INVITATION TO BID

Notice is hereby given that sealed bids will be received at the City Clerk's Office, City Hall, 435 Ryman Street, Missoula, 59802-4297 until 2:30 p.m., Tuesday, November 5th, 2013 and will be opened and publicly read in the Mayor's Conference Room, City Hall at that time. As soon thereafter as is possible, a contract will be made for the following:

Purchase of one (1) Single Axle Dump Truck.

Bidders shall bid by City bid proposal forms, addressed to the City Clerk's Office, City of Missoula, enclosed in separate, sealed envelopes marked plainly on the outside with the bidder’s company name and address and the words: “Bid for one (1) Single Axle Dump Truck, Closing at 2:30 p.m., Tuesday, November 5th, 2013.”

Pursuant to Section 18-1-102 Montana Code Annotated, the City is required to provide purchasing preferences to resident Montana vendors and/or for products made in Montana equal to the preference provided in the state of the competitor.

Each and every bid must be accompanied by cash, a certified check, bid bond, cashier’s check, bank money order or bank draft payable to the City Treasurer, Missoula, Montana, and drawn and issued by a national banking association located in the State of Montana or by any banking corporation incorporated under the laws of the State of Montana for an amount which shall not be less than ten percent (10%) of the bid, as a good faith deposit. The bid security shall identify the same firm as is noted on the bid proposal forms.

No bid will be considered which includes Federal excise tax, since the City is exempt there from and will furnish to the successful bidder certificates of exemption.

The City reserves the right to determine the significance of all exceptions to bid specifications. Products or services that do not meet bid specifications must be clearly marked as an exception to the specifications. Vendors requesting inclusion or pre-approved alternatives to any of these bid specifications must receive written authorization from the Vehicle Maintenance Superintendent a minimum of five (5) working days prior to the bid closing.

The City reserves the right to reject any and all bids and if all bids are rejected, to re-advertise under the same or new specifications, or to make such an award as in the judgment of its officials best meets the City's requirements. The City reserves the right to waive any technicality in the bidding, which is not of substantial nature.

Any objections to published specifications must be filed in written form with the City Clerk prior to the bid opening at 2:30 p.m., Tuesday, November 5th, 2013. Bidders may obtain further information and specifications from the City Vehicle Maintenance Division at (406) 552-6387. Bid announcements, bidding documents, and bid results are posted on the city's website at www.ci.missoula.mt.us/bids.

Martha L. Rehbein
City Clerk

Publish: October 18th, 2013
          October 25th, 2013
CITY OF MISSOULA, MONTANA
SPECIFICATIONS FOR ONE (1) SINGLE AXLE DUMP/DEICER TRUCK

GENERAL EQUIPMENT DESCRIPTION:

The following specifications are for one (1) single axle dump/deicer truck, also referred to as a deicer snow plow unit. This unit will be replacing a Ford F800 single axle dump/deicer truck. The bid truck should be very similar to the replacement truck in terms of operational capability.

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<td>This should be considered one complete &quot;Turn Key&quot; unit ready for immediate use upon delivery. All items that Vendor has selected “Meets Specs” shall be provided prior to processing documentation for payment.</td>
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MANDATORY FUNCTIONS:

The single axle dump/deicer truck will play a major role in snow removal and anti-ice operations for the City of Missoula. The main function of the unit will be plowing snow and deicing streets. This unit must be capable of both of these operations simultaneously under severe weather conditions.

This truck may also be used for transporting materials and debris during the off-season when it is not being used in snow removal operations.

This vehicle will need to operate effectively on steep winding City streets with snow plow and deicer units operating at optimum capacity to promote efficient snow removal and anti-ice operations.

Winter snow and anti-icing operations are often performed in heavy traffic. Visibility and safety in dense traffic will be mandatory.

This unit must be capable of operating in a wide variety of environmental conditions. Operations will be performed in hot weather above 90 degrees and extremely cold below zero temperatures. This equipment must be 100 percent functional regardless of ambient weather conditions.

| ____ | ____ |
This equipment will have to function in steep and rolling terrain effectively without spilling, losing debris, or presenting safety concerns.

Meets Specs | Does Not Meet Specs
-------------|----------------------

All of the above items are mandatory basic functions of a single axle dump/deicer truck. Please explain any exceptions on a separate sheet of paper. Any exceptions to the above specifications will result in product exclusion.

DATE OF MANUFACTURE:

It is the intention of the City to purchase a new single axle dump truck. This means current model year, with only delivery mileage.

BASIC REQUIREMENTS:

24 hour delivery of maintenance related parts and equipment.

Meets Specs | Does Not Meet Specs
-------------|----------------------

Repair oriented parts shall have a 24 hour shipping availability.

Meets Specs | Does Not Meet Specs
-------------|----------------------

All required lubricants shall be available from Montana lubrication suppliers other than OEM dealers.

Meets Specs | Does Not Meet Specs
-------------|----------------------

Only standard (SAE) or metric bolts, nuts, etc. will be allowed.

Meets Specs | Does Not Meet Specs
-------------|----------------------

APPLICABLE STANDARDS (All standards referenced shall be of the most current revisions.) Must meet the following standards:

GOVERNMENTAL:

Federal Motor Vehicle Safety Standards (FMVSS).

Meets Specs | Does Not Meet Specs
-------------|----------------------

Environmental Protection Agency (EPA) standards.

Meets Specs | Does Not Meet Specs
-------------|----------------------


Meets Specs | Does Not Meet Specs
-------------|----------------------

Occupational Safety and Health Administration standards.

Meets Specs | Does Not Meet Specs
-------------|----------------------

INDUSTRIAL:

Society of Automotive Engineers (SAE) standards.

Meets Specs | Does Not Meet Specs
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**TRAINING:**

At no additional cost, Vendor shall agree to provide a qualified factory authorized service representative(s) for the following training:

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8 hours of mechanic training in maintenance, adjustment, and repair of unit.

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4 hours of operator training.

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Video Operation Guides.

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All training will take place within 15 days of delivery.

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Operator and mechanical training shall be two separate classes.

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Video training may be used in place of actual instructors provided the videos become the property of the City of Missoula.

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**SAFETY:**

A sound suppressed cab shall be standard and shall meet current OSHA standards for operator, passengers, and spectator sound.

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All lighting must be located in such a fashion to enable operator to be visible in high traffic situations during both daytime and nighttime operation.

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Unit must be equipped with flashing LED lights that are visible for a minimum of 1,000 feet in all directions (360 degrees).

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One Sound Off Signal, part number EL3MBP+AC, clear dome amber mini bar with a permanent mount will be located on the top of the cab.

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All belts, drive shafts, chains, and pinch points must be clearly marked and protective guards in place to prevent operator injury.

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All steps, landings, walkways, and footholds must be covered with or made of non-slip materials.

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All hazardous areas or operations should be clearly labeled in such a fashion to make the operators aware of potential danger.

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Reflective tape and/or reflectors that allow night visibility of no less than 500 feet.

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A box up light must be included and adequately labeled.

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All steps, landings, walkways, and footholds including cab egress must have three points of contact; two hands and one foot or two feet and one hand secured at all times. This is an ergonomic fall protection mandatory concern.

**DELIVERY:**

Unit will be delivered F.O.B. to
Jack Stucky
Vehicle Maintenance Superintendent
City of Missoula
1305 “B” Scott Street
Missoula, Montana 59804

All delivery, transportation, and shipping charges are included in bid price.

All services will be performed prior to delivery and unit(s) will be clean and free of defects.

Manufacturer's Statement of Origin (MSO) and Title Application must be prepared and available at delivery.

**COLOR:**

Truck cab will be painted white, moderate striping is acceptable.

Box will be painted white. All portions of the box must be painted.

Truck under carriage and frame shall be black.

Deicer is highly corrosive. All portions of the truck, frame, and box must be protected with a good quality paint and a warranty.

**CAB:**

Conventional style cab.

Cab exit and entry (egress) must be ergonomic with three points of stability (one hand and two feet or two feet and one hand contact) for operator at all times.

Exhaust shall be stack style on the right side (passenger side) mounted with a protective shield and grab handle to prevent the operator from burns.

All windows shall be tinted safety glass.

Seats shall be factory installed. Driver’s seat shall be an air suspension type with 8 way adjustment and covered with heavy cloth.
To include both driver and passenger side seats. ______  ______

Retractable shoulder and lap safety belts for the driver and passenger. ______  ______

Heavy duty high output heater and air conditioner equipped with multi-speed fan and manual temperature controls. ______  ______

Arm rests on each door. ______  ______

Dual sun visors. ______  ______

Two heavy duty windshield wipers and windshield washers, wipers shall be variable speed with intermittent setting ______  ______

Heated lower windshield or similar system to prevent or reduce ice from building up in the windshield wiper valley. ______  ______

Interior dome light. ______  ______

Unit must have an air horn; if it is exterior it must have a snow shield. ______  ______

Include an electrical or electronic horn. ______  ______

One West Coast style heated mirror on each side not less than 6”x16” size. Both mirrors must fold when struck. Both mirrors must be fully adjustable and have a separate 8” round convex mirror attached to the bottom of the main mirror support rods. ______  ______

Hand grab rails, mounted vertically behind each door. Not less than 6 inches long. ______  ______

Common key for doors and ignition; a minimum of 4 sets of keys will be supplied. ______  ______

Full front steel bumper shall be provided, partial or plastic bumper sections are not acceptable. ______  ______

Full length heavy duty floor covering made of washable rubber with removable floor mats for each side. ______  ______

All steps shall be non-slip with adequate toe room to promote safe exit, entry and repair access. ______  ______

Front radiator particulate protection mesh grill. ______  ______
Adequate sound insulation to meet OSHA hearing protection requirements.

Forward tilting hood with splash shields and mud flaps.

Hood shall be sectioned to enable operator to tilt it forward without having to drop or lower plow frame hitch.

**COMMUNICATIONS:**

Installation port (location) for additional CB style radio to be installed later.

Unit shall include an AM/FM radio.

**INSTRUMENT PANEL:**

Adequately lighted to make all gauges visible under extreme bright and extreme low light conditions.

Instrument grouping shall be grouped in clear view of the operator’s position.

- Fuel gauge.
- Amp or Voltmeter.
- Air brake pressure gauge with low pressure audio warning.
- Oil pressure gauge with low pressure audio buzzer.
- Water temperature gauge with high temperature audio buzzer.
- Tachometer, speedometer, and engine hour meter.
- Instrument panel shall include sander on/off indicator lights.
- Two additional lighted (blank) toggle switches.
- Filter air restriction indicators.
- Electronic backup alarm.
- Box up indicator light.
- PTO status light.
- Digital outside temperature gauge.

**FRAME:**

Cab to center of rear axle shall measure 85 inches, center of steer axle to center of rear axle shall measure 165 inches. A six inch variance will be permitted to meet legal or physical mandates.

Front frame must allow installation of a frame mounted snow plow hitch assembly, either an existing Schmidt Model 400 B (City Supplied) or a very similar new hitch to be installed by the City of Missoula.

36” of open frame space behind cab on each side for plow must be available for the hitch apron assembly to bolt to the frame.
The frame length and axle location shall accommodate the selected dump box/plow in compliance with all weight regulations and restrictions both State and Federal.

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Frame must be “Full Channel” reinforced with no sections.

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110,000 psi heat treated steel minimally.

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Minimum SM 29 with double channel frame with minimum RBM of 3,500,000.

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Deicer corrodes aluminum; therefore, the frame cannot include any aluminum sections.

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**TIRES:**

Unit shall include “On Spot” or preapproved equivalent cab controlled air operated automatic chains.

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Front tires minimum 315/80/R/22.5 18 ply Michelin XZY 2 or preapproved equivalent.

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Rear tires minimum of 11:00 R 22.5 14 ply.

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Spare to match front tires.

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Traction rear and highway tread on front tires, all tires will be siped.

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**RIMS:**

Ten hole steel solid hub piloted rims.

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Rim color white.

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**BRAKE SYSTEM:**

Brake system shall meet or exceed DOT regulations: 393.40, 393.41, 393.50, and 393.51 minimally.

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A parking brake shall be provided with an audio/visual warning device on the instrument panel to indicate when the parking or hand brake is applied when the engine is running.

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An electronic trailer brake and controller must be provided to control and activate electronic trailer brakes. Truck must be set up for electric and air trailer brakes.

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Full 360 degree brake dust covers on all wheels must be provided.  

Brake system shall be slack adjuster s-cam style brakes with 
self adjusting automatic slack adjusters on every wheel. 

Air reservoirs will be equipped with a drain cock easily accessible to the 
operator. The drain cock will point downward and away from the operator. 
A valve stem air recharge port will be installed so air brakes can be 
released with an external source. 

Rear brakes must have parking brake canisters or air chambers. Parking 
brakes must and will be required to hold the fully loaded unit on a 45 
degree slope minimally. 

Minimally, type 30/30 air cans must be provided on both axles. 36/30 
may be required to meet the parking brake application requirements. 

Minimum of 8" shoes on the rear and 5" in front. 

Brakes and brake system must meet or exceed all applicable local, state, 
and federal brake regulations. 

Parking brake with dash mounted quick release valve provided. 

Parking brake spring type air release maxi cans. 

Air compressor to be minimum of 16 CFM. 

Units must include spin on style heated air dryers. Air dryer must be installed 
in a location where it can be easily serviced. 

**FUEL TANKS:** 

Minimum of 50 gallon fuel capacity located right or left side under the cab step. 

Manual fuel tanks drain ports must be provided on the fuel tanks. 

**SHOCK ABSORBERS:** 

Heavy duty front shocks, rear shocks are not required.
**ENGINE:**

Engine will be a nine (9) liter minimum.  

Turbo charged diesel engine with a minimum of 350 Rated HP and producing a minimum of 1100 lbs. of torque.

Block heater must be 1250 W 110V with a weather protected electrical outlet.

Air induction system shall have filter indicators capable of being reset.

Batteries must be maintenance free, 12 volt, group 31, stud type post with a minimum cold cranking amperage of 1.5 X the cubic inch engine displacement at zero degrees.

Engine shutdown for: low water/high temp, low oil/low oil pressure, high temperature.

Engine air intake system will be placed in such a location where snow, ice, and water cannot plug or easily enter the system.

Water/fuel separator must be Racor, 1000fg-12 heated or equivalent.

Cooling system to provide cold weather protection to -40 and warm weather overheat protection to +110 degrees.

Cooling system will provide overheat protection with prolonged periods of high temperature operation at low engine rpm speeds (idle).

To include an ether quick start system (unless system is hot air induction).

Engine will have idle shut down set at 10 minutes.

**COOLANT AND WEATHER PACK SYSTEM:**

This unit must include a cold weather start package with hot air intake injection system or an equivalent cold start package.

Permanent type coolant/anti-freeze with a 50/50 mix to a minimum of -30 degrees below zero and at least 110 degrees above zero and the proper PH to minimize electrolysis.

Air intake shall be hood mounted in such a manner to prohibit snow and water ingestion and/or blockage in extreme weather conditions.

Cooling system must include a spin on style water filter conditioner.
Note: this unit will often respond to emergency situations that are directly attributed to severe weather. This truck and all of its components must function efficiently under severe Montana weather conditions.

EXHAUST SYSTEM:

Weather protection shall be provided for exhaust stack system.

System will include a vertical or horizontal muffler with vertical pipe dumping exhaust fumes out the right or passenger side of the vehicle. Exhaust shall dump out and above the passenger side of the cab in such a manner to prevent the operators from breathing exhaust fumes while operating all functions. Please note: there may be some pre-approved alternatives for emissions systems.

Exhaust system must reduce engine to OSHA and SAE applicable standards.

The exhaust stack (single) shall be a minimum of 10 feet 0 inches and made of aluminized or stainless steel, rust resistant with a turned out exhaust extension.

Aluminized or stainless steel shield must be included to protect the paint, body, hoses, wires, and operator contact with hot exhaust piping.

FRONT AXLE/FRONT SUSPENSION:

14,000 lb. minimum front suspension capacity or adequate for dump unit Specifications, whichever is greater.

14,000 lb. minimum front axle capacity.

Power steering with gear driven pump.

Multi-leaf front springs, 14,000 lb. rated front suspension.

Bottom of front axle to ground clearance to be greater than 10 inches.

Double drop style front axle is not acceptable.

SINGLE REAR AXLE:

23,000 lb. rated rear axle minimum.

Engine, transmission, torque converter and rear axle combinations to
Meets Specs | Does Not Meet Specs
--- | ---

have a gear ratio of approximately 7 to 1 per Allison SCAAN recommendation.

---

Gear Ratio is ______________ to ______________.

---

Please explain any significant variance in gear ratios.

---

The nature of these operations will be start/stop low end performance. This unit must be capable of plowing snow from a complete stop with the deicer hydraulics and the snow plow in full operations.

---

On-Spot or similar preapproved automatic chains will be mounted on the rear axle and function as to the specifications of On-Spot chains.

---

**REAR SUSPENSION:**

Mechanical suspension required; an air suspension is not acceptable.

---

Suspension to be rated at 23,000 lb. minimum.

---

Multi-leaf spring style suspension with overload protection.

---

**TRANSMISSION:**

Allison 3000 RDS or 3500 RDS 6 speed electronic transmission with floor or lower right side dash mounted lever controls. Must include standard Allison lock up speed reduction system.

---

Heavy duty transmission oil cooler with synthetic fluid.

---

Deep reduction low gears in both forward and reverse.

---

On and off road style transmission.

---

Shift lever style electric transmission control console, push buttons are not acceptable.

---

**ELECTRICAL:**

12 Volt system.

---

120 amp minimum solid state alternator.

---
All lighting DOT approved and in compliance with Federal Motor Carrier Regulations. All of the truck and sander lights shall be LED where LED is applicable.

Wire protective cover at wear points.

All after manufacture wire connections for the lighting and all other components must be soldered and covered with water resistant shrink tube. Deicer will corrode any exposed wires.

**HYDRAULICS:**

Hydraulic PTO system shall be driven off the Allison transmission.

PTO will be air operated/air controlled.

Provide 32 gallon minimum side mount hydraulic tank with site glass.

Provide and install return line filter.

All hydraulic controls for sander and plow, including rate controls, must be located in the cab within easy reach of the operator.

**BOX, SANDER AND DEICER HYDRAULICS AND CONTROLS:**

Front hydraulic circuit for 4 way snowplow including quick couplers.

Hydraulics will allow multiple speeds for sander/deicer spreading units.

Hydraulic pump should be a minimum of 22 GPM.

Hydraulic system will enable snow plow operator to **lift, lower, swing right, swing left, and détente into a float position.**

Provide and install hydraulic circuit to plow and deicer unit complete with dual flow control valve (controlled from the cab) and required quick couplers.

Snow plow control tower shall be North Star or force air over hydraulics with a détente float position. The City of Missoula will install the plow, the vendor will supply and install all of the plow controls and hydraulic pumps, fittings, and lines needed to operate a plow.

Access to hydraulic tank fill port and fluid level check must be located where they can be accessed with the dump box in the down position.
All box, sander, plow, or add on electrical components will be installed with solder and shrink tube. Crimp style butt connectors and unions are unacceptable.

With the exception of installing the plow and sliding the deicer into the box, this unit will be completely ready to use upon delivery.

Hydraulic lines and quick disconnect fittings will be ran to the front of the truck for snow plow operations and to the rear of the truck for deicer or sander operations.

**DUMP BOX:**

I’D length of box shall be 10'6".

6 cubic yard capacity.

Front mounted single telescopic cylinder adequate for box dimensions.

Cylinder housing (dog house) will not protrude into body more than 9 inches.

Reinforced 10 gauge T1 steel floor.

Box shall have a minimum of 2 horizontal support side braces.

Air operated tailgate with break over center linkage.

Rear corner reinforcement to prevent spreading when loaded without a tailgate.

Lighted heavy duty cab controlled hoist control tower.

Hoist control will have safety lock out and détente position.

Tower and cable controls will be sealed in grease and weatherproofed.

Box shall have a headache rack to protect the cab. Headache rack shall extend at least 1/3 of the way across the top of the cab.

Provide and install OSHA approved body prop or safety brace.

Provide mud flaps behind rear axle tires.

Dump body must have 2 coats of enamel over epoxy primer.

All portions of the box must be painted, deicer is corrosive.
Mounted height not to exceed 9 inches from the top of the truck frame to the bottom of the dump box. The intention is to keep the box as low profile as possible to prevent tipping when loaded with deicer tanks and/or a sander.  

Tailgate to be equipped with a minimum of 1 horizontal and 2 vertical braces.  

Tailgate equipped with combination drop and spread chain system.  

Box, tailgate, and headache rack to be minimum thickness of 10 gauge steel.  

System to include taillights, stoplights, turn lights, backup lights and a flashing amber light in each rear corner of box.  All box lights must be LED.  

All lights to recessed rubber mounted anti-vibration lights.  

Left front corner of box will have steps to enable driver to safely climb up into the box.  

Left front corner inside of the box will have a step (re-bar) on the inside to enable an operator to safely enter and exit the box.  

Box will have front and rear LED marker lights (recessed anti-vibration) visible from side and rear of unit.  

Adequate top, bottom and side reflectors to make unit visible at 500 feet.  

Cable pull out to stop cylinder at 50 degree dump angle or equivalent preapproved method of preventing cylinder from over extension.  

**INSTALLATION AND ASSEMBLY:**  
The truck vendor is responsible for ensuring that the unit meets or exceeds all state, federal, and local commercial vehicle (CDL) regulations upon delivery.  

**WARRANTY:**  
All warranty must be Original Equipment Manufacturers with a minimum coverage period of one year on the entire machine.  

Disclose the warranty for rust through and corrosion prevention on a separate sheet of paper.  

Warranty documentation shall be included in the bid package.
VENDOR LOCATION:
Manufacturer’s repair, parts and warranty center will be located in Missoula, Montana.

MANUALS:
All manuals and schematics are to be provided at the time of delivery. No exceptions will be made for unavailable or missing manuals or schematics. One (1) part and one (1) complete service manual must be provided for the following:

- Truck engine, transmission, and truck chassis.
- Hydraulic pumps and valves.
- Operator’s manual for both the truck and dump box.
- Safety instruction manuals.

Two (2) schematics must be provided for each of the following areas:
- Electrical schematic.
- Hydraulic schematic.
- Compressed air schematic for both brake system and air purge system.
The prices listed in this price sheet shall be totally inclusive of all freight, shipping, dealer preparation, or assembly charges. All prices listed will include delivery to 1305 “B” Scott Street, Missoula, Montana 59804. Purchase of one (1) single axle dump truck that meets or exceeds the specifications included in this document.

Description of single axle dump truck being provided:

Model Year:

Name of Manufacturer:

Description:

**Total Bid price for the single axle dump truck being provided:** $________

The City of Missoula may or may not request the vendor to install a rear apron and trailer pintle hitch assembly. The City of Missoula reserves the right to include or exclude this option.

**Additional cost of a recessed rear apron and pintle hitch assembly:** $________

Delivery date of this equipment is: _______ Month_________Day _______ Year ______.

Please note that there are no trade-in vehicles included in this proposal.

**OTHER INFORMATION**

Does the vehicle meet specifications? ______if not, attach a separate sheet with explanations.

* City of Missoula reserves the right to award purchases with or without any or all of the alternatives and to award purchases based on life cycle cost to City, not just lowest initial purchase price.

** Bidders shall promptly notify the City of any ambiguity, inconsistency, or error in the bidding documents, and if a clarification or interpretation is desired, bidders shall request the same from the city in writing, at least five (5) calendar days prior to the bidding deadline. Any objections to published specifications must be filed in written form with the City Clerk prior to the bid opening at 2:30 p.m., Tuesday, November 5th, 2013. Bidders may obtain further information, bid proposal forms, and specifications from the Vehicle Maintenance Division (406) 552-6387. The City reserves the right to reject any and all bids and if all bids are rejected, to re-advertise under the same or new specifications, or to make such an award as in the judgment of its officials best meets the City's requirements. The City reserves the right to waive any technicality in bidding which is not of a substantial nature.

*** The City reserves the right to determine the significance of all exceptions to bid specifications. Products or services that do not meet bid specifications must be clearly marked as an exception to the specifications. Vendors requesting inclusion or pre-approved alternatives to any of these bid specifications must receive written authorization from the Vehicle Maintenance Superintendent a minimum of five (5) working days prior to the bid closing.
Bid Security of 10% of bid (% of dollars - company or personal checks not acceptable security) is hereby enclosed, as our bid for selling the City of Missoula one (1) single axle dump truck, bid security will be increased to include equipment options or additional options available in these specifications. The bid security shall identify the same firm as is noted on the bid proposal forms. We understand that a penalty of $25.00 per day and/or forfeiture of bid security may result from exceeding the delivery date bid by vendor.

Submitted by: Company

Authorized Signature: Name and Title

Date: