



Public Works Department

March, 20 2023

Please quote prices on the following articles F.O.B. Brewer Public Works Department, Brewer, Maine. Quotations will close Thursday April 6th at 2:00 P.M. Bids must be delivered to the office of the Public Works Purchaser 221 Green Point Rd, Brewer, Maine 04412 before the date and time appointed. The bid opening will be held at the Public Works facility immediately following the closing.

We reserve the right to accept all, part, or decline the whole bid without penalty. Bids will not receive consideration unless submitted strictly in accordance with the following instructions.

Mark Envelopes Plainly – “BID FOR 4 X 2 DIESEL DUMP TRUCK/SNOW PLOW”.

1. Bids will be to furnish the City of Brewer with one (1) Diesel Dump Truck/Snow Plow with discharge body sander according to the following and/or attached specifications.
2. Bids shall be exclusive of all Federal and State sales tax, shall be inclusive of all charges and fees, and shall indicate list, discount (where applicable), allowances and net prices, F.O.B. Brewer Public Works Department, Brewer, Maine.
3. Bidder shall submit with proposals the latest printed specifications and illustrations as advertised by the manufacturer of all equipment quoted, and shall include a warranty on basic unit and attached equipment, and date of delivery.
4. Basic unit and equipment or attachments shall be for the latest models available (manufactured 2023 or 2024), fully tested, serviced, ready to operate and complete in accordance with the specifications, and satisfactory to the Public Works Director and the City Manager.
5. All things not expressly mentioned in these specifications but involved in carrying out their intent are required by these specifications, and the Vendor shall perform the same as though they were specifically mentioned, described and delineated.
6. Bidder may be required to demonstrate (within the State of Maine) to the satisfaction of

the City of Brewer, within 10 days following the opening of bids, that the equipment proposed will both meet the specifications and do the functions required.

7. In making awards, consideration will be given to price, quality, delivery time, parts availability and service offered. **Bidder receiving award shall supply on delivery, 1 hard or paper copy of operating, and shop service manuals. They must also deliver 2 copies of the parts manuals and 1 copy of shop service manuals, or an electronic equivalent, either DVD/CD, or free-web based site.** A retainer in the amount of 5% of the contract value will be held pending receipt of these manuals.
8. Bidder shall address each individual item on the attached specification sheets, indicating how it differs. Any item omitted may result in the bid being rejected entirely.
9. By submission of this proposal or contract, the prospective participant certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from doing business with any Federal department or agency. Furthermore, the prospective participant, if selected, agrees to ensure that any subcontractors it uses also meet this standard.
10. The City of Brewer is an Equal Opportunity Employer and Service Provider. The prospective participant, if selected, agrees that it shall not discriminate against any employee or applicant for employment because of age, sex, race, creed, color, national origin, ancestry, marital status, or sexual orientation.
11. The City of Brewer, acting through the City Manager, reserves the right to accept or reject any or all bids in whole or in part. The City of Brewer, acting through its City Manager, reserves to itself the exclusive right to accept high bids when the City Manager, in his sole discretion, believes it would be in the best interest of the City of Brewer. In making such a decision, the City Manager may consider, but not be limited to, any of the following factors: quality, quantity, specifications, availability, service and location of bidder and reputation of bidder.

Sincerely,

Kendall Emerson
Public Works Purchaser

Cc: Public Works Director

**SPECIFICATIONS
4 X 2 DIESEL DUMP TRUCK**

1. ENGINE:

- A. L9 Cummins engine with minimum of 350 hp or equivalent.
- B. Minimum of 1,150 lbs. /ft. torque.
- C. Engine alarm systems monitoring: oil pressure, high coolant temperature, and low coolant level in radiator.
- D. Crankshaft adaptor for front driving PTO.
- E. Engine block heater, minimum of 2500 watts.
- F. Magnetic oil drain plug.
- G. Accelerator pedal to be suspended.

2. EXHAUST:

- A. Vertical exhaust system with under frame muffler for snowplow wing clearance.

3. COOLING SYSTEM:

- A. Minimum of 1,200 sq. in. radiator with cast tanks and bolted construction.
- B. External cooler for transmission fluid.
- C. Fan clutch.
- D. Radiator to be modified to accommodate front mounted PTO.

4. TRANSMISSION:

- A. Allison 3000 RDS.
- B. External auxiliary oil filter.
- C. External oil cooler - 59,000 BTU minimum cooling.
- D. Fourth generation electronic controls.

5. FRONT AXLE:

- A. Heat treated I-beam with tapered kingpins.
- B. Heavy duty multi-leaf springs, 18,000 lb. capacity.
- C. Right front spring shall have driver controlled auxiliary air bag.
- D. Wheels shall have oil seals with visible oil supply.

6. REAR AXLE:

- A. Axle 30,000 lbs. capacity minimum.

- B. Multi-leaf springs with minimum capacity of 30,000 lbs.
- C. Auxiliary multi-leaf spring with 4,500 lb. capacity.
- D. Magnetic drain plug.
- E. Drive shaft to be 1710 HD or 17NHD minimum.
- F. Driver controlled locking differential for both rear axles.

7. BRAKE SYSTEM:

- A. Full air cam-actuated type.
- B. Minimum 12 cu. ft. air compressor.
- C. Electric air dryer: Bendix AD-SP with heater.
- D. Brake dust shields front and rear.
- E. Non-asbestos brake linings front and rear.
- F. Brake pedal to be suspended from fire wall.

8. WHEEL AND TIRES:

- A. 22.5 painted steel 10-stud hub piloted 1-piece heavy-duty wheel rims.
- B. Steel radial tubeless tires 12R x 22.5, 16 ply highway tread on front axle and traction tread on rear (Goodyear, Bridgestone, or equivalent).

9. FRAME:

- A. Heat treated 120,000-PSI minimum yield strength single channel frame.
- B. Section modulus to be minimum 20.25 sm.
- C. Frame attachments to be mounted with bolts.
- D. Inverted L not acceptable.
- E. Fish plates not acceptable.
- F. Front frame extension for plow installation and for front mounted hydraulic pump.
Frame extension should be 12 – 14” or long enough to install headgear and open hood fully without tilting headgear.

10. FUEL TANK:

- A. Steel step tank 50 gal. Minimum.
- B. Fuel tank to be mounted on left side of truck.
- C. Magnetic fuel tank drain plug.

11. ELECTRICAL SYSTEM:

- A. 12 Volt, 160 Amp alternator, minimum capacity.
- B. Turn signals and 4-way flashers.
- C. Backup light.
- D. Automatic reset circuit breakers.
- E. ICC and cab lights.

- F. Electric backup alarm horn style and LED backup light.
- G. High Quality LED Warning Lights mounted on each side mirror and in rear of dump body one each side.
- H. AM/FM radio.
- I. Motorola CM 300 45watt 4 frequency 2-Way FM Radio with 6.0 dbi gain antenna or equal (frequency available on request).
- J. Two extra switches mounted in dash.
- K. Exterior lights shall have LED bulbs, sealed connectors and protected wiring.
- L. Factory wiring for plow lights.

12. CAB:

- A. Cab construction to be welded, double wall galvanized steel.
- B. Tinted and heated windshield.
- C. Cowl vents left side and upper center.
- D. High output heater and defroster with air conditioning.
- E. Adjustable steering column.
- F. Stainless steel cab grab handles, both sides.
- G. Heated West Coast type rear view mirrors with extruded aluminum mirror heads with driver side power adjustment for passenger's side mirror.
- H. Stainless steel mirror arms.
- I. Rain gutters on cab roof.
- J. Air adjustable cloth covered driver seat, with isolator and arm rests. Standard cloth passenger's seat.
- K. Electric windows.
- L. Electric windshield wipers with adjustable speed.
- M. Electrically operated windshield washers; reservoir tube located area where fluid spillage will not come in contact with truck.
- N. Cab shall have butterfly hoods.

13. ACCESSORIES:

- A. Roof mounted air horn.
- B. Two factory installed electrical switches for auxiliary equipment.
- C. Shall have a D Rings for rear.
- D. Automatic lube system for chassis.
- E. Backup safety camera with infra-red for night vision. Must be water tight.
- F. Wing plow laser guidance system mounted externally behind cab
- G. Ground speed controls.
- H. Cirrus Ground speed controls for sander/calcium systems

14. INSTRUMENTS AND GAUGES:

- A. Speedometer with odometer.
- B. Tachometer.
- C. Voltmeter.
- D. Oil pressure gauge.
- E. Air pressure gauge.
- F. Low air pressure buzzer.

- G. Fuel level gauge.
- H. Parking brake warning light.
- I. Coolant temperature gauge.
- J. Coolant level light.
- K. Electric hour meter.

15. PAINT:

- A. Paint to be urethane automotive type on cab, hood, fenders, and body.
- B. Paint to be standard automotive type on truck frame and running gear.
- C. Color to be blue to match existing fleet.
- D. Paint should be black raptor paint or bed liner spray on dump body

16. CHASSIS:

- A. Wheel base to accommodate plow and sander equipment.
- B. Chassis to be used as a dump truck/snow plow.

17. DUMP BODY:

- A. Capacity: 6/8 Yard Side dump body with left front discharge body sander.
- B. Body Construction: Floor shall be 3/16 180,000 PSI steel. Sides shall be 100,000 PSI steel. Ditch side shall have removable pinch guard if right side of body is open.
- C. Tailgate shall be 07 gauge or 3/16 steel with 6 panel bracing. Tailgate shall have air operated locks and be double acting.
- D. Conveyor chain shall have access panels to facilitate maintenance of chain and drive gearbox.
- E. Side-dump body shall have a dump position indicator that can be seen from driver's seat.
- F. Body shall have safety props for standard rear discharge and side dump discharge.
- G. Dump body to have central lube port.
- H. Shall have a body up warning light and buzzer in the cab.

18. SNOW PLOW:

- A. 11 ft Power Angle Plow 3/8" polymer moldboard
- B. Trip Edge Design
- C. Heavy Duty Frame with Twin reversing cylinders
- D. Cushion Valve
- E. 42" Moldboard Height
- F. Plow lift frame shall have hydraulic tilt to accommodate hood tilting and have sufficient room for hood to tilt for engine servicing.
- G. Plow lift frame shall be removable for summer operation.

- H. Plow lift frame shall be mounted on custom front truck hitch.
- I. Rubber Flap 12” or 15”
- J. Screw Adjustable Shoes
- K. Quick disconnect swivel attachment
- L. Moldboard and Curb shoes
- M. Carbide edges
- N. Plow frame shall have quick hitch to match hitch on existing lift frames. Punched and braced for 2 positions. Height shall be between 19” and 21” measured from the ground to center of connection bracket.

19. WING:

- A. Wing shall be a low mount patrol style.
- B. Width of space cleared shall be 9 feet.
- C. Overall length shall be 11 feet.
- D. Wing shall have full trip braces and full trip nose hinge.
- E. Rear of wing shall be lifted with hydraulic piston mounted behind cab.
- F. Rear wing braces shall be mounted to frame in a manner that will not interfere with the installation of a dump body.
- G. Two separate hydraulic spools shall control the wing, one controlling the front of the wing and one controlling the rear of the wing.
- H. Blade shall be 5/8”x 8” x 10’ center punch standard highway.
- I. Wing plow shall be guided by a green laser that projects a line not a dot. That indicates location of wing tip and shall turn on /off automatically with wing position.

20. HYDRAULICS:

- A. The hydraulic pump shall be front mounted piston hydraulic pump with load sensing valve and a capacity of 42 gallons per minute.
- B. Hydraulic pump shall supply hydraulic pressure to a bank of valves to operate plow equipment. One additional valve section shall be added to the valve bank to supply and control hydraulic pressure to operate a double-acting body hoist. The bank of valves mounted vertically behind the cab, shall have a weather tight enclosure encompassing valve bank and push pull cables, and can be easily removed for service.

20. HYDRAULICS: (continued)

- C. The hydraulic valve shall also be equipped with a power beyond port.
- D. The manual controls shall be located in the cab between the driver’s seat and passenger’s seat on an adjustable console. The control cables shall be marine grade cables. The control nearest the driver’s seat shall control the dump body, with the one-way plow control second and the wing controls third and fourth.
- E. Hydraulic lines, pipes, hoses and fittings shall be of adequate capacity to accommodate volume of oil required without undue heating. All high-pressure oil lines shall be of extra heavy pipe and fittings or oil resistant flexible wire braid hose with a minimum bursting pressure of 6,000 psi.
- F. Low-pressure oil lines shall have an abrasion and wear resistant cover and shall be of an

oil resistant type with flexible wire filler to prevent collapse. All long lines of pipe shall be adequately supported, with flexible hose at either end of iron pipe to eliminate transmission of vibration. The flexible hose shall be protected with armor at points where abrasions might occur.

- G. Sander controls shall be electric over hydraulic to eliminate hydraulic oil in truck cab. Sander controls shall have ground speed controls with digital read out.

21. CALCIUM SPRAY SYSTEM:

- A. Material tank shall be molded polyethylene, have a minimum capacity of 100 gallons, and shall be located between the cab and body with support to keep it from bulging and rubbing on cab or body.
- B. The spray system pump shall be hydraulically driven with electronic ground speed control.

22. TRADE IN (optional):

Unit 437 is a, 2007 Sterling L8500 with a 6/8 yd., one-way plow, low mount patrol wing and side dump sander body. The unit has about 51,513 miles and 5,794 hours. Vehicle can be viewed between the hours of 7:00 a.m. and 3:00 p.m. Trade-in is offered "as is, where is", without warranty of any kind either expressed or implied. Trade condition may change depending on delivery date of new truck, as it will be continued to be used by the department until the new one arrives.

23. WARRANTY INFORMATION:

- A. Base warranty of 24 months / 200,000 miles.
- B. Engine warranty of 24 months / 250,000 miles.
- C. Axle warranty of 36 months / 300,000 miles.
- D. Transmission warranty of 36 months / 300,000 miles.
- E. Cab/Body paint warranty of 60 months / 500,000 miles.

**SPECIFICATION FORM
(Must be completed)**

- 1. **ENGINE:**
- 2. **EXHAUST:**
- 3. **COOLING SYSTEM:**
- 4. **TRANSMISSION:**
- 5. **FRONT AXLE:**
- 6. **REAR AXLE:**

7. BRAKE SYSTEM:
8. WHEELS AND TIRES:
9. FRAME:
10. FUEL TANK:
11. ELECTRICAL SYSTEM:
12. CAB:
13. ACCESSORIES:
14. INSTRUMENTS AND GAUGES:
15. PAINT:
16. CHASSIS:
17. DUMP BODY:
18. SNOW PLOW:
19. WING:
20. HYDRAULICS:
21. CALCIUM SPRAY SYSTEM:
22. TRADE-IN:
23. WARRANTY INFORMATION:



Public Works Department

**BID FORM
(Must be completed)**

Make, Model and Year of 4 X 2 Diesel Dump Truck / Snow Plow:

1. Purchase Price for Dump Truck: \$ _____

2. Trade-in allowance: \$ _____

3. Total Bid Price: (Item 1 minus item 2) \$ _____

Warranty: _____

Earliest Delivery Date: _____

Firm Name: _____

Address: _____

E-mail Address: _____

Signed: _____

Print or Type: _____

Title of Signed: _____

Telephone No: _____

Date: _____