both parties.
- Does the Bidder comply with the requirements of Section VIII, Subsection 10?    \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

## IX. Backhoe/Loader Specifications

### 1. Unit:

The unit shall be a John Deere 310SL, or approved equal alternate of comparable size.

- Does the Bidder comply with the requirements of Section IX, Subsection 1?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

### 2. Engine:

The engine shall be heavy duty turbocharged, four (4) cylinder with a minimum net peak horsepower of 90HP, Tier 4 Compliant.

- a. The engine shall also have an extreme duty oil filtration system, muffled exhaust and cold starting aid.
  - b. Fuel shall be low sulfur diesel
  - c. 110 volt, 1000 amp engine heater shall be professionally mounted on the front of the unit for ease of operation
  - d. The exhaust emission and noise level must comply with all applicable Federal, State of Maine and EPA standards. EPA Tier IV emissions.
- Does the Bidder comply with the requirements of Section IX, Subsection 2; a-e? \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

### 3. Transmission:

The transmission shall be power shift with torque converter or approved equal alternate. The torque converter shall be cooled and filtered with a minimum of five (5) forward speeds and a hydraulic reverser.

- Does the Bidder comply with the requirements of Section IX, Subsection 3?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

### 4. Brakes:

The brakes shall be hydraulically operated, self adjusting, power wet disc and must be protected from the elements. The parking brake shall be separate from the service break.

- Does the Bidder comply with the requirements of Section IX, Subsection 4?

\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

5. Steering:

The steering shall be hydrostatic power and emergency steering.

- Does the Bidder comply with the requirements of Section IX, Subsection 5?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

6. Controls:

The unit shall have two (2) lever pilot controls with pattern selection feature.

- Does the Bidder comply with the requirements of Section IX, Subsection 6?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

7. Axles & Differentials:

The axles shall be four (4) wheel drive and heavy duty design. A differential lock of any style is required.

- Does the Bidder comply with the requirements of Section IX, Subsection 7?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

8. Hydraulics:

Minimum thirty-six (36) gallon tandem gear pump and open center system.

a. Pressure:

- i. Backhoe: Minimum 3500 psi
- ii. Loader: Minimum 3500 psi

b. Flow @ 2200 rpm:

- i. Backhoe: Minimum 36 gpm
- ii. Loader: minimum 28 gpm

- Does the Bidder comply with the requirements of Section IX, Subsection 8; a-b?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

9. Operator's Cab:

- a. Sound suppressed ROPS cab that meets or exceeds all applicable Federal, State of Maine and OSHA regulatory standards

- b. Rearview mirrors both internal and external
  - c. A fabric covered, extra cushioned seat with air ride, multi-adjustable swing around with arm rests and lumbar adjustment
  - d. Highest capacity available heater and defroster
  - e. Air conditioning
  - f. Dome light with independent on/off switch
  - g. Illuminated instrument panel
  - h. Gauges:
    - i. Oil Pressure
    - ii. Water temperature
    - iii. Ammeter
    - iv. Torque converter temperature
    - v. Fuel level
    - vi. All other applicable gauges or warning devices
  - i. Heavy duty, two (2) speed front and rear windshield wipers with time delay and front washer.
  - j. Roof and floor sound suppression matting
  - k. Sun visors
  - l. Interior mounted circulation fan
  - m. AM/FM stereo with weather band
  - n. Tinted safety glass
- Does the Bidder comply with the requirements of Section IX, Subsection 9; a-n?    \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

10. Electrical:

The electrical system shall be a twelve (12) volt, heavy duty, direct electrical starting system with a minimum 150 amp alternator. The battery shall be 160 minute rated reserve with no less than 950 cold cranking amps at 0°F.

All computer controlled functions must have the ability to be "bypassed" in order to obtain a "limp-mode" of travel.

- Does the Bidder comply with the requirements of Section IX, Subsection 10?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

11. Cooling System:

The cooling system shall be heavy duty design and bolted metal construction with ample capacity for continuous high engine output under extreme temperature and/or operating conditions. There shall also be a heavy duty metallic radiator guard.

- Does the Bidder comply with the requirements of Section IX, Subsection 11?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

12. Filters:

All filters must be disposable spin on type and located for ease of servicing. The air filter shall be heavy duty dry type (dual stage preferred).

- Does the Bidder comply with the requirements of Section IX, Subsection 12?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

13. Operating Weight:

The operating weight shall be a minimum of 17,500 lbs. with a 1,250 lb. front counterweight with an extendable dipperstick.

- Does the Bidder comply with the requirements of Section IX, Subsection 13?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

14. Tires:

The tires shall be heavy duty with aggressive tread design for snow removal conditions. One (1) spare wheel and tire for both the front and rear must be provided.

Front: 12.8/80; 18 traction; 10 ply

Rear: 19.5L; 24 R4; 10 ply

- Does the Bidder comply with the requirements of Section IX, Subsection 14?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

15. Loader Specifications:

- a. Automatic return to dig
  - b. Self leveling (hydraulic)
  - c. Two (2) lever pilot controls
  - d. Ride control
  - e. Heavy duty, multi- purpose 4 in 1 bucket: 1.32 yd. with reversible bolt on cutting edge and skid plates, including (2) two lifting hooks and predrilled for eight (8) teeth. Must have extra hydraulic valve for both front and rear hydraulic circuits.
- Does the Bidder comply with the requirements of Section IX, Subsection 15; a-e?      \_\_\_\_\_ Yes      \_\_\_\_\_ No      \_\_\_\_\_ Initials

16. Backhoe Specifications:

- a. SAE minimum digging depth of 18 ft. with boom extended. Minimum boom extender: 3 ft., 6 in.
- b. Two (2) buckets shall be provided
  - i. One (1), 2ft. heavy duty digging bucket with replaceable teeth and lifting hook; and
  - ii. One (1), 3ft. heavy duty ditching bucket with lifting hook, bolt on edge and wrist cylinder must mount to bucket.
- c. A hydraulic coupler shall be installed to interchange the two (2) buckets. CF type or equal.
- d. There shall be an auxiliary backhoe valve and plumbing for hammer (foot operated) installed.
- e. The digging force shall be a minimum of 12,000 lbs.
- f. Reversible stabilizer pads
- g. There shall be two (2) lever pilot control with pattern selection features.

**NOTE: The unit must be capable of hooking to and running a hammer the City presently owns. The current equipment can be viewed at the Fleet Maintenance Facility, 481 Maine Avenue.**

- Does the Bidder comply with the requirements of Section IX, Subsection 16; a-g? \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

17. Equipment:

- a. Four (4), shockproof mounted headlights (LED)
  - b. Four (4), rear shockproof mounted work lights (LED)
  - c. Directional signals and marker lights
  - d. Back up alarm
  - e. Horn
  - f. Slow moving vehicle emblem
  - g. Antifreeze to -40°F
  - h. 1,000 watt engine block heater
  - i. Federal or approved equal alternate, LED strobe light mounted on left rear of cab roof.
  - j. Vandalism protection kit
  - k. Stop and hazard lights
  - l. Cab mounted 5 lb. fire extinguisher
  - m. Engine compartment doors
  - n. Service hour meter
  - o. Emergency triangular reflectors
  - p. Automatic low oil pressure/high temperature warning system wired in a way as not to be easily accessible to the operator and be operational only when the ignition switch is in the on or run position.
  - q. Fenders on front and rear
  - r. One (1) piece floor mat
  - s. Air conditioning
  - t. Front grille screen
  - u. Tilt steering wheel
  - v. Minimum of three (3) outlets (12 volt)
- Does the Bidder comply with the requirements of Section IX, Subsection 17; a-w ? \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

18. Warranty:

A full, five (5) year / 4,000 hour, no deductible warranty is required. The successful Bidder is required to perform all warranty work at the Fleet Maintenance facility at no cost to the City.

- Does the Bidder comply with the requirements of Section IX, Subsection 18?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

19. Manuals:

The following manuals shall accompany the delivered unit: Two (2) operator's manuals, one (1) parts manual and one (1) complete service manual set.

- Does the Bidder comply with the requirements of Section IX, Subsection 19?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

20. Orientation and Training:

- a. Training by a factory representative shall be provided for mechanics.
- b. A separate training session shall be provided for the operators.
- c. Training sessions will be scheduled by the Fleet Maintenance Department

- Does the Bidder comply with the requirements of Section IX, Subsection 20; a-c? \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

21. Computer Equipment:

Any available computer related diagnostic equipment (software or hardware) and training must be provided by the successful Bidder at no additional cost to the City. John Deere Satellite tracking will be furnished for five (5) years.

- Does the Bidder comply with the requirements of Section IX, Subsection 21?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials

22. Parts Availability:

Replacement parts for major components shall be available within forty-eight (48) hours of order (Bangor area).

- Does the Bidder comply with the requirements of Section IX, Subsection 22?  
\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Initials



**Backhoe/Loader (life cycle costing)**  
**Bid No.: B16-023**

**Bid Deadline:**  
**2:00 PM, Wednesday**  
**January 20, 2016**

**Note: Equipment must be bid by using this Bid Form and any other requested documentation. Failure to comply may result in disqualification.**

Item	Description	Total Price
1.	Backhoe/Loader	
2.	Guaranteed maximum total cost of repairs for 5 years/4000 hours	
	<b>Subtotal:</b>	
3.	Less guaranteed buy back amount at end of 5 years/4000 hours	
	<b>Total "Life Cycle" Bid Amount:</b>	
Year:                      Make:                      Model:		
Estimated time of delivery after receipt of order:		
Does the proposed equipment meet the requested specifications? ____ Yes ____ No If no, please attach a complete list of exceptions by section, as required under Section VI.		
<b>Price must include all misc. charges: labor, materials, fuel, transportation etc.          No other charges will be accepted.</b>		

<b>Business Name:</b>			
<b>Street or PO Box</b>			
<b>City, State, Zip</b>			
<b>Telephone Number</b>			
<b>Fax Number</b>			
<b>Email Address</b>			
<b>Contact Name</b>			
<b>Title</b>		<b>Date</b>	