

City of Scottsbluff, Nebraska

Monday, October 6, 2014

Regular Meeting

Item Consent5

Council to approve the specifications for the purchase of One, New, Six -Wheel sweeper and authorize the City Clerk to advertise for bids to be received by 11:00 a.m., October 28, 2014 .

Staff Contact: Mark Bohl, Public Works Director



CITY OF SCOTTSBLUFF BID SPECIFICATIONS

FOR THE PURCHASE OF

**ONE (1) NEW SIX WHEEL BROOM STREET SWEEPER WITH
SQUEEGE STYLE CONVEYOR AND HIGH DUMP HOPPER**

**For the Transportation Department
DIVISION OF PUBLIC WORKS**

DATED: October 6, 2014

Contact:

Brett Bewley, Transportation Supervisor 308-630-6297

NOTICE TO BIDDERS

Sealed Bids will be received by the City of Scottsbluff, Nebraska at the office of the City Clerk until 11:00 A.M., Tuesday, October 28, 2014, for furnishing One (1) New Six Wheel Broom Street Sweeper with Squeegee Style Conveyor and High Dump Hopper. 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.

Cindy Dickinson
City Clerk

Publish – 3 times:

Friday, October 10, 2014
Friday, October 17, 2014
Friday, October 24, 2014

INSTRUCTIONS TO BIDDERS

1. All Proposals shall be submitted on Bid Forms provided for this purpose in order that they may be properly compared and evaluated.
2. The Bid shall be for one (1) New Six Wheel Broom Street Sweeper with Squeegee Style Conveyor and high dump hopper.
3. The successful bidder will take a trade-in of one (1) 2008 Elgin Street Sweeper, Model: Pelican, Ser.# NP1000D.
4. The Bid shall be quoted F.O.B. Scottsbluff, Nebraska.
5. Bids shall state the Make and Model of proposed unit(s) and include complete detailed specifications with manufacturer's brochure, specifying the identical model(s) being bid.
6. The Transportation Department **is exempt** from Federal Excise or State Sales Taxes. The City of Scottsbluff will furnish a tax exemption certificate.
7. The Bids shall be submitted to the City Clerk's office by 11:00 A.M., Tuesday, October 28, 2014, in a sealed envelope, and the envelope clearly marked "Bid on Street Sweeper".
8. The Council reserves the right to reject any and all bids and to waive any irregularities for any reason deemed necessary.
9. Award of purchase by the City will not become final until the Street Supervisor gives verbal instruction authorizing this purchase.
10. City will pay for equipment meeting all specifications upon proper documentation of same, no sooner than the first Council meeting following delivery of same.
11. Delivery time from date order placed to vendor, shall be ninety (90) days or less.
12. Price that is stated on Bid Proposal Sheets shall be good for 30 calendar days following bid opening.
13. Actual equipment being bid must be available for inspection by City personnel after the bids are opened and before the next council meeting when the purchase will be approved.
14. Any items of noncompliance or variations to the minimum specification requirements listed on the following pages shall be written and submitted with the Bid Proposal.

**PROPOSAL FOR FURNISHING
ONE (1), NEW SIX WHEEL BROOM STREET SWEEPER WITH SQUEEGEE STYLE
CONVEYOR AND HIGH DUMP HOPPER
For The
TRANSPORTATION DEPARTMENT**

Mayor and City Council
Scottsbluff, Nebraska

Gentlemen:

I (we) have examined the Notice to Bidders, dated October 6, 2014, Instructions to Bidders, and the Specifications, and submit the following proposal to furnish one (1), new Six Wheel Broom Street Sweeper With Squeegee Style Conveyor and High Dump Hopper for the Transportation Department.

Year	Make	Model #
------	------	---------

Less Trade-In: 2008 Elgin Street Sweeper
Model: Pelican, Ser.# NP1000D

Trade-In Value: \$_____

Price With Trade-Ins: \$_____

My Bid for the described Six Wheel Broom Street Sweeper With Trade-Ins:

(amount written out fully)

If the City places an order with my firm for the specified equipment, I hereby certify I will deliver a new unit on or before:

_____ which meets the above specifications.
Month Day Year

Signature of Bidder:_____

Name of Bidder:_____

Company Represented by Bidder:_____

Address of Bidder:_____

Telephone and FAX Number of Bidder:_____

CITY OF SCOTTSBLUFF

TECHNICAL SPECIFICATIONS

FOR

SIX WHEEL BROOM STREET SWEEPER WITH SQUEEGEE STYLE

CONVEYOR AND HIGH DUMP HOPPER

Section A - Chassis

		COMPLY	
		<u>Yes</u>	<u>No</u>
<u>1.0 CHASSIS (2015 Isuzu NRR OR EQUAL)</u>			
1.1	Chassis shall be cab over design with 19,500 GVW rating. State chassis make, model: _____	_____	_____
1.2	Wheelbase shall be not more than 109 inches.	_____	_____
1.3	Cab to axle to accommodate vertical exhaust with after treatment.	_____	_____
1.4	Chassis shall include exhaust brake.	_____	_____
1.5	One- (1) 30-gallon fuel tank shall be used for the chassis engine and shall be easily accessible without raising or shifting any components. A fuel gauge, in cab, shall be supplied. Sight tube is not acceptable.	_____	_____
		COMPLY	
		<u>Yes</u>	<u>No</u>
<u>2.0 CHASSIS ENGINE</u>			
2.1	Truck engine shall be 2013 Emission Compliant, Isuzu 4HK1-TC or equivalent, turbocharged diesel, 215 Hp @ 2500 RPM, 452ft-lbs. @ 1850 RPM.	_____	_____
2.2	Truck engine shall be equipped with a single vertical exhaust system with after treatment.	_____	_____
2.3	The cooling system shall be protected to -34° F.	_____	_____
2.4	Engine shall be equipped with single stage dry-type air cleaner, spin-on fuel filter, full flow oil filter, and heated fuel/water separator with in-cab .	_____	_____
2.5	Radiator fan shall be viscous drive type.	_____	_____
2.6	A Diesel Exhaust Fluid (DEF) tank shall be provided.	_____	_____
		COMPLY	
		<u>Yes</u>	<u>No</u>
<u>3.0 TRANSMISSION, AXLES, WHEELS & BRAKES</u>			
3.1	An Asin A465 Series 6 speed (or approved equal) automatic transmission with oil heavy duty oil cooler shall be provided.	_____	_____
3.2	The rear axle shall have a ratio of 5.57:1 for proper sweeping speeds.	_____	_____

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|-----|---|-------|-------|
| 3.3 | The 7275 lb. front axle shall be equipped with 8440 lb. springs and shock absorbers. | _____ | _____ |
| 3.4 | The 14550 lb. rear axle and air suspension will be required. | _____ | _____ |
| 3.5 | The system must have air suspension to maintain ride height during transport and sweeping. Air suspension evacuates for the dump process to provide a stable platform for safe dumping. | _____ | _____ |
| 3.6 | For safety and to allow the emergency interchange of tires at a job site and front and rear tires and rims shall all be interchangeable. | _____ | _____ |
| 3.7 | Tires shall be tubeless radial tires 12 ply 225R19.5 "F" load rated. The rear axle shall include dual tires for load capacity; singles will not be acceptable. | _____ | _____ |
| 3.8 | Rims shall be 8 hole steel hub piloted 22.5 x 8.25 | _____ | _____ |
| 3.9 | Parking brake shall be expanding drum on the driveline. | _____ | _____ |

4.0 CAB

COMPLY
Yes No

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|------|--|-------|-------|
| 4.1 | Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator shall not exceed 8 feet for an SAE 98 th percentile size operator. | _____ | _____ |
| 4.2 | Steering shall be full power with left side operator controls. | _____ | _____ |
| 4.3 | Steering column shall have tilt and telescopic adjustment | _____ | _____ |
| 4.4 | Seats shall be adjustable, vinyl bench and include 3 point seat belts. | _____ | _____ |
| 4.5 | Sweeper shall include outside west coast type mirrors with lower 8 inch convex lens for easy viewing of the side broom during sweeping. | _____ | _____ |
| 4.6 | To maximize operator visibility of the curb and sweeping gear, a 12" outside RH convex mirror shall be provided on both sides. | _____ | _____ |
| 4.7 | Hydraulic functions shall be controlled by rocker switches located in the cab mounted control panel. | _____ | _____ |
| 4.8 | For safety during night sweeping, switches shall be illuminated so that they can be readily identified without the use of the cab dome light. | _____ | _____ |
| 4.9 | Switches shall be clearly identified by name and symbol. | _____ | _____ |
| 4.10 | Cab interior environment shall be fully air-conditioned including a fresh air heater/ventilator/defroster. | _____ | _____ |
| 4.11 | Cab shall have full flow through ventilation for optimal temperature control and operator comfort. | _____ | _____ |
| 4.12 | Wipers shall have intermittent feature. | _____ | _____ |
| 4.13 | Interior of cab shall have acoustical insulation for low operating noise, automotive type trim, and center sweeper console. | _____ | _____ |

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|---|-------|-------|
| 4.14 Dash shall be faced with soft molded plastic. | _____ | _____ |
| 4.15 All glass shall be tinted safety glass. | _____ | _____ |
| 4.16 Operator position shall have adjustable sun visor. | _____ | _____ |
| 4.17 Doors shall be keyed alike locks. | _____ | _____ |
| 4.18 Door windows shall be power roll up type. | _____ | _____ |
| 4.19 Side windows shall have defogger. | _____ | _____ |
| 4.20 Cab shall include 12V power supply | _____ | _____ |
| 4.21 Cab shall include an AM/FM CD radio installation. | _____ | _____ |
| 4.22 LCD 7" color monitor mounted on dash with two cameras, one facing right side broom, and the second placed at rear of unit and comes on automatically in reverse. | _____ | _____ |

5.0 INSTRUMENTS

COMPLY
Yes No

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|---|-------|-------|
| 5.1 Chassis left side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, hour meter, trip hour meter, fuel gauge, DEF gauge, water temperature gauge, oil pressure gauge, and volt gauge, and emission level indicator. | _____ | _____ |
| 5.3 Truck instruments shall include warning lights for battery, transmission, engine. | _____ | _____ |
| 5.4 Sweeper engine instruments shall include tachometer, hour meter, oil pressure, fuel, voltage, and coolant temperature for complete information for the operator on the condition of the auxiliary engine. | _____ | _____ |
| 5.5 Instruments shall include an auxiliary engine air intake restriction indicator mounted in the fixed console, for ease of maintenance, and a hopper "full load" indicator to notify the operator the hopper is fully loaded. | _____ | _____ |
| 5.6 Dash, all console switches including transmission controls and all gauges shall be illuminated. | _____ | _____ |

6.0 ELECTRICAL

COMPLY
Yes No

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|---|-------|-------|
| 6.1 Batteries should be located in an enclosed accessible environment for long life and ease of service. | _____ | _____ |
| 6.2 Chassis shall have two (2) maintenance free batteries rated at not less than 1500 CCA total, 12 volt. | _____ | _____ |
| 6.3 Chassis engine shall have a 110 amp alternator. | _____ | _____ |

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|---|-------|-------|
| 6.4 Chassis lighting shall include sealed multi-beam halogen head-lights, stop lights, tail lights, backup lights, license plate lights, clearance lights, signal lights, illuminated gauges and instrument panel, and directional lights with hazard switch. | _____ | _____ |
| 6.5 Ambers strobe lights to be mounted as follows; One mounted behind cab, two mounted at rear of sweeper at the LH and RH corners. | _____ | _____ |

Section B - Sweeper Module

1.0 SWEEPER ENGINE

COMPLY
Yes No

- | | | |
|---|-------|-------|
| 1.1 59 HP diesel engine, EPA Tier 4i emissions compliant. | _____ | _____ |
| 1.2 Engine shall be equipped with a full flow oil filter and fuel filter. | _____ | _____ |
| 1.3 Dual stage, dry type air intake with pre-cleaner. Reset type restriction indicator on air filter housing. | _____ | _____ |
| 1.4 Engine shall be protected by a 50/50 mixture anti-freeze/water for cold weather storage and or operation. | _____ | _____ |
| 1.5 Engine, radiator and all auxiliary engine driven devices shall be resilient mounted through a dedicated engine frame. | _____ | _____ |
| 1.6 Safety shut down system for high coolant temperature, low oil pressure and low hydraulic oil level with direct reading gauges mounted in rear engine compartment. | _____ | _____ |
| 1.7 Engine and front of the engine radiator shall be accessible without the use of any tools. | _____ | _____ |
| 1.8 The sweeper engine shall have a shared 30 gallon fuel tank | _____ | _____ |

6.0 SIDE BROOMS

COMPLY
Yes No

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|--|-------|-------|
| 6.1 Each side broom shall be driven by a hydraulic motor directly mounted to the broom disc plate and driven by a hydraulic motor. They shall be the vertical digger type, trailing arm design. Hydraulic motors shall incorporate a relief valve for maximum pressure safety. | _____ | _____ |
| 6.2 Minimum diameter of side brooms shall be 36-inch. | _____ | _____ |

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|------|--|-------|-------|
| 6.3 | To hold broom pattern regardless of up and down motion, arm suspension design shall be the parallelogram type. Free floating suspension to allow up/down and in/out movement to cushion impacts. | _____ | _____ |
| 6.4 | Brooms shall be hydraulically raised and lowered by the operator from the cab while moving. | _____ | _____ |
| 6.5 | Suspension and pressure control shall be hydraulic, automatic self adjusting and maintain a set pattern throughout the broom life with no input from the operator. Arms shall be independently operated to maintain a set pattern over all surfaces, without the use of shocks, springs, or linkages. Broom pressure indicator shall be a gauge in the engine compartment. | _____ | _____ |
| 6.6 | Broom shall consist of five (5) segments on the curbside and four (4) segments on the street side, filled with tempered steel wire bristles. | _____ | _____ |
| 6.7 | Each broom shall have a spotlight for night operation. | _____ | _____ |
| 6.8 | Minimum sweeping width of 114' with both side brooms down. | _____ | _____ |
| 6.9 | Sweeper shall be equipped with a center deflector to windrow material transferred by the side brooms. | _____ | _____ |
| 6.10 | The side broom motors shall be able to apply adequate digging torque to the broom discs without stalling. | _____ | _____ |
| 6.11 | Each side broom shall be electrically tilted from inside the cab. | _____ | _____ |

7.0 MAIN BROOM

COMPLY
Yes No

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|-----|---|-------|-------|
| 7.1 | The main broom shall be not less than 58 inches long and not less than 36 inches in diameter. | _____ | _____ |
| 7.2 | Broom shall be driven by a hydraulic motor directly mounted to the broom core. The motor shall be protected from overpressure by the use of a relief valve. | _____ | _____ |
| 7.3 | Suspension and pressure control shall be adjustable, and be able to provide a range of a set patterns throughout the broom life. | _____ | _____ |
| 7.4 | Main broom shall be prefab disposable type, filled with polypropylene. | _____ | _____ |
| 7.5 | Sweeping path shall be not less than 11 inches wide with right and left side broom activated. | _____ | _____ |
| 7.6 | Main broom shall be shielded by a hinged plastic hood. | _____ | _____ |
| 7.7 | Main broom hood shall be designed to not only prevent material from being over thrown into following traffic, but also be capable of | _____ | _____ |

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|--|-------|-------|
| channeling over throw back into the dirt chamber. | _____ | _____ |
| 7.8 Main broom shall have a work light. | _____ | _____ |
| 7.9 Main broom shall be hydraulically raised or lowered by in-cab control. | _____ | _____ |
| 7.10 Main broom grease fittings shall be centrally located. | _____ | _____ |
| 7.11 The main broom motor shall be able to apply adequate digging pressure the broom without stalling. | _____ | _____ |

8.0 SQUEEGEE CONVEYER

COMPLY
Yes No

- | | | |
|---|-------|-------|
| 8.1 Conveyer shall be able to load hopper to 100% of rated useable capacity. | _____ | _____ |
| 8.2 Conveyer rotation, forward or reverse, shall be selectable without leaving the cab. | _____ | _____ |
| 8.3 Chain squeegee type elevator, with 8 replaceable rubber flights. | _____ | _____ |
| 8.4 Conveyer speed shall be variable with the sweeper engine from the cab | _____ | _____ |
| 8.5 The conveyer system will be driven hydraulically and protected for overpressure by relief valve. The unit shall include an audio and visual conveyer stall alarm. | _____ | _____ |
| 8.6 Conveyer grease fittings shall be centrally located. | _____ | _____ |
| 8.7 The conveyer shall be no less than 58" wide | _____ | _____ |
| 8.9 The conveyor shall have a wash out system to flush debris from conveyor. | _____ | _____ |

9.0 HOPPER

COMPLY
Yes No

- | | | |
|---|-------|-------|
| 9.1 Hopper "Full" indicator, activated by hopper weight. | _____ | _____ |
| 9.2 Hydraulically controlled hopper door. | _____ | _____ |
| 9.3 Hopper volumetric capacity shall be not less than 4.0 cubic yards. Useable capacity not less than 3.2 yards. A hopper inspection door that is accessible at ground level. | _____ | _____ |
| 9.4 Variable dump heights, minimum 18" to maximum 120" measured at the bottom of the chute. | _____ | _____ |
| 9.5 Scissor type lift with greaseless pins with composite bushings. | _____ | _____ |
| 9.6 Scissor lift with single, 4 stage, telescoping cylinder. | _____ | _____ |
| 9.7 Minimum dumping capacity of 9,400 lbs. | _____ | _____ |
| 9.8 Sweeper shall not require jack stands and/or outriggers to stabilize chassis during dumping cycle. Units requiring this stabilization are not acceptable. | _____ | _____ |
| 9.9 Terrain level sensor, disables hopper raise if unit on overly unlevel | _____ | _____ |

ground.

		COMPLY	
		<u>Yes</u>	<u>No</u>
<u>10.0 SPRAY WATER SYSTEM</u>			
10.1	Tank capacity shall be not less than 220 U.S. gallons (833 L).	_____	_____
10.2	Tank shall be constructed of polyethylene.	_____	_____
10.3	To prevent the contamination of the water supply, tank shall be equipped with an anti-siphon device Compliant to American National Standard Air gaps in plumbing systems ASME A112.12-1991.	_____	_____
10.4	Three (3) spray nozzles at each side broom and three (4) spray nozzles on rear broom spray bar and five (5) nozzles under from bumper shall be provided. Independent control of each zone shall be provided.	_____	_____
10.5	An 80 mesh filter on suction line in-line water filter shall be provided with the fill hose to prevent contaminants from entering the water tank.	_____	_____
10.6	Spray water pump shall be a diaphragm type to provide adequate flow and pressure to properly atomize water for efficient dust control.	_____	_____
10.7	Fill hose with storage rack to be provided.	_____	_____
<u>11.0 HYDRAULIC SYSTEM</u>			
		<u>Yes</u>	<u>No</u>
11.1	Maximum 30-gallon hydraulic reservoir with sight gauge indicating oil level and temperature.	_____	_____
11.2	The system shall contain one 10-micron return filter.	_____	_____
11.3	The hydraulic pump shall be a load sense piston type that can deliver 32 GPM at 2700 aux engine RPM. Pump must be driven direct from aux. engine.	_____	_____
11.4	Auxiliary engine must power all sweeper hydraulic functions.	_____	_____
11.5	System shall include a hydraulic oil cooler, sized to allow for continuous operation with engine at full speed.	_____	_____
11.6	Electric over hydraulic valve block shall be accessible from ground level with manual levers to actuate each valve individually.	_____	_____
<u>13.0 CONTROLS</u>			
		<u>Yes</u>	<u>No</u>
13.1	All sweeper controls shall be mounted on a central console located to the right of the operators position.	_____	_____
13.2	All switches to be tactile rocker type.	_____	_____

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|-------|--|-------|-------|
| 13.3 | Control panel to be lit for night operation. | _____ | _____ |
| 13.4 | Clearly labeled switches and indicators shall be provided | _____ | _____ |
| 13.5 | Sweeping mode engaged by one Sweep / Transport / Dump switch. | _____ | _____ |
| 13.6 | Individual switches for left and right broom tilt (In/Out) | _____ | _____ |
| 13.7 | Individual switches for left and right broom (On/Off) | _____ | _____ |
| 13.8 | Individual switch for main broom and conveyor (Forward/Reverse) | _____ | _____ |
| 13.9 | Individual switch for dust control (On/Off) | _____ | _____ |
| 13.10 | Dust control water shall have low level indicator when approximately 25 gallons remain. | _____ | _____ |
| 13.11 | Hopper raise / lower and tilt to be controlled from the cab and have a cycle time maximum of 70 seconds. | _____ | _____ |
| 13.12 | Individual switch for auxiliary engine throttle (Increase/Decrease) | _____ | _____ |
| 13.13 | Electrical circuits to be protected by automotive style circuit breakers. | _____ | _____ |

COMPLY
Yes No

15.0 PAINT

- | | | | |
|------|--|-------|-------|
| 15.1 | The cab, hood and fenders shall be painted with high gloss polyurethane white. | _____ | _____ |
| 15.2 | The chassis running gear shall be painted black acrylic enamel. | _____ | _____ |
| 15.3 | All visible exterior metallic surfaces shall be powder coated prior to assembly. | _____ | _____ |
| 15.4 | Color shall "White". | _____ | _____ |

COMPLY
Yes No

16.0 MANUALS

- | | | | |
|------|--|-------|-------|
| 16.1 | An operation manual shall be provided. | _____ | _____ |
| 16.2 | A parts manual shall be provided. | _____ | _____ |
| 16.3 | A service manual shall be provided. | _____ | _____ |

COMPLY
Yes No

17.0 WARRANTY

- | | | | |
|------|---|-------|-------|
| 17.1 | Manufacturer's warranty shall be not less than one (1) year on entire sweeper, including all parts and labor. | _____ | _____ |
| 17.2 | Manufacturer's warranty shall be not less than two (3) years on chassis and chassis engine, including all parts (except batteries at one year) and labor. | _____ | _____ |
| 17.3 | Bidders submitting literature stating warranties which do not fully comply with warranty requirements of this specification, must submit a | | |

letter from the manufacturer certifying warranty compliance as an integral part of their proposal. Failure to comply may cause the proposal shall be deemed "non-responsive" and rejected without further review. _____

18.0 DEMONSTRATION OF PROPOSED UNIT

COMPLY

Yes No

- 18.1 Before a recommendation for award will be given to a vendor submitting a bid, you will be required to demonstrate the product submitted. This will be performed at the Scottsbluff Street Shop within 15 days after bid is opened. _____

19.0 DELIVERY

COMPLY

Yes No

- 19.1 Sweeper shall be delivered to City of Scottsbluff Street Shop. _____
- 19.2 Acceptance shall be subject to the inspection and approval of the City personnel. _____
- 19.3 Bidder shall state delivery time after receipt of order: _____

20.0 TRADE-IN's

- 20.1 2008 Elgin Pelican P - Serial Number NP1000D
Hours _____, Miles _____ (approximate and subject to be higher as used)

These are available for inspection at the City of Scottsbluff Street Shop at 1105 3rd Ave, Scottsbluff, NE 69361.

21.0 EXCEPTIONS AND DEVIATIONS

- 21.1 Bidder shall fully describe every variance, exception and/or deviation. Additional sheets may be used if required.