

# **City of Scottsbluff, Nebraska**

**Monday, August 17, 2015**

**Regular Meeting**

## **Item Reports3**

**Consideration and approval of specifications for the purchase of one, new, used or demonstrator front wheel loader and authorize City Clerk to advertise for bids to be received until 2:00 p.m. September 8, 2015.**

**Staff Contact: Nathan Johnson, Assistant City Manager**

# Agenda Statement

Item No.

For Meeting of: August 17, 2015

**AGENDA TITLE:** Council to approve advertisement for bids for a wheel loader for the compost facility

**SUBMITTED BY DEPARTMENT/ORGANIZATION:** Environmental Services

**PRESENTATION BY:** City Manager Rick Kuckkahn/ Asst. City Manager Nathan Johnson

**SUMMARY EXPLANATION:** The Environmental Service Department is requesting approval to go out for bids for a new wheel loader for the compost facility. The loader will accommodate the growing facility's needs and help with the new process at the compost facility. The city has been awarded \$100,000.00 grant through NDEQ to help defer the cost of new equipment. (Wheel Loader and 2" screen) The NDEQ grant just request we obligate \$65,000.00 of our funds for matching cost and another \$15,000.00 in-kind for salary of equipment operators for the first year.

**BOARD/COMMISSION RECOMMENDATION:**

**STAFF RECOMMENDATION:** The Environmental Service Department is recommending that the council approve to go out for bids for a new loader for the compost facility. This piece of equipment will be added to what the compost facility currently has available. But will allow more than one operator to work on the compost and mulch at the same time while still assisting the public. We have already received three (3) quotes for the wheel loader per grant terms and would like to open bids to the public.

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**EXHIBITS**

Resolution  Ordinance  Contract  Minutes  Plan/Map

Other (specify) approve to go out for bids for a wheel loader

**NOTIFICATION LIST:** Yes  No  Further Instructions

Please list names and addresses required for notification.

- Murphy Tractor & Equipment  
220810 Hwy 92 East  
Gering, NE 69341  
308-436-2177
- Nebraska Machinery  
POB 519  
Scottsbluff, NE 69363  
308-632-6163
- Titan Machinery  
3211 Rodeo Road  
North Platte, NE 69101  
308-532-6571

**APPROVAL FOR SUBMITTAL:** \_\_\_\_\_  
City Manager

Rev: 11/15/12 City Clerk

CITY OF SCOTTSBLUFF  
NOTICE TO BIDDERS

Sealed bids will be received by the City of Scottsbluff, Nebraska at the City Clerk's Office, City Hall, 2525 Circle Drive, Scottsbluff, Nebraska, 69361 until 2:00 p.m., Tuesday, September 8, 2015 for furnishing ONE, NEW, OR DEMONSTRATOR FRONT WHEEL LOADER. Bids must be made on the bid form found in the specifications and submitted in a sealed envelope labeled "Bid on One, New, or Demonstrator Front Wheel Loader". Specifications and Instructions to Bidders are available at the office of the City Clerk. The Council reserves the right to reject any and all bids and to waive irregularities.

/s/ Cindy Dickinson, City Clerk

Publish – 3 times:

Friday, August 21, 2015

Friday, August 28, 2015

Friday, September 4, 2015

## **Bid specifications for 524K or similar 4-wheel drive loader**

### **ENGINE**

1. Six cylinder, turbocharged, charge air cooled diesel engine and shall be designed and built by the manufacture
2. Engine shall be certified to EPA Final Tier 4/EU Stage IV
3. Engine shall have a wet-sleeve cylinder liner design for improved cylinder cooling over dry sleeve and cast-in-bore design for improved cylinder and piston ring durability.
4. Engine displacement shall be no less than 6.8 liters (414 cu.in)
5. Engine net peak power shall be no less than 141 hp (105kW) @ 1,700 rpm
6. Engine shall develop at least a 50% torque rise and should have at least 459 lb. ft. net peak torque @ 1,200 rpm.
7. Fuel system shall be high-pressure, common rail
8. Daily check points shall be accessible from one side of the engine and shall be done from ground level.
9. Under-hood engine air cleaner shall be dry type, dual element with a restriction sensor and in-cab restriction warning light.
10. The loader will have under hood pre-screened air intake to minimize plugging.
11. Access to engine will be open from both sides with side opening, full access service doors.
12. Engine shall have no less than 30-micron rated primary fuel filter with water separator.
13. Loader shall be equipped with heavy-duty steel fuel tank guard.
14. Service interval for the engine oil and filter shall be 500 hours.
15. The unit should have an auto-idle, auto-shutdown feature for the engine as standard equipment.
16. The electrical system shall be 24 volt with 130 amp alternator.

### **COOLING**

1. Unit shall have a proportionally controlled, hydraulically driven, 90 degree-swing-out fan, standard equipment.
2. The unit will have two-side access to all coolers.
3. Air intake shall be pre-screened (3 mm perforations) for each cooling component.
4. Cooling system shall be isolated from the engine compartment.
5. Unit shall have a coolant recovery tank provided.
6. Unit shall have a fan-guard.
7. Fluid levels should be easily checked by sight gauges or overflow tank.

### **POWER TRAIN**

1. Unit shall have a Countershaft-type, Power Shift transmission – 4 forward, 3 reverse gears.
2. The transmission shall be electronically controlled, adaptive, with load and speed dependent shift modulation.
3. Shift modes shall be manual, auto to 1<sup>st</sup> or 2<sup>nd</sup>, kick down or kick up/down.

4. Service interval for the transmission oil filter shall be 2,000 hours.
5. The transmission clutch calibration shall be performed from the cab monitor and shall have three clutch cutoff settings adjustable on the switch pad.
6. Unit shall have steering column or joystick mounted F-N-R and gear-select lever, kick-down button on hydraulic lever. Will also have quick shift feature that allows pushbutton gear changes, one gear at a time.
7. Sight gauge showing transmission fluid shall be at ground-level.
8. Transmission filter restriction shall be displayed in the cab.
9. The transmission shall be able to reach 22.4 mph in 4<sup>th</sup> gear and 14.3 mph in 3<sup>rd</sup> gear with 20.5R25 tires.

#### **AXELS/BRAKES**

1. The final drives shall be heavy-duty inboard planetary.
2. The loader shall have two brake pedals with an activation switch to allow left brake pedal to switch between a brake and neutralizer or brake only function.
3. The service brake shall be hydraulically actuated, inboard sun shaft mounted, oil cooled, self-adjusting, single disc and sealed from water, mud and dust contamination.
4. Rear axle shall not have less than 24 degree total oscillation, stop to stop, when equipped with 20.5R25 tires.
5. The dipstick port and housing fill shall be at the top of the axle.
6. The front axle shall be hydraulically actuated, disc clutch style, locking differential for maximum traction when required but with less tire wear than limited slip or no-spin differentials.
7. The loader shall have a standard hydraulic locking front with conventional rear and optional dual locking front and rear.
8. The loader shall have optional automatic differential lock.

#### **HYDRAULIC SYSTEM**

1. Hydraulic filter shall be in the hydraulic tank with service interval of 4,000 hours.
2. The hydraulic fluid shall have a rated life of 4,000 hours.
3. The hydraulic system shall be pressure-compensating load-sensing for reduced fuel consumption and better fluid heating compared to open center hydraulic systems.
4. Hydraulic tank capacity should be no less than 31.4 gallons for extended hydraulic fluid intervals and cooler systems temperature.
5. Unit will be provided with an automatic return to dig to level attachment.
6. In cab adjustable automatic boom height kick out control.
7. Unit will be provided with in-cab adjustable automatic boom return-to-carry control.
8. Unit shall be equipped with either single-lever joystick or two-lever fingertip pilot-operated controls.
9. A sight gauge will be provided for checking hydraulic reservoir fluid.
10. Hydraulic pump shall be variable-displacement, axial-piston pump: closed-center, pressure-compensating system.

11. Loader steering articulation angle shall be no less than 80 degrees, 40 degrees in each direction.

#### **ELECTRICAL**

1. Two batteries shall be included, 24 volt, 950 CCA, with a rated reserve of no less than 25 amps for 190-min at 80F.
2. The unit shall have a solid-state electrical power distribution system using circuit board technology and solid-state switches.
3. The unit shall have a keyless starting system with configurable security settings.
4. Unit's electrical system will be protected by a 150 amp circuit breaker.
5. The unit shall be provided with a lockable master electrical disconnect switch.
6. Cab will be pre-wired for a rotating beacon/strobe light.
7. The in-cab switch module shall be sealed to keep out dirt, dust and airborne debris.
8. Unit shall be equipped with (4) front; (2) rear driving lights with guards, turn signals and flashers, stop and tail lights. The tail lights shall be LED type mounted high up in the rear grille for protection from damage and better sight visibility and shall have a normal service life equal to the machine.
9. Optional LED lighting for greater visibility during night time operations.
10. Unit shall be equipped with analog display for: engine coolant temperature, transmission oil temperature, hydraulic oil temperature, and engine oil pressure.
11. Unit shall have digital readout for: engine rpm, odometer, transmission gear/direction indicator, speedometer, hour meter, fuel level and DEF level.
12. Unit shall have operator warning light for: check engine, engine oil pressure, engine air restriction, battery voltage, transmission filter restriction, brake pressure, hydraulic oil filter, transmission fault, hydraulic oil temperature.

#### **OPERATOR STATION**

1. Unit shall be equipped with a Cab with ROPS/FOPS Level 1 protection, including A/C and heater and be multiplane isolation mounted for noise/vibration reduction.
2. Orange colored 3" retractable seat belt shall be provided.
3. Steering wheel shall be tiltable.
4. 3-point contact all times at the front and rear of the loader and around the roof-line.
5. The cab shall have continuous and unobstructed glass from roofline to floor for visibility in tight quarters.
6. A seat backrest extension will be standard.
7. Cab shall have a minimum of 2 cup holders, personal cooler holder/storage compartment for operator's manual, rubber floor mats.

#### **GENERAL SPECIFICATIONS**

1. Unit shall be equipped with 20.5R25, 1 star L-3 tires with multi-piece rims

2. Machine Full Turn 40 degree tipping load with standard Z-bar linkage with Pin-on GP Bucket with Bolt-on Edge, with no tire deflection 2.75 cu yd. (2.3m<sup>3</sup>) shall be at least 20,212 lb. (9,168 kg)
3. Front tires shall be covered with fenders.
4. Easily accessible remote start battery terminals.
5. The counterweight shall be built-in.
6. Unit will be provided with a hitch with locking pins.
7. Unit shall have an articulation locking bar.
8. Unit shall have vandal protection with lockable engine enclosure, right counterweight storage, filler access for radiator/fuel/hydraulic/transmission.
9. The unit shall be provided with a loader boom service locking bar.
10. Loader shall have reinforced articulation joints with double tapered roller bearings.
11. Fuel tank capacity shall be no less than 58 gallons (220 L).
12. Operating weight with standard equipment, Pin-On bucket with Bolt-on edge, 2.75 cy yd. (2.1m<sup>3</sup>), 20.5R25 tires, ROPS cab, 175 lb. operator and full fuel tank shall be no less than 27,928 lb. (12,668 kg)
13. Bucket breakout force shall be no less than 19,974 lbs. (9,060 kg) with manufactures standard z-bar with pin-on 2.75 cu yd. pin on bucket and standard configuration.
14. Ground clearance under the loader shall be no less than 15.7" (0.4m)
15. Loader with attachment coupler and bucket shall have a height to hinge pin no less than 12'5" (3.77m)
16. Dump clearance at 45 degrees at full height shall be no less than 9'1" (2.77m) with 2.75 cu yd. general-purpose with Bolt-on Edge bucket.
17. Reach at 45 degree dump, 7' clearance shall be no less than 4'9" (1.44m) with 2.75 cu yd. general-purpose with Bolt-on Edge bucket.

#### **FRAMES AND STRUCTURES**

1. Machine front frame shall be of a 4-plate design of four vertical plates extending from boom pivot pins reaching to the front axle to distribute boom loads on the axle. The design is superior to the two-plate frames.
2. Loader bucket bell crank linkage shall be fabricated of high strength steel for increased durability and strength over castings.
3. Machine shall be equipped with an exterior mounted, ground level storage compartment.

#### **OPTIONAL CONFIGURATION**

1. Optional automatic reversing fan drive with monitor adjustable 20 – 40 minute time increments.
2. Unit has optional axle coolers and filtration.
3. Optional ride control, automatic with monitor adjustable speed settings.
4. Optional high-lift loader linkage for additional 1'1" height to hinge pin, fully raised.
5. Optional centrifugal engine air intake pre-cleaner for heavy airborne debris or dust.
6. Optional centrifugal cab fresh air pre-cleaner for heavy airborne debris or dust.

7. Optional heated mirrors for cold weather environments.
8. Optional environmental drains and oil sampling for the engine oil, transmission oil, hydraulic oil, and engine coolant.
9. Optional heated seats with headrest and independent height and weight adjustment for operator comfort and cold environments.
10. Optional right side step.