

**CITY OF LA VISTA  
MAYOR AND CITY COUNCIL REPORT  
APRIL 7, 2009 AGENDA**

<b>Subject:</b>	<b>Type:</b>	<b>Submitted By:</b>
ADVERTISEMENT FOR BIDS – STREET SWEEPER	◆ RESOLUTION ORDINANCE RECEIVE/FILE	JOE SOUCIE PUBLIC WORKS DIRECTOR

**SYNOPSIS**

A resolution has been prepared authorizing the advertisement of bids for the purchase of a new Street Sweeper for the Public Works Department.

**FISCAL IMPACT**

The FY 2008/09 Street Operating Budget provides funding for the lease/purchase of a new street sweeper.

**RECOMMENDATION**

Approval

**BACKGROUND**

The new sweeper will replace a 1992 Johnson Sweeper. Industry life span for a street sweeper is 5 years. Public Works has been able to keep this unit operating for 17 years; one main reason is that we do not sweep every day. The current sweeper has been through several major overhauls; it has finally reached the point where it is not cost effective to sink any more money into the unit.

Advertise for Bids	April 8, 2009
Open Bids	April 23, 2009
Award Bid	May 5, 2009

A complete copy of the specifications is on file in the Office of the City Clerk.

**RESOLUTION NO. \_\_\_\_\_**

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF LA VISTA, NEBRASKA AUTHORIZING THE ADVERTISEMENT FOR BIDS FOR THE PURCHASE OF A NEW STREET SWEEPER FOR THE PUBLIC WORKS DEPARTMENT.

WHEREAS, the City Council has determined that the purchase of a new Street Sweeper for the Public Works Department is necessary, and

WHEREAS, the FY 2008/09 Street Operating Budget provides funding for the purchase of said Street Sweeper, and

WHEREAS, the Public Works Street Superintendent has prepared specifications for said Street Sweeper.

NOW, THEREFORE BE IT RESOLVED, that the City Administrator is hereby authorized to advertise for bids for the purchase of a new Street Sweeper in accordance with specifications prepared by the Public Works Street Superintendent and said bids are to be opened and publicly read aloud at 2 p.m. at La Vista City Hall, 8116 Park View Blvd., La Vista, Nebraska on April 23, 2009.

Advertise for Bids – April 8, 2009

Open Bids – April 23, 2009

Award Bid – May 5, 2009

PASSED AND APPROVED THIS 7TH DAY OF APRIL, 2009

CITY OF LA VISTA

---

Douglas Kindig, Mayor

ATTEST:

---

Pamela A. Buethe, CMC  
City Clerk

## EQUIPMENT SPECIFICATIONS

### MECHANICAL STREET SWEEPER

The sweeper to be furnished under this proposal shall be, high dump hopper, hydrostatic drive, and minimum 5 cubic yard hopper capacity with dual gutter broom system. It shall be the manufacturer's latest model and design. Any deviations, deletions or variations from these specifications must be stated. These specifications shall be regarded as MINIMUM. Bidders must furnish descriptive literature, manufacturer's compliance certificates and all other necessary data on the equipment proposed to be furnished.

Meets Specification – Please indicate – (if other explain on comment line)

YES    NO    OTHER

#### **1. HOPPER**

- \_\_\_\_\_ 1.1 Hopper shall be high dump (9'6" minimum) capable of dumping into a dump truck or roll off container.
- \_\_\_\_\_ 1.2 Hopper shall have a minimum capacity of 3 cubic yards.
- \_\_\_\_\_ 1.3 Hopper shall have a lifting capacity of 12,000 lbs.
- \_\_\_\_\_ 1.4 Hopper shall carry a lifetime warranty. The warranty shall cover rust, corrosion, and abrasion perforation, including normal wear and tear.
- \_\_\_\_\_ 1.5 Hopper dump system shall have a safety lockout system to prevent any forward or reverse movement of the sweeper with hopper in the raised position.
- \_\_\_\_\_ 1.6 Hopper shall be raised and lowered by means of two 4" or larger diameter hydraulic cylinders.
- \_\_\_\_\_ 1.7 Hopper shall have a mechanically activated load discharge door which will open automatically when hopper is being raised and close automatically when hopper is being lowered.
- \_\_\_\_\_ 1.8 Hopper dump control shall be by means of a single cab dash mounted rocker switch.
- \_\_\_\_\_ 1.9 A dirt/debris deflector shall be mounted to the hopper to prevent engine compartment contamination.
- \_\_\_\_\_ 1.10 Hopper shall have a hopper full indicator.
- \_\_\_\_\_ 1.11 Hopper shall be equipped with an access door.

Other or Comment

---

YES    NO    OTHER

**2. CAB**

- \_\_\_\_\_ 2.1 Cab shall be fully enclosed and of all steel construction.
- \_\_\_\_\_ 2.2 Cab shall be attached to chassis frame by means of rubber mounts.
- \_\_\_\_\_ 2.3 Cab shall be dust and weather sealed and be equipped with factory installed air conditioning, heater and defroster.
- \_\_\_\_\_ 2.4 Limb guard protection shall be supplied
- \_\_\_\_\_ 2.5 Cab interior shall be sound suppressed and insulated with an in-cab noise level not exceeding 83 dBA.
- \_\_\_\_\_ 2.6 Cab shall be furnished with two seats, one being the primary operator's station and the other for the purpose of training and accompaniment by service staff for operator tutoring.
- \_\_\_\_\_ 2.7 Operator's seat shall be single bucket air ride suspension type with cloth upholstery, dual arm rests, and shock absorbers.
- \_\_\_\_\_ 2.8 Operator and "buddy seat" shall have three point safety seat belts with shoulder and lap harnesses.
- \_\_\_\_\_ 2.9 AM/FM stereo radio with CD player.
- \_\_\_\_\_ 2.10 Cab shall have a single lever operated tilt and telescoping steering wheel.
- \_\_\_\_\_ 2.11 Cab shall have opening windows on both right and left sides.
- \_\_\_\_\_ 2.12 Cab shall have adequate storage space for driver's tool kit, lunch box, hard hat, coffee cup, coat, etc.
- \_\_\_\_\_ 2.13 Cab shall have dual west coast mirrors with extended frames and 12" convex sweeping mirrors on both sides.
- \_\_\_\_\_ 2.14 Cab shall have a tinted safety glass throughout and gradient tinted band on windshield.
- \_\_\_\_\_ 2.15 Cab door hinges shall be fitted with grease fittings or constructed of stainless steel to prevent corrosion.

Other or Comment

\_\_\_\_\_

YES    NO    OTHER

**3. ENGINE**

- 3.1 Sweeper shall be powered by a minimum, Tier 3, four-cylinder, Turbo charged diesel engine with a horsepower rating of at least 100 HP @ 2500 engine RPM and a net torque rating of 270 ft. lbs. at 1400 RPM. All sweeper functions and drive systems shall be powered by this engine.
- 3.2 Engine shall have a two stage dry type air cleaner with safety element and restriction indicator.
- 3.3 Engine shall be fitted with a pusher fan with special "EJECTOR" blades for centrifugal ejection of ambient dust particles from engine compartment.
- 3.4 Engine shall be water cooled by aid of a radiator of swing-away design and have grease fittings in the hinges.
- 3.5 Antifreeze protection for engine shall be not less than minus (-) 40 degrees Fahrenheit.
- 3.6 Engine shall automatically shut down and dispose itself from re-starting if any attempt is made to unlatch radiator or oil cooler away from their locked positions.
- 3.7 Engine shall be protected against damage by means of anti-crank device which will prevent re-engagement of starter while the engine is running.
- 3.8 Engine shall have an air restriction indicator in cab.
- 3.9 Engine shall have an air/pre-cleaner, Turbo II (HD).
- 3.10 Engine shall have a safety shutdown.

Other or Comment

YES    NO    OTHER

**4. TRACTION SYSTEM**

- 4.1 Traction system shall be fully hydrostatic and capable of variable speed up to 25 MPH.
- 4.2 Direction and speed selection shall be controlled by means of a dash mounted four position quadrant shifter and vernier throttle control with integral quick release feature.
- 4.3 Engine mounted traction pump shall be variable displacement axial piston type.
- 4.4 The broom and elevator speed shall be independent of vehicle speed.

- \_\_\_\_\_ 4.5 The traction drive system shall be capable of being shifted from "LOW" to "HIGH" while the sweeper is in motion.
- \_\_\_\_\_ 4.6 The traction pump and motors shall be relief valve protected.
- \_\_\_\_\_ 4.7 Operational control shall be by means of a single automotive type foot pedal.
- \_\_\_\_\_ 4.8 The traction system shall provide braking assistance when control pedal is released.

Other or Comment \_\_\_\_\_

YES NO OTHER

**5. ELEVATOR**

- \_\_\_\_\_ 5.1 The elevator shall be constructed of a continuously molded rubber belts and replaceable corded rubber squeegee tips.
- \_\_\_\_\_ 5.2 Elevator sprockets shall be of split flange type to enable replacement without having to remove belts and shafts.
- \_\_\_\_\_ 5.3 Elevator sprockets shall have hardened steel teeth for longevity.
- \_\_\_\_\_ 5.4 Elevator flight bars shall be constructed of 2" x 1/2" aluminum angle.
- \_\_\_\_\_ 5.5 Elevator speed shall be variable and reversible.
- \_\_\_\_\_ 5.6 Elevator belt shafts shall be of split design to facilitate easy belt replacement.
- \_\_\_\_\_ 5.7 Elevator drive shall be direct hydraulic with relief cartridge protection.
- \_\_\_\_\_ 5.8 Elevator shall have an adjustable throw plate and deflector system to ensure even hopper loading and prevent debris from back spilling.
- \_\_\_\_\_ 5.9 Elevator shall have a flasher system.
- \_\_\_\_\_ 5.10 Elevator shall have stall alarm installed.
- \_\_\_\_\_ 5.11 Elevator height shall be adjustable.

Other or Comment \_\_\_\_\_

YES    NO    OTHER

**6. HYDRAULIC SYSTEM**

- 6.1 Hydraulic oil reservoir system shall consist of two frame mounted tower tanks, each with an oil capacity of 18 gallons. The residual oil capacity shall be an additional 5 gallons for a total system capacity of 41 gallons.
- 6.2 Each hydraulic tank shall be dedicated to specific sweeper functions and shall have "low oil level" probes with dash mounted warning systems to alert operator of impending malfunctions.
- 6.3 The hydraulic system MUST include the following filtration elements:
  - 6.3.1 Each tank neck fill strainer must be rated at a minimum 40 microns.
  - 6.3.2 Each tank MUST have its own suction strainer rated at a minimum 100 mesh.
  - 6.3.3 A suction filter with restriction gauge MUST be supplied with a minimum rating of 10 microns.
  - 6.3.4 A return filter with a minimum rating of 10 microns MUST be supplied.
  - 6.3.5 A high pressure filter complete with restriction status indicator shall be supplied.
  - 6.3.6 Each hydraulic tank shall be provided with 5 lb. pressurized fill cap.
  - 6.3.7 Each hydraulic tank shall contain a magnetized drain plug probe.

Other or Comment

YES    NO    OTHER

**7. PICKUP BROOM**

- 7.1 Pickup broom shall be 32" diameter and 58" long minimum.
- 7.2 Pickup broom drive shall be direct hydraulic, variable speed with relief valve protection.
- 7.3 Pickup broom shall be hydraulically raised and lowered by a single, in cab dash mounted rocker switch.
- 7.4 Pickup broom shall be self adjusting for pressure and wear.

\_\_\_\_\_ 7.5 Pickup broom motors shall have a shaft and seal protection device which will prevent the ingress of damaging wire, cassette tape, fishing line, etc.

Other or Comment \_\_\_\_\_

YES NO OTHER

## 8. GUTTER BROOMS

\_\_\_\_\_ 8.1 Gutter brooms (right & left sides) shall be a minimum of 36" in diameter and each shall contain snap in "Tuff Grip" disposable segments.

\_\_\_\_\_ 8.2 Gutter broom drive shall be completely hydraulic and relief valve protected.

\_\_\_\_\_ 8.3 Gutter brooms shall be hydraulically lowered and raised by means of an in-cab, dash mounted rocker switch.

\_\_\_\_\_ 8.4 Provisions shall be made for gutter broom pressure adjustment by means of independent dash mounted switch gauges.

\_\_\_\_\_ 8.5 Gutter brooms shall be free floating both horizontally and vertically and shall be impact protected.

\_\_\_\_\_ 8.6 Gutter broom curb angle adjustment shall be wrench free.

\_\_\_\_\_ 8.7 Gutter broom support towers shall have adjustable travel "stop" mechanisms.

\_\_\_\_\_ 8.8 Gutter broom motors shall have a shaft and seal protection device which will prevent the ingress of damaging wire, cassette tape, fishing line, etc.

Other or Comment \_\_\_\_\_

YES NO OTHER

## 9. WATER SYSTEM

\_\_\_\_\_ 9.1 Water tank capacity shall be 200 gallons minimum.

\_\_\_\_\_ 9.2 Water tank/s shall be constructed of corrosion proof polyethylene.

\_\_\_\_\_ 9.3 A water level indicator shall be dash mounted in cab.

\_\_\_\_\_ 9.4 Individual adjustable water delivery valves shall be installed in the sweeper cab to allow operator to control water sprays over main broom and both gutter brooms.

\_\_\_\_\_ 9.5 Water pump/s shall be "run dry" with total output rating of at least 7.2 gallons per minute shall be supplied.

9.6 An in line stainless steel mesh screen type filter with a clear view inspection bowl shall be installed in an accessible area and shall be capable of being checked, cleaned or changed without the use of tools.

9.7 A 15' hydrant hose, coupler with valve, and wrench shall be supplied.

Other or Comment \_\_\_\_\_

YES NO OTHER

#### 10. FUEL SYSTEM

10.1 Vehicle fuel system must be a minimum of 35 gallons.

10.2 Fuel system must incorporate a fuel/water separator system with built in primary fuel filter.

Other or Comment \_\_\_\_\_

YES NO OTHER

#### 11. DIRT SHOES

11.1 Dirt shoes shall be of parallel arm construction and be capable of floating over uneven surfaces, railroad tracks, raised manhole covers, etc.

Other or Comment \_\_\_\_\_

YES NO OTHER

#### 12. BRAKES

12.1 Service brakes shall be internal expanding drum type on rear wheels.

12.2 Parking brake shall be mechanically applied and hydraulically released internal expanding type.

12.3 Parking brake shall be automatically applied when sweeper is placed in "PARK" position or the hopper is raised.

12.4 Brake master cylinder shall have an auxiliary boost feature.

12.5 Standard braking system shall be assisted by vehicle's inherent dynamic braking when control pedal ("GO" pedal) is released.

Other or Comment \_\_\_\_\_

YES    NO    OTHER

**13. STEERING**

13.1 Steering shall be hydrostatic type by means of an engine driven gear pump through an orbital hydraulic motor, and shall still be capable of operation in the event of engine shutdown.

Other or Comment

YES    NO    OTHER

**14. FRONT STEERING AXLE (IF EQUIPPED)**

14.1 Front assembly shall be of double strut steel fork configuration with its own full axle and bearings.

14.2 Front axle assembly shall be supported on both sides and shall have a weight and load matched suspension springs and shock absorbers.

14.3 Front axle configuration shall be such that the standard front steering road wheel shall be kept at a distance of NOT LESS THAN 55" away from the curb line to avoid front tire damage from broken bottles and other sharp debris.

14.4 Front axle shall also be available with optional dual tired road wheel with full independent rubber spring and shock protected suspension.

Other or Comment

YES    NO    OTHER

**15. FRAME**

15.1 Frame shall be constructed of 4 gauge, high strength low alloy steel (HSLA 50 or equivalent) with an RBM rating of 831,500 inch pounds and a minimum yield strength of not less than 50,000 pounds per square inch.

15.2 Frame shall be 13" x 3" 'C' section channel.

15.3 Frame shall incorporate tow points front and rear.

15.4 A tool / storage compartment shall be supplied.

15.5 Frame attached gutter broom towers shall have reinforced cut outs to enable access to lower elevator bearings for ease of maintenance.

15.6 Dual rear drive tires to be fully suspended. (full suspension)

Other or Comment

YES    NO    OTHER

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## **16. ELECTRICAL SYSTEM 12 VOLT**

16.1 Battery/s shall be maintenance free and rated at a minimum 900 CCA.

16.2 A heavy duty 120 amp dust shielded alternator shall be supplied.

16.3 All electrical connections shall be sealed and no harness splices shall be allowed.

16.4 A sealed electrical systems locker shall be provided to house all electrical components and protect from exposure to dirt and inclement weather.

16.5 The system locker shall comprise of two compartments to separately house both high amperage and low amperage components.

16.6 All components within the locker shall be easily replaceable with minimum effort.

16.7 All rocker switches in cab shall be sealed, back lit, and function identified.

16.8 Bridge rectifiers shall be used in lieu of diodes and they shall be rated at 30 amps minimum.

16.9 A laminated electrical schematic shall be permanently attached to systems locker door for instant easy reference during troubleshooting or repair procedures.

16.10 Two sealed beam headlights with in dash high beam indicator shall be standard.

16.11 Two speed windshield wiper with adjustable intermittent feature shall be provided.

16.12 Sweeper shall be supplied with dual stop and tail light combinations, dual gutter broom lights, rear license plate light and bracket, back up lights and reflectors, self canceling turn signals with hazard flashers, electrical back up alarm (107 dB(A) minimum) and hopper dump alarm (107 dB(A) minimum).

16.13 All hydraulic manifold solenoids shall be pre-wired and shall have molded in flying leads to eliminate corrosion.

16.14 All electrical wiring shall be solid colored, numbered and function coded every 12 inches for quick, easy identification purposes.

16.15 Sweeper shall be equipped with amber strobe lights which can be seen from all directions and an arrow board mounted in the rear.

Other or Comment

---

YES NO OTHER

#### 17. **SWEeper BODY**

- 17.1 Sweeper body shall have hinged, swing out single latched side panels for simple, easy access to elevator, fuel tank fill, air conditioning unit and water manifold components.
- 17.2 Rear radiator grill and engine cover shall have stainless steel hinges to enhance longevity and eliminate rust or be equipped with grease fittings.
- 17.3 A heavy duty rust and corrosion proof front bumper shall be supplied.
- 17.4 A two step cab entry ladder with anti-slip, positive grip feature shall be supplied.

Other or Comment

---

YES NO OTHER

#### 18. **WHEELS & TIRES**

- 18.1 Wheels shall be heavy duty steel disc type. Split rims are NOT ACCEPTABLE.
- 18.2 Steering tires shall be 11R x 17.5 x 16Ply Rating tubeless radials.
- 18.3 Drive tires shall be 11R x 22.5 x 14Ply Rating tubeless radials.
- 18.4 1 spare drive tire and wheel and 1 spare steering tire and wheel shall be supplied.

Other or Comment

---

YES NO OTHER

#### 19. **IN-CAB DASH & INSTRUMENTS**

- 19.1 An automotive style, anti glare, wraparound dash with easily removable fascia and instrument panel shall be supplied.
- 19.2 All dash mounted equipment including instruments, gauges, switches and display panels shall have extra length wires to permit lifting of dash for internal component access.

19.3 Dash panel shall have VIP (AV 1000) light emitting diode panel system which will monitor and provide an alert to the following systems: OIL PRESSURE, SWEEPER in PARK, ENGINE WATER TEMP, RIGHT HYDRAULIC TANK LEVEL, LEFT HYDRAULIC TANK LEVEL, RIGHT AND LEFT TURN SIGNALS and HIGH BEAM INDICATOR. The panel shall also be capable of accommodating additional monitoring systems if required.

19.4 The dash board shall be of low cut design for completely unobstructed vision.

19.5 The dash panel shall incorporate high flow adjustable side and windshield defrost vents.

19.6 The side instrument panel shall accommodate all sweeping functions, heating and air conditioning controls.

Other or Comment \_\_\_\_\_

YES NO OTHER

## 20. **SWEEPER DIMENSIONS**

20.1 Sweeper shall meet the following minimum requirements:

20.1.1 Wheel Base..... 116 in.  
20.1.2 Turning Radius (Not to exceed) ..... 14 ft.  
20.1.3 Overall Length (Not to exceed)..... 206 in.  
20.1.4 Maximum Height (Not to exceed)..... 106 in.  
20.1.5 Maximum Width (Not to exceed) ..... 98 in.  
20.1.6 Sweeping Swath ..... 125 in.  
20.1.7 Maximum Weight/Empty ..... 14,000 lbs.

Other or Comment \_\_\_\_\_

YES NO OTHER

## 21. **PAINT**

21.1 All sweeper components, including but not limited to, CAB, HOPPER, FRAME, ELEVATOR, BODY PANELS, ENGINE COVER PANELS, BODY FLOOR PANELS, GENERAL BRACKETRY, shall be individually 100% powder coated BEFORE VEHICLE ASSEMBLY to protect the machine from the adversities of weather and the ravages of sweeping environments.

21.2 Sweeper color shall be standard white.

Other or Comment \_\_\_\_\_

YES    NO    OTHER

**22. QUALITY**

22.1 All fasteners above  $\frac{1}{4}$ " in thread size shall be grade #8 or better,  
22.2 ALL critical fasteners shall be torqued to manufacturer's quality requirements and a special torque striping vibration proof paste shall be applied as witness to this procedure.  
22.3 ALL hydraulic hose pressure fittings shall be torqued to manufacturer's requirements and a special torque striping vibration proof paste shall be applied as witness to this procedure.

Other or Comment

YES    NO    OTHER

**23. WARRANTY**

23.1 Sweeper shall carry a minimum one year warranty covering 100% parts and labor.

Other or Comment

YES    NO    OTHER

**24. MANUALS**

24.1 The following documentation shall be supplied upon delivery of unit:

24.1.1 Sweeper: 2-Parts Manuals, 2-Service/Operation Manuals, 1-Driver's Guide delivery of unit.

24.1.2 Engine: 1-Engine Users Guide.

Other or Comment

YES    NO    OTHER

**25. TRAINING**

25.1 Operator/mechanic training shall be provided at no charge by dealer on customer's premises.

Other or Comment