



**Purchasing Department
City Hall, 73 Harlow Street
Bangor, Maine 04401
Tel. 207-992-4282**

**Request for Bids
Tandem Axles Cab & Chassis
Issue Date: August 19, 2016**

I. Introduction

Bids are requested to furnish and deliver one (1) tandem axle cab and chassis to the Fleet Maintenance Facility, FOB Destination, 481 Maine Avenue, Bangor, Maine 04401. The cab and chassis will be used to assemble dump trucks that will be used for construction work and for snow plowing. In order to expedite the assembly and delivery of this equipment, the City will accept an "off the lot" cab and chassis that complies with the attached specifications.

The City of Bangor has one (1) complete truck with plow and wing to trade in. The vehicle is a 2006 Sterling SL8513.

II. General Information

General information is available on the City's website at the following web address: www.bangormaine.gov/proposals. By submitting a response to this solicitation, the bidder 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 pages 4-10 of this Request for Bids in an envelope clearly marked "**Tandem Axle Cab and Chassis Bid**" by **2:00 PM, Wednesday, September 7, 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. If emailing bid, please reference "**Tandem Axle Cab and Chassis**" in the subject line. Bids will be publicly opened at the time stated above.

A tabulation of all bids received will be available within 24 hours of the date of opening. Bid results may be viewed by visiting the City's website at www.bangormaine.gov/bidtabs.

IV. Questions

All questions must be directed in writing to bids@bangormaine.gov no later than **4:30 PM, Thursday, August 25, 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, Monday, August 29, 2016**. The response will be in the form of an addendum, which will be available made on the City's website.

V. Withdrawal of Bids

No Bidder may withdraw his/her bid for a period of ninety (90) days from the date of opening. All bids shall be subject to acceptance by the City during this period. To withdraw a bid prior to the opening, the bidder shall request the withdrawal in writing. All costs associated with the withdrawal (i.e. mailing fees) will be borne by the Bidder.

VI. Award

The bid award will be based on the following:

- Price of equipment offered.
- Quality and performance of equipment offered.
- Availability of equipment and parts.
- Prior history or experience with the Bidder and equipment (if no history or experience, references will be required).

VII. Information & Requirements

1. Pages four (4) through eleven (11) of this request must be completed and returned with all questions answered in order to be considered.
2. In Section IX: Specifications, the bidder is asked whether they comply with the referenced sections. Caution should be taken by the Bidder to ensure that all questions are answered and that all information requested is provided.
3. All bids must include a comprehensive list of any exceptions to the specifications as noted herein for each component of the vehicle. An explanation of any items that do not meet specifications must be included with specific reference to the item. Failure to comply with this request may result in disqualification. If any unapproved exceptions are found in the delivered equipment, payment will be withheld until they are rectified.
4. The entire unit must be thoroughly inspected, serviced and ready for use upon delivery. All work performed must meet established industry standards of quality to be acceptable to the City. Any unacceptable work must be corrected before the City will issue payment.
5. The bid award will be based on one or more of the following:
 - a. Price of equipment offered and cost of replacement parts;
 - b. Quality and performance of equipment offered;
 - c. Availability of equipment; and

- d. Prior history or experience with the Bidder, and prior history or experience with the equipment offered.
6. A price for the manufacturer's extended power train warranty is requested. The extended warranty shall be for a period of eight (8) years beyond the manufacturer's standard warranty period and shall include the engine, transmission and rear axle. The City reserves the right to reject the proposed warranty.
7. The City of Bangor reserves the right to reject any or all bids, to waive informalities or defects in bids, or to accept a higher cost bid if such action is deemed to be in the best interest of the City of Bangor. The City also reserves the right to negotiate with the low Bidder.

VIII. Trade-In Information

The truck that the City of Bangor will trade is a 2006 Sterling SL8513 tandem axle dump truck. Trade in will be available once the City has taken possession of completed new vehicle.

- Truck No. 325 has approximately 66,000 miles

The snow equipment is as follows:

- 11 ft. Frink steel " Dustpan" angle plow with trip edge blade
- 10 ft. Frink steel Patrol wing with trip edge

The vehicle will be made available for inspection by appointment. Please call Eric Willett at 207-992-4662 or Jay Redmond at 207-992-4665.

IX. Specifications

1. Unit:

- A. Heavy duty, ten (10) wheel dump truck cab and chassis with GVW of not less than 60,000 pounds
- B. Expected gross combination weight of 80,000 lbs

2. Wheelbase and CT:

- A. CT shall be a sufficient length to accommodate a 12 ft. (12 yd.) dump body and also plow rigging. This CT measurement shall be approximately 96”;
- B. AF dimensions must allow for a minimum 12” of frame to extend past the rear tires to facilitate mounting the dump body and brake controls with mounted lighting adapters for a trailer;
- C. Unit must have both electric and air lines to the rear

3. Front Axles:

- A. 20,000 lb. minimum capacity I-Beam type, such as Detroit DA-F-20.0-5 20,000 lbs 71.0 KPI 3.74 or equivalent;
- B. Suitable for extreme snowplow and dump truck service;
- C. Oil lubricated and sealed wheel bearings with visible oil supply;
- D. Front springs shall be heavy duty designed to support the plow and wing in travel position, under full ballast load with no appreciable sag or deflection on either side; Left spring shall be 9,500 lbs; Right Spring shall be 10,500 lbs;
- E. Spring mounted hardware and brackets shall be designed for extreme use;
- F. Front axle shall be set-back type;
- G. Front shock absorbers

4. Rear Axle:

- A. Meritor RT-46-160P R-Series tandem axle or equivalent, @ 46,000# GVW;
- B. Approximately 55 MPH at most economical RPM in high gear;
- C. Aluminum housings will not be accepted;
- D. Magnetic oil drain plug;
- E. Oil lubricated and sealed wheel bearings;
- F. Rear axle ratio shall be 6:14 to one;
- G. Interaxle/differential lockout with indicator light

➤ Does the Bidder comply with the requirements of Section IX, Subsection 1-4?
_____ Yes _____ No _____ Initials

5. Engine:

- A. Automotive diesel, 4 cycle 350HP (minimum);
- B. Caterpillar, Cummins, Mercedes or equivalent;
- C. Engine brake;
- D. Turbocharged;
- E. 860 lbs./ft. minimum torque output;
- F. Screw on water filter (time release) with the following:
 - i. Pre-charged conditioner
 - ii. Factory installed shutoff valves;
- G. Extreme service oil filtration system (remote mount filter assembly will not be accepted);
- H. Magnetic oil drain plug;
- I. Engine block heater: 1,500 watt minimum; 115 volt receptacle with spring operated lid, mounted on front of truck;
- J. Adapter for Spicer coupler 2-2-79 on crankshaft (factory installed).

6. Transmission:

- A. Allison 3500 RDS; 6-Speed; Package 113;
- B. PTO openings;
- C. Magnetic oil drain plug;
- D. Transmission shall have push-button controls with diagnostic and oil level capacity;
- E. Castrol Syntec oil is required.

7. Driveline:

- A. Driveline shall be heavy duty and factory balanced;
- B. Main driveline shall use Meritor 176T or equivalent with half-round yokes;
- C. Interaxle driveline shall use Meritor 17T or equivalent with half-round yokes;
- D. Extended life u-joint.

8. Brakes:

- A. Dual air brake system with ABS (such as Wabco 4S/4M ABS) or equivalent;
- B. Front brakes shall be 16½ x 6 cam type ("Q" + style preferred);
- C. Rear brakes shall be 16½ x 7 cam type ("Q" + style preferred) with two (2) 30/30 brake chambers on rear axles, with moisture proof chambers;
- D. All brake drums shall be outboard mounted cast drums;
- E. Haldex or equivalent automatic slack adjustors;
- F. Wabco SS-1200 plus Air Dryer with integral heater and governor; frame mounted;
- G. Reservoirs must have ample road clearance and have sufficient capacity to support all air accessories and the requirements of a tag-a-long trailer. Compressor shall be a minimum 18.7 cfm type. All air tanks must allow for clear frame plow attachment and shall be located under the cab of the truck;

- H. Pull drains on each reservoir with loose end of the cable attached professionally in a location that is easily accessible to the operator;
- I. Semi-trailer connections and breakaway valve should be mounted on rear most crossmember in such a way not to interfere with proper placement of lights, Pintle hook or license plates;
- J. Hand control valve (trolley valve) shall be mounted on the steering column. The brake control valve for trailer shall be mounted on the dash.

➤ Does the Bidder comply with the requirements of Section IX, Subsection 5-8?
 _____ Yes _____ No _____ Initials

9. Rear Springs and Suspension:

- A. Tufftrac 46,000lbs, or equivalent, rear suspension;
- B. Fore/aft and transverse control rods;
- C. Clearance between dual tires shall be 2" minimum. Clearance between inner dual tires and suspension system or brake chambers shall not be less than 2". The minimum clearance must be retained under normal operating conditions under capacity loading. Local modifications, special spacers or wheel components will not be accepted.;
- D. All hardware shall be designed for extreme services.

10. Steering:

- A. Heavy duty design suitable for snowplow and dump truck service and for in town driving, such as TRW TAS85 or equivalent;
- B. Power steering with replaceable filter with large capacity reservoir.

11. Electrical:

- A. 12 volt Delcotron 160 amp capacity alternator model number 28-SI or equivalent;
- B. Heavy duty Delco starter 12 volt, #39 MT type, or equivalent, with integrated magnetic switch;
- C. Minimum of two (2) 12 volt batteries, Group 31 minimum of 2750 CCA maintenance free stud mounting type, must be mounted so not to interfere with plow mounting;
- D. Enclosed battery compartment with proper ventilation to prevent corrosion;
- E. Sealed beam halogen headlights;
- F. All exterior wiring shall be salt resistant in suitable loom or conduit, using weather proof connectors;
- G. Manually operated master battery disconnect switch mounted on the battery box and readily accessible to the operator. Cole-Hersee Model 75908 or equivalent; must have ability for lock out tag out;
- H. Sealed battery cable ends;
- I. Separate fused 7-way semi-trailer socket mounted on rear most cross member with trailer interrupter switch mounted on the dash;
- J. Electronic features of manufacturer must be able to integrate with plow requirements.

12. Frame:

- A. One piece heavy duty reinforced high tensile heat treated steel, 120,000 psi yield minimum. Straight channel frame rail 7/16" thick;
- B. Minimum section modules 21.6 per rail;
- C. Bolted construction, designed for extreme service and use;
- D. Front frame extensions are mandatory; and must be long enough to mount plow and still allow hood to be opened.
- E. Frame shall be designed and constructed not to interfere with Spicer crankshaft coupler 2-2-79;
- F. Heavy duty gusseted crossmembers shall be provided;
- G. Local installation of frame reinforcement will not be acceptable.

13. Tires & Wheels:

- A. Front tires shall be 12R x 22.5 16-ply tubeless type such as Goodyear G149A or equivalent;
- B. Rear tires shall be 11R x 22.5 16-ply tubeless traction type such as Goodyear G164 RTD or equivalent;
- C. Spare wheel and tire, 12Rx22.5 Goodyear G149A or equivalent;
- D. Both front and rear hubs must be cast iron hub-piloted (ten-hole);
- E. Heavy duty steel accu-ride wheels shall be 22.5 x 8.25 hub-pilot style.

14. Fuel System:

- A. Fuel storage tank mounted on left side of truck, 60 gallons minimum. Fuel tank must not protrude beyond rear of cab;
- B. Non skid step;
- C. 12" road clearance minimum;
- D. Factory installed fuel heater, Alliance or equivalent;
- E. Fuel lines shall be the proper flexible wire braid type;
- F. Tank shall be vented in such a manner to prevent fuel spillage if operating on a slope or on level ground with the tank full and the fuel warm;
- G. Suitable mud flaps shall be installed to protect the fuel tank from road debris;
- H. Shut-off valve shall be installed at fuel outlet;
- I. Fuel tank heater such as Instaheat or equivalent.

➤ Does the Bidder comply with the requirements of Section IX, Subsection 9-14?
 _____ Yes _____ No _____ Initials

15. Cooling System:

- A. Radiator core and tanks shall be heavy duty design and construction;
- B. Ample capacity for continuous high engine output under extreme temperatures and/or operating conditions;
- C. Heavy duty mounting brackets and hardware;
- D. Screw on water filter (time-release) with pre-charge and factory installed shut off valves;

- E. Gates Blue – strip type radiator and water hoses if available;
- F. Radiator and mounts shall be designed and installed not to interfere with Spicer crankshaft coupler 2-2-79;
- G. Space shall be provided under or through radiator to mount crankshaft driven PTO and pump;
- H. Extended life antifreeze to -60°F;
- I. Viscous driven fan clutch.

16. Exhaust:

- A. Vertical exhaust designed and installed not to interfere with any customer installed accessories (i.e. snow plows, hydraulic tanks, wings etc.);
- B. Angle exhaust tip shall be provided;
- C. Heavy duty mounting brackets, elbows, piping and expansion joints;
- D. Shall keep noise to lowest practical level in accordance with Federal and State regulations;
- E. Aluminized muffler;
- F. Must comply with latest EPA regulations with regeneration capabilities and warning system.

17. Filters:

- A. Air filter shall be heavy duty dry type;
- B. Option of drawing air from either under the hood or from the cab so not to clog filter with snow;
- C. All filters must be located for ease of servicing;
- D. All oil, fuel and water filters shall be disposable spin on type.

➤ Does the Bidder comply with the requirements of Section IX, Subsection 15-17?
 _____ Yes _____ No _____ Initials

18. Cab:

- A. Aerodynamic LED cab marker lights;
- B. Dome light shall have independent switch;
- C. Heater shall be highest capacity available;
- D. Automatic low oil pressure; high temperature; low coolant visual and audible warning system operational only when ignition is on;
- E. Electric windshield washer;
- F. Heavy duty 2-speed electric windshield wipers, minimum with time delay;
- G. Dual sun visors;
- H. Bright finish heated aero mirrors with lights, RH remote adjustable (4-way);
- I. 8" convex mirrors, bright finish mounted under primary mirrors;
- J. Grab handles on right and left side;
- K. Three point seat belts on driver's seat;
- L. All exterior lights must be LED;

- M. Driver's seat shall be a Bostrom Talledega 915 or equivalent, high back air suspension seat with air lumbar support;
- N. Passenger seat shall be conventional foam rubber bucket seat;
- O. Instruments shall include, but not be limited to: Oil pressure gauge, water temperature, fuel gauge, brake warning light, low air pressure light and alarm, voltmeter, amp meter, air pressure gauge, dash mounted engine hour meter. All gauges shall be properly marked and illuminated.;
- P. Full coverage, insulated rubber floor mats;
- Q. Heavy duty closed cab all steel construction;
- R. Hood and fender shall be one piece design, tilt forward type with factory installed side access panels to provide safe, easy and complete access to the engine compartment for daily service and periodic maintenance with full plow gear (including wing and post) installed;
- S. Stationary grille is preferred to increase engine accessibility when plow hardware is attached;
- T. Backup alarm;
- U. Fresh air intake for heater/defroster must be protected or designed and installed to prevent entrance of sand/salt;
- V. AM-FM/WB radio with clock;
- W. Suitable heavy duty bumper must be supplied mounted on frame;
- X. Electric horn;
- Y. Directional signals, non-cancelling type with motorized flasher;
- Z. Cab mounted 5 lb. fire extinguisher;
- AA. Steering column shall be both tilt and telescopic;
- BB. Two (2) extra switches mounted in dash;
- CC. Exterior fiberglass visor;
- DD. Single auxiliary dash mounted defroster fan;
- EE. Air ride for cab.

19. Paint:

- A. Omaha Orange preferred, but will accept an "off the lot" color. Wherever possible, lead free paint is required;
- B. Chassis shall be semi-gloss black enamel;
- C. Cab interior to match exterior.

20. Manuals:

- A. Operator's manual;
- B. One (1) complete line ticket (parts);
- C. Software program to diagnose engine troubleshooting provided by engine manufacturer to be used with shop owned laptop. Engine supplier must train shop personnel in proper use of the software program. Any electronic software available for either parts or service related problems must accompany this vehicle and may be substituted for written material;
- D. Vendor must supply complete set of service and parts manuals, either in print or electronic. If electronic, training must be supplied to two (2) work shift personnel.

21. General:

- A. All manuals or software shall be delivered prior to acceptance of the final completed vehicle;
 - B. Chassis shall be completely serviced, tuned up, wheels balanced (front) and steering geometry adjusted prior to delivery;
 - C. Vehicles offered must comply with all applicable Federal, State of Maine and most current Engine EPA Regulatory Standards. Certified GVWR **must** be furnished;
 - D. A computer analysis of the proposed engine, transmission, rear end combination which is being offered must be provided;
 - E. Wherever possible, friction materials must be non-asbestos;
 - F. Vehicles must be fully operational and ready for service when delivered to the Fleet Maintenance Department;
 - G. Noise level at the operator's hearing zone must not exceed the applicable OSHA maximum amount with hours of exposure as specified in Table G-16 of Part 1910-95 and D2 of 1926.52. This sound level shall be an eight (8) hour time weighted average in accordance with SAE Standards J1166, J919, J1174 and J1175 or whichever is applicable.
- Does the Bidder comply with the requirements of Section IX, Subsection 18-21?
_____ Yes _____ No _____ Initials

Important Note:

These vehicles will become complete snowplow vehicles with a plow, wing and dump body. Arrangements must be made at a later date to transport these vehicles to the completing dealer for finish work. A check for front end alignment after all equipment has been installed must be performed before delivery of finished vehicles. All warranty dates shall begin upon delivery of finished vehicles.



**Bid Form
Tandem Cab & Chassis**

**Bid Deadline:
2:00 PM, Wednesday
September 7, 2016**

Please note: Pages four (4) through eleven (11), including this bid form must be submitted with bid proposal. Detailed explanation of ALL exceptions must be included. Failure to do so may result in disqualification.

Description	Qty.	Unit	Price
Single Axle Cab & Chassis Year: _____ Make: _____ Model: _____	1	EA	\$ _____
Less: Trade-In	1	EA	\$ _____
Total Bid Amount:			\$ _____
Estimated time of delivery follow receipt of order: _____ weeks			
Price for Extended Power Train (Engine, Transmission, Rear Axle) Warranty			\$ _____
Length of Warranty: _____ years			
Address of Service Location:			
<i>Price must include all miscellaneous charges; no other charges will be accepted.</i>			

Business Name:			
Street or PO Box:			
City, State, Zip:			
Telephone Number:			
Email Address:			
Contact Name:			
Title:		Date:	