

City of Waterville
DEPARTMENT OF PUBLIC WORKS
6 Wentworth Court
Waterville, Maine 04901-4892

TEL (207) 680-4744 FAX (207) 877-7532

**REQUEST FOR BIDS
DUAL AXLE CAB/CHASSIS ROLL-OFF
(64,000 GVW) & ACCESSORY EQUIPMENT**

DATE: August 22, 2019

INSTRUCTIONS TO BIDDERS

- 1. GENERAL:** The City of Waterville is accepting bids for a Dual Axle Cab / Chassis **(64,000 G.V.W.)** and Accessory Equipment meeting the specifications accompanying this document.
- 2. BID SUBMITTAL: Sealed bids** will be accepted by the Office of the Director of Public Works, 6 Wentworth Court, Waterville, Maine 04901 up to and including **11:30 AM, Tuesday, September 24th, 2019** at which time they will be publicly opened and read. All bids will be placed in a sealed envelope clearly marked **"Bid – Dual Axle Cab / Chassis (64,000 G.V.W.) Truck & Accessory Equipment"** in the center with the bidder's name and address in the upper left-hand corner. Bids not dated and time stamped by the Office of the Director of Public Works prior to the specified date and time stated above will be declared invalid and returned unopened.
- 3. WITHDRAWAL OR REVISION OF BID:** A bidder may withdraw or revise a bid after it has been received by the Office of the Director of Public Works, provided the request is made in writing or in person before the time set for bid opening.
- 4. BID AWARD:** Bid award, if the City determines to award, will be made within thirty (30) calendar days after bid opening, to the lowest responsible bidder whose bid fully complies with the requirements specified and contingent upon approval by the City Council. The City reserves the right to reject any and/or all bids without absorbing any liability against the City.
- 5. EVALUATION OF BIDS:** For purposes of evaluating the bids, in the event of any discrepancies on a proposal between an amount written out in words verses the same amount expressed in numbers, the amount written in words shall govern (if applicable). Similarly, unit prices shall prevail over extended totals. In the event of Additive Bid Items, the "low bid" shall be based upon the least total for the highest combination of bid items which may be awarded within the Control Amount (i.e. a predetermined budget amount to be disclosed at the time of bid opening). In the event that all Base Bids exceed the Control Amount, the "low bid" shall be based solely upon the lowest Base Bid submitted. Bidders shall examine and familiarize themselves with the Specifications and Bid Documents. The bidder shall in no way be relieved of any obligation to provide the product, service and/or equipment specified through error, mistake or omission.

6. **INTERPRETATION OF ADDENDA:** It shall be the bidder's responsibility to make inquiry as to any interpretation of the specifications or requirements of the participants. Any changes in the specifications shall be by written addenda.
7. **SPECIFIED QUANTITY:** One (1) Unit
8. **INVOICES AND PAYMENT:** Invoices shall be transmitted to the City of Waterville, 1 Common Street, Waterville, Maine 04901-6699. It is the practice of the City of Waterville to pay invoices within thirty (30) days of receipt. The City is exempt from State of Maine Sales Tax.
9. **PENALTY CLAUSE:** N/A
10. **INSURANCE:** N/A
11. **PERFORMANCE BOND:** N/A
12. **CANCELLATION:** The City reserves the right to cancel any unfulfilled portion of the Contract if, in the opinion of the City, the services or materials supplied are unsatisfactory or are not in compliance with the terms and conditions of the specifications. Cancellation shall be effective following ten (10) calendar days written notice to the Bidder.
13. **EXCEPTIONS TO SPECIFICATIONS:** These instructions to Bidders and General Paragraphs are an integral part of the Specifications for a **Dual Axle Cab / Chassis (64,000 G.V.W.) Truck & Accessory Equipment** and will be binding on the Bidder. Bidders are advised that they shall be bound to the requirements of the Specifications, Instructions to Bidders and General Paragraphs unless exceptions are otherwise clearly noted in the Proposal. Any exceptions shall be considered, however, in determining the most acceptable proposal.
14. **INQUIRIES:** Any questions concerning this bid request should be directed to Fred Dechaine, Department of Public Works, 6 Wentworth Court, Waterville, Maine 04901 or at fdechaine@waterville-me.gov. Telephone inquiries can be made by calling (207) 680-4746 between the hours of 7:00 AM & 3:00 PM Monday thru Friday.
15. **GENERAL PARAGRAPHS:** See attached **Bid Specifications**.

City of Waterville, Maine
BID SPECIFICATIONS
DUAL AXLE CAB/CHASSIS
(64,000 GVW)

GENERAL - It is the intent and purpose of these specifications to describe a standard production model heavy duty diesel powered 8 X 2 64,000 GVW cab and chassis truck. This vehicle will be equipped with a **cable roll-off or hook-lift system and full plow and wing assemblies** and will be utilized during operations conducted by a municipal public works department. The bidder shall supply equipment that has been in production for one (1) year or greater in full compliance with these specifications.

All equipment furnished under this contract shall be new, unused and the same as the manufacturer's most current production model. Accessories not specifically mentioned herein, but necessary to furnish a complete unit ready for use, shall be all inclusive. The unit shall conform to the highest quality standards in overall design, quality of workmanship and materials. All assemblies, sub-assemblies and component parts shall be standard and interchangeable throughout the entire quantity of units as is specified in these bid specifications.

ENGINE - 375 H.P, or equivalent, generating minimum @ 2100 RPM with 1450 FTLB torque

- 1.) Inside/Outside air intake manifold
- 2.) Silicone cooling hoses with steel tube connectors
- 3.) On/off fan clutch
- 4.) Delco Remy© or equivalent 12V 42MT OCP starter
- 5.) Delco Remy© or equivalent 12V 145AMP 22SI HD Alternator
- 6.) Magnetic crankcase drain plug
- 7.) Two position engine brake with exhaust brake (or equivalent)
- 8.) Spin on secondary fuel filter
- 9.) Spin on water filter or with water conditioner
- 10.) Wabco© or equivalent 31.8 CFM air compressor
- 11.) Phillips© 120V 1500W or equivalent engine block heater.
- 12.) Electric heated manifold
- 13.) Engine mounted oil check and fill reservoir
- 14.) Front drive flange for PTO.

EXHAUST -

- 1.) Single outboard type vertical exhaust
- 2.) Single stainless exhaust shield
- 3.) Deflector cap
- 4.) HD mounting brackets, elbows, piping and expansion joints.

EMISSIONS - Engine and exhaust emissions system shall meet current EPA standards and will employ EGR or SCR technology, if applicable, compliant with these standards.

TRANSMISSION - ALLISON AUTOMATIC RDS 4500-6 Speed

- 1.) Synthetic based lubrication
- 2.) Air to oil type transmission cooler

- 3.) Spicer 1810HD or equivalent life driveline with XL U-joints.
- 4.) Magnetic drain plug

POWER DIVIDER -

- 1.) Torque proportioning type with driver actuated lock-out mechanism
- 2.) Magnetic drain plug

FRONT AXLE -

- 1.) Certified 20,000 LB minimum capacity
- 2.) 20,800 LB minimum flat leaf suspension
- 3.) Unitized front oil seals preferred
- 4.) Lifetime sealed wheel bearings preferred
- 5.) 2000 LB RH build up spring system (No air bag)

REAR AXLE -

- 1.) Certified 46,000 LB minimum capacity
- 2.) Main assembly to be Rockwell RT46-160P or equivalent
- 3.) 4.89 rear drive axle ratio
- 4.) Manual activated anti-spin full locking front and rear wheel differential
- 5.) Inter-axle differential lock
- 6.) Synthetic based lubrication
- 7.) Hendrickson© RT/RT2 460 or 46K T-Ride equivalent rear suspension
- 8.) Minimum 54" HD steel suspension beams
- 9.) Rubber bushed longitudinal torque rods
- 10.) Factory balanced HD drive line
- 11.) Positive axle alignment
- 12.) Off-highway articulation and oscillation characteristics
- 13.) Duplicate final drive ratio
- 14.) Single and dual tire chain clearance, minimum 2"
- 15.) Chicago Rawhide© or equivalent oil seals
- 16.) Oil lubricated and/or Uni-Hub Lifetime greased wheel bearings
- 17.) Magnetic drain plugs

AXLE DRIVELINE EQUIPMENT -

- 1.) Full activation main differential lockout
- 2.) Greased and sealed drag link and tie rod assemblies

CHASSIS -

- 1.) Set Back Axle with Cab to Axle and wheel base to be coordinated by Dealer and Body Company.
- 2.) 7/16" straight steel frame rails, single channel bolted construction
- 3.) Heat treated components, minimum strength rating 120,000 PSI
- 4.) Front reinforcement with under slung gusseted cross members
- 5.) 3,100,000 RBM rating with single frame rail desired
- 6.) Flange bolted frame fasteners
- 7.) Minimum 56" rear frame overhang with straight rear frame cut off
- 8.) Push/Pull type brake valves
- 9.) Manual pull-cord drain valves on all air tanks

- 10.) Minimum 75-gallon LH aluminum fuel tank with factory installed Webb or equivalent fuel pre-heater
- 11.) SAE J844 nylon tube fuel lines
- 12.) RH mounted steel (3 batteries @ 2850 CCA) - box with aluminum lid.
- 13.) Trailer connections mounted end of frame/Detachable trailer cable. Electrical receptacle on end of frame. Full pressure trailer brake hand control.

BRAKE SYSTEM -

- 1.) Full air actuation
- 2.) Minimum 31.8 CF compressor lubricated through engine lubrication system
- 3.) Filtered air inlet on compressor unit
- 4.) Minimum reservoir capacity 3,000 cubic inches
- 5.) Drain cocks on each reservoir
- 6.) Wabco© or equivalent air dryer system
- 7.) 16.5 X 6 S -CAM Eaton ES-165-6L or equivalent front brakes
- 8.) Rockwell© or equivalent automatic front and rear slack adjusters
- 9.) 16.5 X 7 S-CAM Eaton ES-165-7D tandem axle or equivalent rear brakes
- 10.) Bendix© or equivalent antilock brake system
- 11.) Front and rear brake dust shields
- 12.) Brakes to be equipped with pressure relief valve
- 13.) Low pressure alarm system with indicator located on instrument panel

FRONT TIRES -

- 1.) Goodyear© or equivalent 385/65R22.5J 18 ply tubeless radial
- 2.) 22.5 X 12.25 Accuride© or equivalent rims with hub piloted wheels
- 3.) Cast iron brake drums with aluminum hubs
- 4.) Deep inset wheel for better turning radius
- 5.) Matching Heavy Duty front wheel & tire
- 6.) Matching Heavy Duty spare front wheel & tire

REAR TIRES -

- 1.) Goodyear© G164 RTD or equivalent 11R22.5G 14 ply tubeless radial
- 2.) 22.5 X 8.25 Accuride© or equivalent rims with hub piloted wheels
- 3.) Cast iron brake drums
- 4.) Matching Heavy Duty rear wheel & tire
- 5.) Matching Heavy Duty spare rear wheel & tire

STEERING SYSTEM –

- 1.) Heavy duty design with sufficient gear reduction for off-highway operation
- 2.) Large capacity power steering fluid reservoir with changeable filter unit
- 3.) Dual power steering boxes rated for front end capacity of 20,000 LBS

CAB EXTERIOR -

- 1.) Conventional day cab with corrosion inhibitor sub-base
- 2.) Fiberglass hood with engine access panel
- 3.) Painted stationary front grille with bug screen mounted behind
- 4.) Rubber front fender extensions
- 5.) Dual rectangular air horns with shields
- 6.) Heated mirrors equipped heated convex mirrors LH RH
- 7.) Down view mirror mounted over passenger door
- 8.) Mirror arms for 102" trailer
- 9.) Full fiberglass sun visor mounted over windshield
- 10.) Safety glass windows, rear cab glass and tinted windshield
- 11.) One-piece windshield
- 12.) Dual windshield wiper/washer with intermittent feature
- 13.) Back up alarm system mounted rear of chassis
- 14.) LH/RH cab grab handles, (Interior preferred)
- 15.) Driver/passenger cab access step maximum height of 21" from ground

CAB INTERIOR -

- 1.) Mid-tone gray color trim
- 2.) Metal components to be painted cab color
- 3.) Thermal insulation kit
- 4.) Standard cab heating and integral a/c system
- 5.) Driver & Passenger Side Power Windows
- 6.) Door mounted LH/RH armrest
- 7.) Mat floor covering with foam back
- 8.) LH and RH door storage pocket
- 9.) Driver side air bag desired for safety
- 10.) Fully illuminated standard instrumentation panel cluster
- 11.) Speedometer, tachometer, hour meter and odometer to be electronic
- 12.) National© or equivalent air suspension high back with lumbar and seat back adjustments (or equivalent) drivers and passenger seat
- 13.) Three-point retractable safety belt system.
- 14.) 18-inch diameter sport steering wheel with tilt and telescopic steering column
- 15.) LH/RH color keyed sun visors
- 16.) Audible/visual alarm shutdown for low oil pressure, engine over heat and low water level with automatic override.
- 17.) Graduated air restriction gauge with dash warning indicator light
- 18.) Main transmission gauge with dash warning indicator light

LIGHTING -

- 1.) Blade fuse circuit protection
- 2.) Daytime running lights
- 3.) SAE Class A front turn signal lights
- 4.) Five (5) amber marker lights
- 5.) Parking lights integral with front turn signal lights
- 6.) Dual stop and tail lights with integral back up lights
- 7.) SAE Class A rear turn signals integral with tail light system
- 8.) Self-canceling turn signal switch with motorized flasher

MISCELLANEOUS
EQUIPMENT -

- 1.) AM/FM stereo radio
- 2.) Two dual cone speakers
- 3.) Power and ground connections for two-way radio units
- 4.) Roof mounted factory (2) warning lights – Class A DOT
- 5.) Dry type ABC 5 LB rechargeable fire extinguisher mounted in cab
- 6.) Three (3) pack emergency triangular reflector kit mounted in cab
- 7.) Common door/ignition key
- 8.) Outside temperature gauge
- 9.) Operators & Maintenance Manuals
- 10.) Floor Mats
- 11.) Rain Guards on both doors
- 12.) Filters for first service
- 13.) Back Up Camera Zone Defense with 5" Monitor W/LCD Camera - LZD3221

ACCESSORIES -

Mud flaps (4 – 36") for each unit
Rear corner, high intensity safety lights & reflectors
Cab mounted "Body Raised" indicator light
Hoist control lever lock-out system
Safety body props
8" apron to keep rear lights free of materials/debris
25 ton Pintle Hook
D-Rings on Tow Plate
Install LED wing light, switch operated
Install LED spinner light, switch operated
Install Two LED back up lights on tow plate
Trailer Plug - Cole Hersee #12063

TRAINING - Bidder shall supply a minimum of four (4) hours on-site training.

FINISH -

- 1.) Chassis color - Black - primed and undercoat protection
- 2.) Cab color - Orange S/W 42139 (or equivalent) - primed and undercoat protection
- 3.) Front bumper color - Argent Silver S/W 48494 (or equivalent)

**Accessory Equipment
SUBORDINATE BID SPECIFICATIONS
ROLL OFF OR HOOK LIFT TRANSFER SYSTEM
EQUIPPED WITH DUMP BODY, ROLL OFF CONTAINERS, FLATBED
(Furnished and Installed)**

It is the intent and purpose of these specifications to describe (1) one standard production model multi-purpose **Roll Off or Hook Lift System** for meeting the department's highway, snow removal and other construction activities. All equipment furnished under this contract shall be new, unused and the same as the manufacturer's current production model. Accessories not specifically mentioned herein, but necessary to furnish and install complete unit(s) ready for use, shall be included. Equipment construction shall conform to the best practices known to the body trade in design, quality of material and workmanship. Assemblies, sub-assemblies and component parts shall be standard and interchangeable throughout the entire quantity of units produced and supplied by the manufacturer.

For all intents and purposes, systems proposed can be equivalent to Viking Roller-Pro, Swaploader, Palfinger, Stellar Industries or similar. The department will examine each proposal to determine which one best meets its overall needs and requirements.

General:

The system will be a hydraulic roll off or hook lift unit with multiple optional body designs capable of transferring 40,000lbs loads off and on the main frame. The main frame must be capable of accepting a RH wing brace without affecting the minimum CA required for the main frame. All electrical and hydraulic connections must be made at the front driver's side corner of tipping frame. Frame / body must be able to be raised without disconnection of electrical and hydraulics. 1 1/2" lock pins on each side to prevent horizontal movement of the body on the tipping frame. Lock operated manually from front driver's side, with the actuation locking both sides.

Dimensions:

The complete assembly will be designed to fit a chassis CA of 138"

Reinforced main frame will be 4" x 8" x 3/8" x 187.5".

A hydraulically extendable tail will be 3" x 7" x 3/8" x 96".

The frame will be equipped with 4, 4" outside rollers

The front stop blocks will be 2" 44W plate 13 5/8" x 3 11/16" welded 100% to main frame.

The tilt hinge will be a P250 model.

The saddle weldment will be 1/2" 44W formed plate reinforced with 3/4" x 4" flat bar, if so required.

Hydraulics:

There will be two single stage double acting lift cylinders located outboard of LH and RH chassis frame rails, complete with flange mounted counterbalance valves. Hydraulic valve requirements are 2700 psi 32 gpm motor spool.

A hydraulic stinger cylinder (cable lift systems) must be 2" x 50" double acting. Hydraulic valve requirements are 2700 psi 10 gpm motor spool.

All hydraulic cylinder rods will be hyper-chromed 200 treated.

All hydraulic body functions will be hard plumbed using 304 stainless tubing through the tipping frame and along the chassis.

Safety Prop:

Dual LH and RH safety prop stored on main frame rails and must clip onto cylinder rod to act as positive cylinder locks.

Lighting:

A basic light kit complying with FMVSS/CMVSS 108 lighting requirements shall be supplied as standard equipment with each unit.

There will be a rear LH and RH light cluster in a 304L stainless steel enclosure with stop, tail & turn and backup lights on each side as well as two 5" work flood lights on a separate single switch.

There will be clearance lights mounted mid body both left and right side on the standard supplied chassis frame mounted aluminum fenders.

The lights and wiring will be completely sealed with corrosion and vapor proof lamps and junction box.

Warranty:

Minimum one-year parts and labor on all components from date of delivery of completed unit.

Dump Body: **Price:** \$ _____

Length 13 FT; Width 8 FT

Minimum Requirements as follows:

Body front, sides & tailgate shall consist of 3/16" Cor-Ten®, or equivalent, corrosion resistant, high tensile, non-spliced steel plate.

Floor of Hardox 450 steel

Long sills shall be 10" structural channel at 25.4 lb/ft.

Side bracing shall be 3" facing tapered to 9" where meets the side and 13"x5" rear corner post.

Top rails shall be 4" X 4"x1/4" tubing with a 18" sideboard gussets.

Rub rails shall be dirt-shedding and formed with side plate.

Tailgate shall be double-acting with flame cut HD hardware, dirt-shedding bracing and air operated gate latch.

All moving parts shall have grease fittings.

LED Strobes in Rear Corner Posts.

Body must be equipped with safety lock latches and secure to the frame.

Roll-Off Containers

30 Yard Roll Off Container

w/automated tarp cover system **Price:** \$ _____

40 Yard Roll Off Container

w/automated tarp cover system **Price:** \$ _____

Flatbed: **Price:** \$ _____

Dimensions:

Overall flatbed length will be a minimum 204" measured from front of flatbed frame to outside rear of bed

Outside flatbed width will be 102" maximum

Front panel height will be a maximum 54" from floor

Clear and useable floor will be a minimum 193" from back of headboard doghouse

Doghouse height will be a maximum of 15" on headboard

Long sills will be a minimum of 6 inch, 12.5 lbs per foot I-beam.

Tare weight of complete flatbed assembly will be 3,230 lbs maximum

Construction:

Flatbed floor construction will be a minimum of 3/16" steel checker board

Headboard construction will be a minimum of 3/16" Corten steel with a center window cutout, re-enforced with 2 x 2 x 1/4" vertical posts on each side.

Adjustable curb side rail for use with 3" winch ratchets

1/4" x 3" rub rails along each side for strapping/chaining to bed.

Four 15,000 lb "D-rings" welded one to each corner of the flatbed.

Storage pocket and hangers for chains and winch bar.

14" rear "beaver tail" for easier loading of driven equipment.

Options:

Extended 18", with clear and useable floor will be a minimum 211" from back of headboard doghouse

12,000 lb electric winch

Heavy Duty Plow / Wing Outfit: **Price:** \$ _____

GENERAL - It is the intent and purpose of this specification to describe a **Heavy-Duty Plow / Wing Outfit**. This equipment shall be designed and built for exceptional performance under difficult conditions requiring high speed snow removal. All equipment furnished under this contract shall be new, unused and the same as the manufacturer's current production model. Parts/Accessories, not specifically mentioned herein, but necessary to furnish a complete unit ready for use, shall be included. All units shall conform to the highest standards of strength, quality and workmanship that is provided, in general, by the related manufacturing industry.

PLOW
BLADE - Polymer reversible trip-edge 12' X 48" moldboard with reversing ram type cylinders. C1090 or equivalent cutting edge of 5/8" X 6" stock covering Kennametal Carbide Blade or equivalent with replaceable wear shoes mounted behind the cutting edge.

WING - 11 ft trip-edge wing with C1090 or equivalent cutting edge of 5/8" X 6" stock equipped with replaceable wear shoe on discharge end of wing, heavy duty wing braces.

FRONT - Hydraulic tilt & detach front hitch, heavy duty components to include 4"x 6" X 3/8" rectangular tubing hitch cross tubes with flanges for front wing post, 4"x4"x1/2" angle iron uprights, tilt function to be direct lift without use of chain, 4"X14" double acting lift cylinder.

WING

TOWER - Cable lift rear wing tower or equivalent with 10" rear beam bolt on 66" cable lift front post assembly for easy removal, bolt on 66" cable lift front post assembly for easy removal, bolt on 40-gallon reservoir integrated into rear wing tower, integrated enclosure for control valves in rear tower. Add Camera Zone Defense LCD313C for Wing.

HYDRAULICS -

Rexroth A10© or equivalent variable displacement pump with Gresen© or equivalent load sensing valves. Full power hydraulic controls with (2) additional self-centering valves to operate side dump body. All controls to be cab mounted Del Hydraulics© air controls, or equivalent. **Note - Location of all valves and controls shall be approved by a designated representative of the Waterville Public Works Department.

Lines, pipes, hoses and fittings shall be of adequate capacity to accommodate circulation of hydraulic fluids without causing undue heat buildup. All high-pressure lines shall be heavy duty equipped with swivel connectors on all ends. All low-pressure lines shall be oil resistant type with flexible wire filler and wear resistant outer casing. Long runs of line shall be stainless steel, adequately supported and secured.

PAINT - Primer coat to consist of minimum two (2) applications rust resistant paint.
Finish coat to consist of minimum two (2) applications Orange S/W 42139 (or equivalent)

MAINTENANCE

SUPPLIES - Two (2) extra sets of the following shall be furnished:

- a. Wing Edge – 5/8"X6"x11'
- b. Moldboard Edge – 12' Carbide with cover edge
- c. All Shoes

SPECIAL

CONDITIONS -

Bidder to furnish all OEM Parts, Service and Operators manual for each product.

WARRANTY - Manufacturer's standard.

INSTALLATION OF ALL ACCESSORY EQUIPMENT -

To be coordinated by bidder. To commence upon delivery of truck chassis by dealership and returned to Waterville Public Works Department upon completion.

BID FORM

DATE: _____

To the Director of Public Works for the City of Waterville, Maine:

Please accept this bid submission from

(hereinafter called "Bidder"), a corporation* organized under the laws of the State of _____ or a partnership/individual** doing business as _____.

This bid is being submitted for a **Dual Axle Cab / Chassis (64,000 GVW) & Accessory Equipment** in compliance with your invitation for bids, having examined the specifications and conditions contained therein. Alternatives/Substitutions are as follows:

(Attach Additional Comments, As Necessary)

The Bidder proposes to supply the following:

Bid Option #1: Dual Axle Cab / Chassis (64,000 G.V.W.)
& Accessory Equipment (Per Specifications) **\$**_____

Bid option #2: With Trade-In Allowance –
1991 Long Wheel Base Flat-Bed Truck
1994 GMC Roll Off Truck **\$**_____

Bid option #4: Extended Truck Warranty: Provide Description Summary **\$**_____

**Delivery Guaranteed within _____ days of contract award and not beyond ninety (90) days of contract award.

NAME OF BIDDER: _____
BY: _____
(Signature)

NAME AND TITLE: _____
ADDRESS: _____

TELEPHONE: _____ TAX ID# _____

* Affix seal if by Corporation **Cross out word/phrases that do not apply