

City of Auburn, Maine

"Maine's City of Opportunity"

Financial Services

September 18, 2014

Dear Bidder:

The City of Auburn is accepting written Bids for the Auburn Public Works Department for One (1) 2014 Single Axle Dump Truck. The City reserves the right to accept or reject any or all Bids in whole or in part and to waive any informality the City may determine necessary. The City also reserves to itself the exclusive right to accept or reject any Bids when it is deemed by the City to be in its best interest. The City of Auburn is governed by Title 1 M.R.S.A. § 401-410, otherwise known as the Freedom of Information Act, which considers bid specifications as public documents. In awarding any Bid, the City may consider, but not be limited to, any of the following factors: Bidder qualifications, price, experience, financial standing with the City, warranties, references, bonding, delivery date, and service of Bidder. Successful Vendors/Contractors shall be current on all amounts due to the City of Auburn prior to the City entering into any contract agreement. All bids must include FOB to Auburn, Maine unless otherwise specified.

Bids will not receive consideration unless submitted in accordance with the following instructions. Please mark sealed envelopes plainly: **"2014 Single Axle Dump Truck– Bid #2015-006."**

Questions regarding this Request for Bids should be directed to Kevin Doyle, Operations Manager, at (207) 333-6601, ext. 2159 or Derek Boulanger, Facilities Manager/ Purchasing Agent, at (207) 333-6601, ext. 1135.

Please submit your Bid to the City of Auburn by 2:00 p.m. October 2nd, 2014. **Bids must be delivered to Derek Boulanger, Facilities Manager/ Purchasing Agent, 60 Court Street, Auburn, Maine 04210** on or before the date and time appointed. No Bids will be accepted after the time and date listed above.

Sincerely,

Derek Boulanger
Facilities Manager/ Purchasing Agent

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CONDITIONS AND INSTRUCTIONS TO BIDDERS

1. Bidders shall use the enclosed bid form for quotations. Whenever, in bid forms, an article is defined by using a trade name or catalog number, the term "or approved equal", if not inserted, shall be implied.
2. Submit a separate unit price for each item unless otherwise specified in the bid request. Award will be made on a basis of each item, or as a group, whichever is in the best interest of the City. Prices stated are to be "delivered to destination".
3. Bid proposals must be completed in full, in ink and must be signed by firm official. Bid proposal **must be notarized** prior to bid being sealed and will be disqualified if not notarized. Bids may be withdrawn prior to the time set for the official opening.
4. Bids will be opened publicly. Bidders or representatives may be present at bid opening.
5. Awards will be made to a responsible bidder, considering the quality of the materials, date of delivery, cost which meets specification and is in the best interest to the City of Auburn.
6. All transportation charges, including expense for freight, transfer express, mail, etc. shall be prepaid and be at the expense of the vendor unless otherwise specified in the bid.
7. The terms and cash discounts shall be specified. Time, in connection with discount offered, will be computed from date of delivery at destination after final inspection and acceptance or from date of correct invoice, whichever is later.
8. The City is exempt from payment of Federal Excise Taxes on the articles not for resale, Federal Transportation Tax on all shipments and Maine Sales Tax and Use Taxes. Please quote less these taxes. Upon application, exemption certificate will be furnished with the Purchase Order when required.
9. Time of delivery shall be stated. If time is of the essence, the earliest date may be a factor in the bid award. Trucks from the truck manufacturer not delivered within 5 days of delivery date to the plow builder will be deemed late and assessed a penalty fee of **\$250 per day** for every day beyond stated date of delivery. Once delivered complete and on time to the plow builder the truck manufacture will have met the deadline clause. Completed fully serviced and ready for plow duty from the Plow Builder not delivered within 5 days of the delivery date to the City of Auburn Public Works Department will be deemed late and assessed a penalty fee of **\$250 per day** for every day beyond the date of delivery. The truck manufacturer and plow builder must be in constant contact to avoid all delays, issues that might arise with the build and keep the City of Auburn well informed of the progress of the build. Ultimately, once the plow build begins it shall be the sole responsibility of the Plow Builder to handle all issues and problems that might arise with the completion of the fully serviced and ready for plow truck operation without exception. Any such incidents such as company strikes will not be taken into consideration and will not be able to move out the delivery.
10. No contract may be assigned without the written consent of the Finance Director or her designate. The contract shall not be considered valid until a purchase order has been issued to the successful bidder.
11. Please state **"2014 Single Axle Dump Truck– Bid # 2015-006"**, on submitted sealed envelope.
12. The City of Auburn reserves the right to waive any formality and technicality in bids whichever is deemed best for the interest of the City of Auburn.

GENERAL CONDITIONS

1. **Equal Employment Opportunity**

The City of Auburn is an Equal Opportunity Employer and shall not discriminate against an applicant for employment, and employee or a citizen because of race, color, sex, marital status, physical and/or mental handicap, religion, age, ancestry or natural origin, unless based upon a bona-fide occupation qualification. Vendors and contractor or their agents doing business with the City shall not violate the above clause or the Civil Rights Acts of 1964. Violations by vendors shall be reviewed on a case-by-case basis and may mean an automatic breach of contract or service to the City of Auburn.

2. **Save Harmless**

The Bidder agrees to protect and save harmless the owner from all costs, expenses or damages that may arise out of alleged infringement of patents of materials used.

3. **Subcontracting**

The Bidder shall not subcontract any part of the work or materials or assign any monies due it without first obtaining the written consent of the municipality. The Bidder is responsible for all approved sub-contracted work. The Bidder is responsible for managing all aspects of sub-contracting work. Neither party shall assign or transfer its interest in the contract without the written consent of the other party. **All completed plow trucks with associated plow equipment shall be built exactly the same without exception** so as to keep all components interchangeable from one unit to the next including all trucks, dump bodies, plow equipment, hydraulics, electrical, and various materials to make the unit fully operational thus maximizing up time for municipal use.

4. **Warranty**

The Bidder warrants that all work will be of good quality and free from faults and defects, and in conformance with the specifications. All work not so conforming to these standards may be considered defective. The Bidder agrees to be responsible for the acts and omissions of all of its employees and all subcontractors, their agents and employees, and all other persons performing any of the work under a contract with the Bidder. If these specifications, either in whole or in part, do not meet all Federal and State of Maine DOT and ICC mandates it shall be the responsibility of the successful bidder to bring specifications into compliance prior to awarding bid.

BID FORM
Due Thursday, October 2nd, 2014

To: City of Auburn
Derek Boulanger,
Facilities Manager/ Purchasing Agent
60 Court Street
Auburn, ME 04210

The undersigned individual/firm/business guarantees this price for thirty days (30) from the bid due date. The undersigned submits this proposal without collusion with any other person, individual, or firm or agency. The undersigned ensures the authority to act on behalf of the corporation, partnership or individual they represent; and has read and agreed to all of the terms, requests, or conditions written herein by the City of Auburn, Maine. By signing this bid form, the firm listed below hereby affirms that its bid meets the minimum specifications and standards as listed above.

Signature _____ Name (print) _____

Title _____ Company _____

Address _____

Telephone No. _____ Fax No. _____

Email Address: _____

STATE OF MAINE
_____, SS. Date: _____

Personally appeared _____ and acknowledged the foregoing instrument to be his/her free act and deed in his/her capacity and the free act and deed of said company.

Notary Public

Print Name

Commission Expires _____

2014 SINGLE AXLE DUMP TRUCK WITH PLOW SPECIFICATIONS

SPECIFICATIONS FOR: One (1) With the option to purchase additional units > 2014 DUMP TRUCK 41,000 G.V.W. WITH 7CY SIDE DUMP BODY, TOWER ASSEMBLY, PLOW, WING AND WET SYSTEM, GROUND SPEED CONTROL

Trade ins: (trade-ins will be available and transacted on date of delivery of fully operational new trucks that have passed an inspection by City of Auburn Staff.)

- One (1) 2000 International 12 cy Dump truck to include / front plow / wing gear / (where is, as is, no implied guarantee at time of trade-in.)
- One (1) 2005 International model 7400 recycling truck . (where is, as is, no implied guarantee at time of trade-in.)

(FAILURE TO ANSWER ALL QUESTIONS COULD LEAD TO REJECTION OF BID)

	DUMP TRUCK MANUFACTURER REQUIREMENTS	Yes	No	Var.
1	315 HP diesel engine with wet sleeved cylinder bores			
2	a. 315 HP min 2000 RPM at flywheel, 950 lb-ft Torque @1200 RPM, 2200 RPM Governed Speed			
	b. Cold starting equipment intake manifold electric grid heater with engine ECM control			
	c. <u>Extended life</u> powder coated metal oil pan with magnetic engine oil drain plug			
	d. Electric governor			
	e. Fan Drive (Horton Drive Master Polar Extreme) Direct drive type, two speed, with residual torque device for disengaged fan speed			
	f. Block heater, Phillips 120 volt/1250 watt with “Y” cord from socket in standard location			
	g. Block heater socket receptacle type mounted below driver’s door			
	h. Throttle Hand Control for engine speed control, electronic, stationary, variable speed, mounted on steering wheel			
3	a. Auxiliary harness 3.0’(three feet) for auxiliary front head lights and turn signals for front plow applications			
	b. Accessory wiring for Road Speed Wire coiled under the instrument panel for customer use			
	c. Switch, auxiliary accessory control for wiring in roof, with maximum of 20 amp load with switches in instrument panel			

4	a. Radiator HD – radiator will be adaptable to a front pump drive from the engine			
	b. Antifreeze min 34 degrees below zero – conventional antifreeze, low coolant level with audible alarm			
	c. Aluminum cross flow series system: 1230 square inch core and 650 square inch charge air cooler and 345 square inch low temperature radiator with transmission oil cooler			
	d. Deaeration system with surge tank			
	e. Radiator hoses heavy duty commercial rubber			
	f. Hose clamps, radiator hoses Gates shrink band type; thermoplastic coolant hose clamps			
5	Air compressor min. 15 cubic feet per minute air supply line Naturally Aspirated			
6	a. Alternator (Leece-Neville BLP2361H, or equal Delco Remy)12 volt 185 AMP capacity min., Pad mount, with remote voltage sensor, 1,350 watts (brushless type)			
	b. Starting motor Delco Remy 38MT Type 300 or approved equal, 12 volt			
7	Aluminum Fuel tank mounted left side under cab, non polished capacity min. seventy five (75) gallons with a lower step, fuel tank straps bright finish stainless steel			
8	a. Twelve (12) volt system with two (2) 12-volt HD batteries with min. 1800 cold cranking amps, mounted on right side; battery box frame mounted under the cab and accessible without unbolting equipment. Must provide clean CA. Battery disconnect switch, Joseph Pollak 51-315 or approved equal positive type, lever operated, cab mounted factory installed only. Battery Indicator Warning green BATTERY ON indicator mounted on left side of instrument panel to be used with Factory installed battery disconnect switch			
	b. Battery box steel with aluminum cover, MUST provide clean CA			
	c. Data link connector for vehicle programming and diagnostics in cab			
	d. Fuses, electrical SAE blade type			
	e. Hazard switch push on/push off located on top of steering column			
	f. Headlight dimmer switch integral with turn signal			
	g. Headlights (2) long life halogen for two light system, sealed beam, round, with chrome plated bezels			
	h. Jump start stud located on positive terminal of outermost battery.			
	i. Parking light integral with front turn signal and rear tail light			
	j. Running light (2) daytime, with head lights			

	k. Starter switch electric, key operated			
	l. Stop, turn, tail and back up lights dual, rear, combination with reflector			
	m. Turn signal switch self cancelling for trucks			
	n. Turn signals front include reflectors and auxiliary side turn signals, solid state flashers, flush mounted			
	o. Wind shield wiper switch 2 speed with wash and intermittent feature (5 pre-set delays) integral with turn signal lever			
	p. Windshield wipers single motor, electric, cowl mounted			
	q. Windshield wiper speed control force wipers to slowest intermittent speed when park brake is set and wipers left on for a predetermined time			
	r. Clearance /marker lights (5) truck lite amber LED lights, flush mounted on cab or visor/sunshade			
	s. Test exterior lamps Pre-trip inspection will cycle all exterior lamps except back-up lights			
	t. Headlights on with wipers, headlights will automatically turn on if windshield wipers are turned on			
9	Low oil and high temperature electronic engine default and engine shut down switch, factory installed, without substitution, with audible alarm. Fully electronic engine integral shutdown protection system.			
10	Fuel filter, spin on type. Secondary fuel filter mounted on engine and easily accessible for immediate access by maintenance personnel.			
11	Fuel/water separator spin on type mounted on frame in an easily accessible location, factory installed with thermostatic fuel temperature controlled electric heater and filter restriction/change indicator, must include standard equipment water-in-fuel sensor			
12	Engine exhaust shall include a horizontal muffler mounted under cab above frame rails with vertical stack pipe and a chrome plated 90 degree tip			
13	Air dryer – Bendix AD-9 with heater or equal mounted on the inside of frame			
14	Cooling fan drive must be automatic on/off type, air operated; Horton type or approved equal.			
14a	Air Cleaner/Air filter canister single element, with integral snow valve and in-cab controls.			
	FRONT AXLE	Yes	No	Var.
15	a. Meritor MFS-18-133A or Spicer Wide Track 18,000 lb. min. capacity I-beam type with dual power steering box, left side			
	b. Front springs parabolic, taper leaf, with shock absorbers			
16	a. Springs 9,000 lbs. min. capacity left side; 9,000 lbs. min. capacity right side with spring pins rubber bushings, maintenance free			

	b. 4" wide leaf each side plus extra leaf right side to compensate for Plow Wing			
	c. Front auxiliary air bag right side only 2,000 lb., driver controlled			
17	Tires: (2) 16 ply, load range H, radial type 12R22.5 Steer			
18	Wheels: Steel, white powder coated paint, 10 hole bud HD hub piloted 8.25"x22.5			
19	Wheel bearing lubed with synthetic gear oil			
	REAR END AND AXLE	Yes	No	Var.
20	Rockwell, Meritor RS-26-185, or approved equal single reduction, standard track 26,000 lbs. capacity minimum with a gear ratio of 6.83 axle ratio, driver controlled locking differential with synthetic oil			
21	Tires: (4) 16 ply radial snow tires 12R22.5 drive			
22	Wheels: Steel, white powder coated paint, 10 hole bud HD hub piloted 8.25" x 22.5"			
23	Springs 15,500 lb min. leaf with 2,250 lb Over Load leaf with grease fitting type, min. 4" wide.			
23a	Air operated differential locker, axle lube filled with synthetic oil			
	TRANSMISSION	Yes	No	Var.
24	a. Automatic Allison World, RDS 4500, close ratio, 6 speed, with double overdrive, on/off highway, oil level sensor included, with PTO provision, external transmission cooler; Allison transmission filled with synthetic fluid			
	b. Transmission shift control Allison push button type for Allison 3000 & 4000 series transmission			
	c. Transmission TCM location in cab			
	FRAME	Yes	No	Var.
25	a. Reinforced capable of having snowplow mounted extended 20 inches past hood of truck. Extending 20" beyond front of cab for snow gear connections.			
	b. Cross member, intermediate (1) additional, 5 piece, located 9" back of cab			
	c. Steel Front Bumper, powder coated gray color, swept back			
26	Premium steel 120,000 lbs P.S.I. heat treated extra high tensile strength alloy steel; must also have a R.B.M. rating of 3,800,000 inch lbs. Double "C" Channel Frame. Corrosion resistant coating between rails of double "C" channel frame			
27	Wheel base – 177" - cab to axle 108" min. (Frame must be long enough to accommodate the body with the stack exhaust, wing tower assembly, 10' dump body and calcium tank), "set forward axle" only style accepted.			
28	Tow hooks – (2) front and (2) rear Mounted in the pintle plate in the rear, and on the frame on the front.			
29	CA <u>Note</u> : All truck manufacturers <u>must</u> consult with plow equipment builders to ensure wheel base is as short as practical to give the best turning radius possible without			

	compromising the integrity of the finished product and meet all Federal and State of Maine DOT and ICC requirements.			
	PINTLE PLATE (from plow body builder)	Yes	No	Var.
30	From Plow/Body builder: Pintle hook 15 ton (PH 15 <u>or equivalent</u>) from plow body builder. Must include two (2) “D” rings. Glad hands 2’ (24 inches) from floor to jaw of pintle hook From Truck Manufacturer: Electric trailer lighting hookup (7 pin not flat Pollack) with electric trailer brake controller to operate electric trailer brakes. Must include tail lamps and plate lamp, with EMO lights remounted into the Pintle plate.			
30a	Trailer connection socket 7-way (truck builder), mounted at rear of pintle plate (body builder), wired for turn signals combined with stop, compatible with trailers that use combined stop, tail, turn lamps			
	CAB	Yes	No	Var.
31	a. Premium Cab (steel construction only, no plastic or fiberglass) with premium trim w/thermo insulation on floor & firewall to make cab 72db compliant or less (lower than 72 as in 71db), with minimum width of 68” height 56”, depth 51” from back of cab to fire wall			
	b. Cab interior trim premium			
	c. HVAC fresh air filter			
	d. Cowal tray lid			
32	Hood (front end tilting with stationary chrome grille) and fenders (with rubber fender extensions) must be made of fiber glass throughout from the factory, no after market, dealership or body shop alterations, absolutely no plastics			
33	Hood must also include butterfly-type access doors (2); the butterfly doors must be large enough and placed to allow for removal of the air filter element and checking / filling of all fluids. NO less than 24” openings on both sides. Able to be accessed from ground.			
34	Highest output capacity heater and defroster with air conditioning – 30,000 BTU min.			
35	a. Windshield, heated single piece			
	b. Windshield wiper switch, electric 2-speed with wash and intermittent feature with 5 pre-set delays: minimum reservoir capacity will be 1 ½ gallons			
36	Mirrors (2) Lang Mekra styled rectangular, 7” x 16” & integral convex both sides, 102” inside spacing, breakaway type, heated heads thermostatically controlled, power both sides, clearance lights LED, bright finish heads and brackets stainless steel or commercial hard plastic mirrors (no painted steel) factory installed, no substitutions – one (1) each side of cab			
37	Two (2) visors, ceiling must have storage pockets and two way radio holder			
38	AM/FM radio with CD player			
39	Bostrom air ride high back cloth driver side with (2) arm rests; passenger side conventional seat with (2) arm rests; both with shoulder/lap belts, passenger seat must have storage area.			
40	Throttle and service brake pedals <u>MUST BE mounted</u> to the firewall with at least 2 ½” of clearance between pedals, no pedals to be mounted on floor			

41	Two (2) electric horns one with high tone, the other with low tone, one air horn, must be equipped at the factory – no after market or dealer add-on			
	a. Cab shall be equipped with Electronic messenger center with find/troubleshooting capability			
	b. Telescoping and tilt steering wheel, 2 spoke, 18” diameter factory installed Steering gear (2) Sheppard M-100/M-80 dual power factory installed			
	c. Exterior Visor with lighting			
	d. Grab handle chrome, tower bar type with anti-slip rubber inserts for cab entry mounted left side only at “B” pillar			
42	Triple Power port, cigarette lighter type, 12 volt			
43	Air Ride Cab (cab rear suspension air bag type) mounted to frame in two or more locations factory installed with shock and air ride system. No rigid or bolted down cabs allowed			
	BRAKES	Yes	No	Var.
44	a. Full air 100% s-cam type with dust shields on all axles, maxi-type hand parking brake for straight truck applications			
	b. Drain valve twist type			
	c. Air pressure gauge (2) Air 1 and Air 2 gauges located in instrument cluster			
	d. Parking brake control, yellow, located on instrument panel			
	e. Parking brake valve for truck			
	f. Quick release valve (Bendix only) on rear axle for Spring Brake Release: One for 4x2			
	g. Spring Brake Modulator Valve R-7 for 4x2			
	h. Brake system to be sufficient to make rear axle 26,000 lb. GVW as a minimum			
	Rear brake shoes 16.5”x7.0”			
45	Type 20 front chambers type (Haldex GC3030LHDHO) 30/30spring brake - rear chambers, long stroke			
46	Self adjusting automatic slack adjusters front and rear, Rockwell only, factory installed			
47	Air glad hands under rear frame (well protected) installed behind and thru Pintle Plate, not beside it. Their shall be no excess hose hanging and glad hands shall be protected from damage or debris by a steel fabricated fixed hood over each glad hand without interfering with the operation of the glad hand			
48	a. Air supply control valve for trailer, switch mounted in dash; all brake lines color coded			
	b. Air compressor Bendix Tu-Flo 550 15.0 CFM capacity			
	c. Air tank location (2), two mounted outside right rail, under cab, on step mounting brackets.			

49	a. Front brake shoes air cam 16.5" x 6" to include Haldex 24 sqin long stroke brake chambers			
	b. Trailer connections four wheel with hand control valve and tractor protection valve for straight truck			
	c. Manual drain valve with pull chain for air tank			
	d. Drain valve mounted in wet tank			
	e. Air brake ABS, Bendix anti lock brake system, full vehicle wheel control system, 4 channel			
	f. Air dryer Bendix AD-9 only with heater			
	g. Air dryer location inside left rail, back of cab			
GAUGES		Yes	No	Var.
50	Volt meter			
51	Engine oil pressure (electric)			
52	Coolant Temperature (electric)			
53	Air pressure			
54	Tachometer (electric)			
55	Odometer/Hour meter/Fuel Gauge			
56	Transmission temperature			
	a. Warning system low fuel, low oil, high engine coolant temperature and low battery voltage, visual and audible. Air cleaner restriction gauge with black bezel mounted in instrument panel			
LIGHTING		Yes	No	Var.
57	All lights and reflectors required by Federal and State of Maine DOT and ICC. Shall be installed at factory, (Body/Plow builder to install marker lamps on rear corners and rear ID lights must be LED).			
58	Chassis stop/tail/turn Truck Lite #4027			
59	All lights shall be LED type, Cab & Chassis. (Body/Plow builder rear facing SRB lights to be LED strobe and standard STT installed in rear corner post of body, recessed. Front strobes LED installed in headboard in front at a 45% angle recessed.			
ELECTRICAL		Yes	No	Var.
59a	Body Builder Wiring back of cab at left frame to include sealed connectors for tail/amber turn/marker backup/accessory power/ground and sealed connector for stop/turn			
59b	Switch, Body Circuits, MID for body builder, 6 (six) Momentary switches in instrument panel; one power module with 6 (six) channels, 20 Amp Maximum per channel, 80 amp			

	maximum output, switches control power module through multiplex wiring, mounted in cab behind driver seat.			
	BACKUP ALARM	Yes	No	Var.
60	To meet Federal and State of Maine DOT and ICC laws Bal Kamp #730-1067, 102dBa minimum			
	OTHER	Yes	No	Var.
61	Dash mountable 12.5 Htz switchable, 100 watt VHR, reprogrammable mobile unit, narrow band capable. Compatible with Motorola M1225 radio. Installed by Bidder using accessory power.			
61a	8 inch convex mirror mounted to front lift post.			
	PAINT	Yes	No	Var.
62	Omaha orange; top of engine hood to be <u>flat black</u>			
	SHOP MANUALS	Yes	No	Var.
63	<u>One (1)</u> Complete hard copy shop repair manual and One (1) CD manual for EACH OF THE FOLLOWING cab/chassis to include engine, transmission and differential (rear end), dump body, plow gear, wetting system, and plow controls.			
64	<u>One (1)</u> Complete hard copy Parts manual and One (1) CD manual for EACH OF THE FOLLOWING cab/chassis, dump body, plow gear, wetting system, and plow controls.			
65	<u>One (1)</u> Hard copy Operating manual and One (1) CD manual for EAH OF THE FOLLOWING cab/chassis, dump body, plow gear and wetting system, and plow controls.			
	WARRANTY	Yes	No	Var.
66	Minimum Warranty 5 years, 100,000 miles and MUST COVER DIANOSTIC'S 100%			
67	Optional extended warranty, 8 years or 150,000-miles MUST COVER DIANOSTIC'S 100%			
	PLOW BUILDER REQUIREMENTS	Yes	No	Var.
	<u>HEAVY DUTY RUGGED SERVICE SIDE DUMP BODY</u>			
68	Heavy Duty 205,000 lb psi steel body serving as spreader or dump, transformed by a hydraulic tilting floor, <u>or approved equal</u> . Shell of body to be constructed from AR450 steel The understructure of the body shall consist of two 10" C channel longitudinal and I-beam cross members spaced 12" on center, and stainless steel corner posts			
69	Sides, chain cover, tailgate, headboard – 3/16" inch thick 205,000 psi AR450 steel. Flush mount chain cover to be simple design similar to present Tencos. Piano type hinge on chain cover unacceptable.			
70	Floor – 1/4" inch thick AR450 Steel (205,000) P.S.I. minimum. I would like to see this read "or equivalent". Can we use the standard Rockwell hardness scale			
71	Min. 7 cubic yard capacity; 10 ft length. 6.1 cubic water level			

72	27" height without side board, min. bottom of pocket			
73	Outside length of 14'			
74	60"-inch tailgate height.			
75	Cab shield 24"			
76	Tailgate constructed of 205,000 psi steel			
77	Tailgate top ears made of 1/4" AR450 steel min.			
78	Tailgate will be double acting design and lay flat with the floor when in the horizontal position			
79	Tailgate top and bottom pins made of 1 1/4" cold roll steel			
80	Tailgate shall be air operated latch control inside cab			
81	Tailgate shall have one coal door on drivers side of body			
82	Dump body must be mounted to frame square, level and balanced according to industry specifications.			
83	Cut out in rear apron for access to chain and sprockets, slotted discharge box with split flange for ease of access to gear box, grease adjusters for chain adjustment, honeycomb floor to prevent scalloping, Full remote extended grease fittings for all grease maintenance.			
84	Donovan EL1500, or approved equal, electrically operated load cover – installed w/asphalt tarp and Hold down hoop. Require removable arms.			
85	Mud flaps mounted to dump body in front and rear of all tires			
86	Full Remote Grease Systems using 3000PSI hydraulic hoses, installed in min. of 2 junction boxes one mounted on each side of body. The entire package shall have a central lube system.			
87	Ladder mounted driver side dump body. Welded to body towards front. Telescoping design with pin lever for operation. Lowest step even with dump body bottom when telescoped, two steps below body bottom when extended. Self contained unit.			
	HOIST	Yes	No	Var.
88	Front telescopic hoist single acting, 30 ton power up with 3 year warranty.			
	FRONT HITCH	Yes	No	Var.
89	Heavy duty tilting front hitch with cable front post. With 6 degree set back of angle. Fully welded.			
90	Equivalent to Tenco Model H345-FFC52 or approved equal. With Timbren block system for wing trip.			
	ATTACHMENT PLATES	Yes	No	Var.
91	There shall be two side plates extending from the chassis frame rails to the bottom of the hitch			
92	Side plates shall be 3/4" thick for single axle trucks.			

93	Drop plates of ½” shall extend from the front of the chassis frame rails to the side plates and serve as the truck portion of the tilting front hitch.			
94	Pinned to each side of the drop plates are 3 ½” x 3 ¼” x ½” angles to serve as the hitch portion of the tilting hitch.			
95	Tilting angles shall be welded to the structural tubes of the hitch or approved equal.			
96	Hitch shall tilt forward for engine access when two top pins are removed.			
97	Hitch shall be removable when all four hitch pins are removed. Front OEM bumpers must be able to be used for summer operation			
	HITCH FRAME	Yes	No	Var.
98	Hitch frame constructed of two horizontal tubes and two vertical angles			
99	Horizontal tubes are to be 3” x 5” x 3/8” structural tubes. Vertical angles to be 3x4x3/8”.			
100	The base end of the vertical angles, in conjunction with a 3 ½” x ½” bent flat, shall have a provision for three pinning heights for front plow attachment			
101	Top of verticals shall incorporate a 3” x 3” x 3/8” steel angle to serve as a support for the plow lift hinge			
102	The plow lift hinge shall be flame cut from ¾” steel plate. The lift cylinder shall have a stroke of 12” and be double acting.			
103	Cylinder tube: 4” diameter			
104	Cylinder shaft: 2” diameter			
105	All Cylinders shall be nitrated with a minimum of 3 year warranty.			
106	Base of cylinder shall be supported by a 3” x 4” 3/8” angle mounted on the top horizontal tube. Hitch frame shall incorporate an integral 10-gauge bumper.			
	FRONT POST	Yes	No	Var.
107	Front wing post shall contain a ¾” sliding plate to center lift the nose of the wing			
108	The sliding plate shall be raised and lowered by a 36” double acting cylinder			
109	The cylinder shall provide for 52” of slide travel. The cylinder shall raise and lower the front slide through use of ½” cable and sheave arrangement			
110	The cylinder shall be located behind the front post for protection from damage.			
111	Cylinder tube= 2 ½” diameter. Shaft = 1 ½” diameter. An 8”convex mirror will be mounted in a location that allows the driver to see the wing and side of truck but is out of harm’s way while in operation			
112	Cylinder shall be nitrated with a minimum of 3 year warranty.			
113	Front post shall be manufactured from 6” I-beam @ 12.5lbs/ft. Full welded seam on all beams with a 6 degree setback.			
114	The I-beam shall be welded to a minimum of three attachment points extending from the front hitch. Bottom two attachments are to be a minimum 3” x 5” x 3/8” structural tub reinforced with 3/8” plate.			
115	I-beam post to be welded in 3/8” brackets at end of each tubular brace.			

116	Post is to be further supported by a 3" x3" x 3/8" upper brace			
	FINISH	Yes	No	Var.
117	All steel to be sandblasted, primed with an epoxy primer and painted black			
	MISC. FRONT POST	Yes	No	Var.
118	One set of Halogen plow lights shall be included. ICC light package in accordance with DOT. Warranty of 1 year.			
	REAR WING TOWER	Yes	No	Var.
119	Shelving type cable rear wing tower			
120	Rear tower post height no less than 60 inches.			
121	Rear wing post shall contain a 3/4" sliding plate to lift the wing arm from shelving			
122	The sliding plate shall be raised and lowered by a 60" stroke double acting cylinder			
123	Cylinder tube: 2 1/2" diameter. Shaft: 1 1/2" diameter. Cylinder to be nitrated with a 3 year warranty.			
124	Rear wing post shall have a two point attachment for top and bottom push arm attachments. and shall be perpendicular, and straight to the wing.			
125	Rear post shall be manufactured from 8" I-Beam @ 23 lbs./ft.			
126	A steel plate formed in a semi-circle or angle to be installed on post mechanism so as to face parallel to the back of the wing blade and utilized the full strength of the rear post.			
127	Attach tower assembly to truck frame with a minimum 4" x 6" x 1/2" angle welded to the outside of the frame.			
128	Base of post shall be braced with two angle irons, 4" x 4" x 3/8" and 3" x 3" x 3/8" running from the base of the semi-circle or angle to the chassis mounted angle iron. Welded.			
	WING ARMS and LIFT CYLINDER	Yes	No	Var.
129	Push arms are to be adjustable in length to provide variable cleaning path widths , and shall be mounted to be straight when in a lowered position			
130	Upper arm inner shaft: 2 3/4" diameter			
131	Upper arm outer tube: 3" diameter schedule 80 pipe.			
132	Lower arm inner shaft: 2 1/4" diameter			
133	Lower arm outer tube: 2 1/2" diameter schedule 80 pipe.			
134	Truck side ends to have "U" shaped receiver and universal joints			
135	Wing side ends pin into receiver on backside of wing moldboard			
136	Bottom arm contains a compression spring mounted between the tube and the shaft			

137	Wing arm lift cylinder is located behind the rear post and has a stroke of 27"			
138	The cylinder shall utilize a series of pulleys and cable for raising and lowering rear of wing.			
139	All cylinders to be nitrated with a 3 year warranty.			
140	Cylinder tube: 3 ½" diameter			
141	Cylinder shaft: 1 ¾" diameter			
	FINISH	Yes	No	Var.
142	All Steel to be sandblasted, primed with epoxy primer and painted black.			
	MISC.	Yes	No	Var.
143	Parts manual and maintenance manual to be provided			
144	All components shall carry a ONE-YEAR warranty.			
144 a	carbide and cover blade put on the wing and plow			
	HYDRAULIC	Yes	No	Var.
145	Heavy Duty load sensing piston pump, 36 GPM @ 1200RPM, with low oil sensor installed in the Hyd tank and automatic shutdown valve with override switch installed in dash, stainless steel ½" hydraulic lines plumbed to front and to rear, 40 gallon frame mount tank with sight gauge and filter, Walvoil electric spool valves to operate all functions and electric Hydraforce sander valve with separate chain and spinner cartridges, or approved equal. <u>Stainless steel lines</u> front and rear for all Hyd components, with short 3 to 4 ft, 3000 psi hyd line to connect implements and are to be installed in such a manner as to not block or interfere with bolt on engine components, transmission components or any other devices or truck/plow components that would require maintenance during its service with the City. Minimum 36 GPM load sense pump and list a maker of pump...Eaton ,Rexroth etc			
	All front Hyd attachments will have high pressure male and female fittings with covers and shall be mounted on a plate attached to the front of the frame as to make it easy for the gear to installed and uninstalled.			
	SHOP MANUALS	Yes	No	Var.
146	<u>One (1) Complete hard copy shop repair manual and One (1) CD manual for EACH OF THE FOLLOWING</u> dump body, plow gear and wetting system			
147	<u>One (1)Complete hard copy Parts manual and One (1) CD manual for EACH OF THE FOLLOWING</u> dump body, plow gear and wetting system			
148	<u>One (1) Hard copy Operating manual and One (1) CD manual for EACH OF THE FOLLOWING</u> dump body, plow gear, wetting system and associated software			
149	All hydraulic cylinders including hoist shall have a five year warranty			
	OTHER EQUIPMENT	Yes	No	Var.

150	Cirus Uni-grip 620 Electric joystick control of latest model and design, or approved equal, with armrest to operate all functions proportionally hydraulically actuated includes hydraulically trimmed microprocessor, safety trigger for all functions, LCD display for operator, and programmable buttons for up to 24 functions of hydraulics. Installed ergonomically for driver with adjustments both up and down and tilt and turn. Joy stick must be ready for service when delivered.			
151	Cirus Spreadsmart Rx auto sander control system, or approved equal, with wireless drive by base station and data access, gps, prescription spreading, capable of no Speedo mode for operation without rate sensor, self diagnostics and windows based program, with road temperature sensor mounted in dash, flow meter, rate sensor, cable connectors to be IP68 rated at rate sensor and hydraulic connections, All electric controls and computers for sander control functions shall include base station installation and a minimum of 8 hours training by the factory authorized dealer located in the State of Maine and by a manufacturer factory representative. Yearly refresher training provided at our location. I would like to see the temp sencer mounted on the dash. Units must be calibrated for sand, salt and cacl2 when delivered.			
152	Option: Cirus MultiStix Contols in lieu of Unigrip 616 controls Option			
153	Closed circuit camera system – Clarion CC-8516B or equal camera system must be weather resistant. Camera should have a protective box around it and an automatic lens guard to be mounted on the rear of truck. The b/w monitor will be mounted in the cab on a stand bolted to the floor and positioned so the operator can view it from his seat. Camera wired to reverse, on when in reverse.			
154	Auxiliary wiring such as switched and wiring shall be mounted in the cab with the switches next to the ignition switch, fuse box bunted next to O.E.M. fuse panel and the relay mounted on the rear cab wall All Plow gear Auxiliary wiring to be wired to builders box installed/mounted behind passenger seat, consult with truck manufacturer And label with wiring diagram.			
155	Six pre-wired electrical switches for body connection, consult with truck manufacturer			
156	Wiring Harness for plow headlights, consult with truck manufacturer			
157	All electrical wires color coded and numbered, consult with truck manufacturer			
158	Spare tire- (tire and rim) to be mounted and provided upon delivery, consult with truck manufacturer			
SPECIFICATIONS FOR SNOW PLOW EQUIPMENT				
	FRONT PLOW	Yes	No	Var.
159	Heavy Duty power reversing trip edge poly plow, <u>or approved equal</u> -compression springs for trip mechanism, torsion bar springs not acceptable			
	- Three piece trip edge, cable self leveling mechanism			
	- Two curb shoes			
	- 4: x 4” structural tube framing 3/8” thick			

160	Overall length 11 ft, height 42"with 300 Tenelene face.			
161	Clearing path @ 30 degrees: 9' 6"			
162	Moldboard constructed from no less than 10 gauge high strength carbon steel with cut outs to accept a polymer moldboard sheet			
163	Option for Tencoloc or equivalent			
164	Moldboard skin is high-density polymer (Tenelene) .300 thick with an orange front and black back. With a full length reinforced rubber snow deflector, that extends min .of 18 inches below the top of the plow			
165	Leading edge of moldboard shall be reinforced with a 1 ½" x 2 ½" x ¼" rectangular tube running the full length of the top of the moldboard.			
166	Moldboard reinforcement with no less than seven full-length 3/8" ribs. Bottom of ribs shall be welded to a 4" x 7" x ½" boxed hinged and spring support.			
167	Backer angle shall be minimum 4" x 4" x 3/4" thick A-35 angle iron with ½" gussets.			
168	Attack angle of moldboard is adjustable to 10, 15, and 20 degrees by the use of two adjusting braces.			
	PLOW TRIP MECHANISM	Yes	No	Var.
169	Trip mechanism shall be hinged with a minimum of seven-plate hinges flame cut from 3/8" steel. SINGLE piece trip hinges are not acceptable			
170	The hinges shall be located midway down the trip section. Top mount hinge locations are not acceptable.			
171	The trip sections shall have the ability to be both, one-section or three sections. And use 8 or 12 inch standard punch blades.			
172	The trip sections shall be reset, after hitting an obstruction, by six coil-springs mounted vertically behind the trip section. Horizontal torsion springs are not acceptable.			
173	Trip springs shall be 7/8" diameter wire and have a minimum of 8 coils			
174	Springs shall be attached from backer angle to mainframe via 2" diameter rods			
172	Each spring shall have two retainer holes for spring tension adjustments.			
	FRONT PLOW CUTTING EDGE	Yes	No	Var.
173	Moldboard shall be punched to accept 8" and 12" punched cutting edges			
174	Plow shall be complete with Black Cat "bull nose" carbide blades, cover blade curb shoes			
175	Two moldboard shoes shall be supplied and installed			
176	Tow curb shoes shall be supplied and installed. Plow will have a removable jack stand capable of raising and lowering plow			
	PUSH FRAME	Yes	No	Var.
177	Truss frame pins to moldboard with no less than four 1 ¼" diameter pins.			
178	Truss frame constructed from 4" x 4" x 3/8" wall square tubing			

179	The reversible A –Frame table shall be flame cut from ½” plate and shall be 9” wide and reinforced with 3/8” plate.			
180	The A-Frame shall pin to the truss with a 1 ½” diameter pin.			
181	Oscillating bar support plate constructed from a ¾” x 4” x 42” steel plate with stops made from steel dowels sandwiched between the oscillating bar and ¾” steel plates.			
182	Plow shall pin to hitch with two 1” ears on 30 ½ “centers. Option for Tencoloc or equivalent			
	REVERSING MECHANISM	Yes	No	Var.
183	Reversing shall be achieved with two double acting cylinders.			
184	Cylinders shall be 3” in diameter with a 1 ½” rod and 20” stroke.			
185	Cylinders shall have nitrated rods for corrosion resistance. Chrome plated cylinder rods are not acceptable.			
186	Cylinders shall be equal to Mailhot cylinders and a 3 year warranty.			
187	A built in cushion valve shall be provided for cylinder protection.			
	LIFTING DEVICE	Yes	No	Var.
188	Lifting device shall be pulley and cable design. Design shall allow plow to lift with minimum of list.			
	FRONT PLOW HITCH	Yes	No	Var.
189	Heavy-duty tilting front hitch with cable front post.			
190	- Heavy duty detachable full wing tower unit.			
191	- Tenco FFC52 cable front post, or approved equal			
192	- Power tilt and detach front hitch,			
193	-Tenco FRC60 cable rear post with curved rear armature to customize the angle of the rear post to be perpendicular to the push arms or approved equal.			
194	- Extra heavy duty wing arms with spot light mounted on wing post			
195	- Plow will come with cutting edges with carbide inserts and 5/8” cover blade			
196	- Punch pattern to be 3 / 3 / 12			
	SIDE WING ATTACHMENT	Yes	No	Var.
197	Heavy duty 11ft (10ft cutting edge) wing suitable for patrol or leveling operations. Cable operated.			
198	- Complete installation to chassis			
199	- Heavy-duty 3/16”steel moldboard			
200	- Five(5) full-length 3/8” horizontal reinforcements			

202	Back of wing shall incorporate integral float			
203	There shall be several places longitudinally at the back of the wing to allow the push-arms to be attached at the proper angle using straight on geometry, while in the down position			
204	Backer angle shall be a minimum 4" x6" x 5/8" thick A-36 angle iron with 1/2" gussets.			
205	Leading edge of moldboard shall be reinforced with a 3"x3"x 3/8" angle running the full length of the top of the wing.			
206	Leader shall be a 1" steel plate with two holes to accept a 1 1/4" bolt.			
	CUTTING EDGE	Yes	No	Var.
207	Moldboard shall be punched to accept both 8" and 12" punched cutting edges			
208	5/8" Carbide edges and 5/8 cover plate			
209	Plow shall be complete with 120" x8"x 5/8" cutting edge.			
210	Two moldboard shoes to be provided.			
	FINISH	Yes	No	Var.
211	All steel shall be sandblasted			
212	All steel shall be primed with an epoxy primer.			
213	Moldboard shall be painted Black on the face and backside.			
	WARRANTY	Yes	No	Var.
214	Wing shall carry a ONE-YEAR warranty			
215	Tenco electric calcium system, or approved equal, electrically operated with 60 gallon CACL2 tank bolted onto the passenger's side of the frame rail next to the fuel tank where clearance is best or (mounted below the headboard of the body on passenger side with APW authorization) and controlled by the sander control system. Tank to have sight glass built in for filling. Fill control on driver's side top. Drain valve driver's side bottom. Vent relief valve equal size to fill spout. Plow builder must consult Auburn Public Works for exact location, size of tank and configuration prior to installation.			
	MISC. WING	Yes	No	Var.
216	One parts manual and maintenance manual shall be provided			
	SPECIFICATIONS FOR A STROBE SYSTEM FOR HIGHWAY VEHICLE			
	CAB	Yes	No	Var.
217	The strobe light system for the cab shall consist of 1-12 volt LED strobe with independent switch to be located in cab. 2 Angled corner mount strobes			
	REAR STROBE LIGHT HEAD ASSEMBLIES	Yes	No	Var.

218	All lights shall be 12 volt, self-contained. Independent strobe switch to located in cab. The rear mounted head assemblies shall use stainless steel screws that screw directly into a nylon-mounting bracket to prevent seizing. Units that screw into a steel bracket are unacceptable since they corrode over time.			
	WARRANTY	Yes	No	Var.
219	To be cut into the rear post of dump body and recess mounted in Buyers triple oval steel box #LB3253. The three light groups shall be standard lighting not LED. and configured as follows: Top: strobe Truck Lite #60120Y; Middle: stop,			
	Turn, & tail Truck Lite #6050; Bottom: reverse Truck Lite #6060C.			
220	The strobe system shall be warranted by the manufacturer to the user directly, to be free of defects of material or workmanship for a period of two (2) years from the date of installation (five 5 years on the strobe power supply). Sample of this warranty must be provided with bid. All hardware, such as lenses etc., is understandably excluded from this warranty.			
	WARRANTY	Yes	No	Var.
221	Minimum Warranty 5 years, 100,000 miles and MUST COVER DIAGNOSTIC'S 100% on any and all equipment / systems installed by body company. All Warranty work will be inspected at APW			

BID PROPOSAL

The undersigned proposes to furnish one (1) Model Year 2014 41,000 G.V.W. Single Axle Dump Truck with Tower Assembly, Snow Plow equipment and other accessories in accordance with the Instruction to Bidders and Specifications, both of which are incorporated herein by reference. Please note: All completed units will be built exactly the same with the same components so as not to have any dissimilar units. All components will be interchangeable without the need to modify, fabricate or re-route hoses, wiring, hydraulic to make it fit.

One (1) MODEL 2014 DUMP TRUCKS 41,000 G.V.W. With Tower Assembly, Snow Plow Equipment \$ _____

Make and Model and Year: _____

Dump Body and Hoist \$ _____

Make and Model and Year: _____

Snow Plow Equipment \$ _____

Make and Model and Year: _____

Less Trades:

One (1) 2000 International Model 2554, 7cy center chain sanding dump body / front plow / wing gear #28 sander body (where is, as is, no implied guarantee at time of trade-in.) \$ _____

One (1) 2005 International Model 7400 Recycling truck 82 (where is, as is, no implied guarantee at time of trade-in.) \$ _____

Other Equipment:

A) Cirus Uni-grip 620 electric joystick or approved equal \$ _____

B) Cirus Spreadsmart Rx auto sander control or approved equal \$ _____

C) Clarion CC-8516B camera or approved equal \$ _____

D) Auxiliary wiring: \$ _____

Six pre-wired electrical switches for body connection

Wiring harness for plows headlights

All electrical wires color coded and numbered

E) Tencolocs or equivalent \$ _____

Total Other Equipment \$ _____

Make and Model and Year - Other Equipment: _____

Net FOB Auburn Highway Garage (Total Price) \$ _____

Delivery Date: _____

Please state additional cost for the following:

Additional cost if trucks come with Alcoa Aluminum Wheels per truck: \$ _____

Additional cost for (1) spare Aluminum wheel and steer tire as specified \$ _____

Additional cost for (1) drive Aluminum wheel & drive tire as specified \$ _____

Additional cost of one spare snow plow with cutting edges as specified: \$ _____

Additional cost of one spare wing with cutting edges as specified: \$ _____

Additional cost of spare push arms for wings as specified: \$ _____

Name of Company: _____

Signed by: _____

Print Name: _____

Title: _____

Address: _____

Telephone number: _____ Fax number: _____

Date: _____

e-mail: _____