



INVITATION TO BID

FINANCE DEPARTMENT

GREGORY N. L'HEUREUX
Finance Director

COLLEEN C. SELBERG
Purchasing Agent

ONE (1) TANDEM AXLE TRUCK WITH UNDER BED SCRAPER, PLOW/WING, SANDER, STANDALONE Bid #16-21

Sealed bid for furnishing a One (1) Tandem Axle Truck with Under Bed Scrapper, Plow/Wing, Sander, Standalone (**NO DEMO OR USED**) to the City of South Portland Public Works Department as specified below, in the attached specifications and proposal, will be received by the City Purchasing Agent, 25 Cottage Road, South Portland, Maine 04106, until 2:00 p.m., Thursday, November 12, 2020 at which time, they will be publicly opened and read aloud. Proposals received after the above stated day and time will not be considered.

Bids shall be submitted on the attached bid form in sealed envelopes, plainly marked "Bid #16-21 Tandem Axle Truck" and shall be addressed to the Purchasing Agent at the above address.

Delivery to be made upon receipt of purchase order and shall be F.O.B., Public Works Department, 929 Highland Avenue, South Portland, Maine.

All equipment offered on this bid shall be brand-new and the latest type available. Bidder will state in his bid the name and model number of the equipment he is offering and will include with his bid a catalog or brochure marked to indicate the standard factory equipment of the model on which he is bidding. Bidder must attach a separate sheet to his bid listing any deviation from the minimum specifications shown. If no attachment is provided, it will be assumed that the item being bid meets the minimum specifications.

If the equipment offered by a bidder under the attached specifications meets the specifications except for minor factors or reasonably small amounts in dimensions, and if it shall be determined by the City that these minor variations from the specifications do not prevent the equipment being bid from performing as satisfactorily or from being as good as equipment fully meeting these specifications, then these minor variations from the specifications may be waived by the City, if it deems it to be to its advantage, and the equipment with the waived variations in specifications will be accepted as fully meeting these specifications.

Since a prompt delivery is required, delivery time, as well as price, may be a factor in determining the award of this bid.

Price shall include a 14-day plate and State of Maine Certificate of Title or Certificate of Origin, which shall be made out to the City of South Portland, Maine and mailed to the Purchasing Agent, P.O. Box 9422, and South Portland, Me 04116-9422. A copy of the title application is to be delivered with each vehicle. There shall be, within the Greater Portland area, a repair service which shall maintain a stock of spare parts for any make and model of any vehicle that a bidder offers in the proposal.

It is the custom of the City of South Portland to pay its bills within 20 to 30 days following delivery of and receipt of bills for all items covered by the purchase order. In submitting bids under attached specifications, bidders should take into consideration all discounts, both trade and time, allowed in accordance with the above payment policy. All bidders should quote net prices, therefore, exclusive of all Federal Excise Taxes and Sales Taxes.

The City of South Portland reserves the right to waive all informalities in bids, to accept any bid or any portion thereof, or to reject any or all bids should it be deemed in its best interest to do so. Except as otherwise required by law or as specifically provided to the contrary herein, the City shall govern the award of this bid's purchasing ordinance.

Colleen C. Selberg
Purchasing Agent

City of South Portland
PUBLIC WORKS DEPARTMENT
Solicitation of Bids

**ONE (1) TANDEM AXLE TRUCK WITH
UNDER BED SCRAPER, PLOW/WING, SANDER, STANDALONE**

This specification is intended to describe **ONE (1) TANDEM AXLE TRUCK WITH UNDER BED SCRAPER, PLOW/WING, SANDER, STANDALONE (NO DEMO OR USED)** to be used for various functions in the Public Works Department. This vehicle will be a regular production model for which published specifications are available. Modifications of the vehicle to meet operational requirements of this specification shall be limited to the manufacturers published and optional standards.

Bidders shall list and explain in writing any and all deviations from these specifications. Bidders shall provide sufficient detail and proof needed to assist the city in fully evaluating compliance with detailed specifications. Failure to do so may result in rejection of the bid in its entirety.

General Specifications

These Specifications is intended for One (1) New or Current Year (No Demos or Used) Tandem Axle Truck with Under Bed Scraper, Plow/Wing, Sander, and Standalone and is to conform to all EPA and DOT regulations in effect at the time of delivery. The vehicle shall be equipped with all standard equipment, components, and safety features necessary for operation and normally supplied, even if not identified in specifications. The equipment shall have full manufacturer's preparation, title, and be ready for service upon delivery. The equipment shall come with a full warranty and option of extended warranty.

The equipment will be delivered with all the proper paperwork to insure and register the equipment in a timely manner.

TRUCK SPECIFICATIONS

ONE (1) TANDEM AXLE TRUCK

Bidder shall check the yes box if they comply or the no box if they are taking exception to that line item. All exceptions must be clearly explained in the bid materials. This page must be submitted along with the Bid Form.	COMPLIANCE	
	YES	NO
Diesel Engine, EPA 2017, 475 HP @ 1700 RPM, 1700 lb-ft Torque @ 1000 RPM		
Allison 4000 RDS Transmission, wide ration, 6-speed with double overdrive with PTO Provision, Less Retarder, Includes Oil Level Sensor, On/Off Highway		
Front swept back, steel, heavy duty bumper		
Drain valve twist-type		
Gauges, Air pressure (2) Air 1 and Air 2 gauges (located in instrument cluster)		
Parking brake control (located on instrument panel)		
Parking brake valve for truck		
Quick release valve on rear axle for spring brake release: 1 for 4x2, 2 for 6x4		
Spring brake modulator valve R-7 for 4x2, SR-7 with relay valve for 6x4/8x6		
Air brake ABS 4-channel (4 sensor/4 modulator) full vehicle wheel control system, with automatic traction control		
Air compressor		
Front brake dust shields for air cam brakes		
Drain valve (3) with pull chains for air tanks		
Air tank located: Under each rail, front of rear suspension, parallel to rail		
Park brake chambers, additional (2) spring brake type		
Steering column tilting		
Steering wheel 4-spoke; 18 inch Diameter black		
Steering gear dual power		
Driveline system, SPL250 main driveline with SPL170 interaxle shaft, for 6x4		
Steel after treatment cover, black		
Tail pipe turn back type		
Stainless steel muffler/tail pipe guard		
Exhaust height 10'		
Hazard switch push on/push off (located in instrument panel)		
Headlight dimmer switch integral with turn signal level		
Parking light integral with front turn signal and rear tail light		
Key operated electric starter switch		

Stop, turn, tail and B/U Lights dual, rear, combination with reflector		
Turn signal switch self-cancelling		
Windshield wipers single motor, electric, cowl mounted		
Body builder wiring back of day cab with sealed connectors for tail/amber turn/marker/backup/accessory power/ground and sealed connector for stop/turn		
Tail light wiring, include wiring for standard LT & RT tail lights,; separate 8.0' of extra cable wiring for LT & Rt Body Mounted tail lights		
Auxiliary Harness 3.0' for auxiliary front head lights and turn signals for front plow applications		
Windshield wipers SPD control		
Daytime running lights		
Clearance/marker lights, amber LED lights, flush mounted on cab or sunshade		
Test exterior lights PRE-Trip inspection will cycle all exterior lamps except back up lights		
Headlights automatic with wipers on		
Direct drive fan, two speed with residual torque device for disengaged fan speed		
Air cleaner single element, with integral snow valve and in-cab control		
Fan override manual; with electric switch on instrument panel		
Deaeration system with surge tank		
Oil Cooler, Auto transmission Water to Oil Type		
50 gallon aluminum fuel tank		
Fuel tank straps stainless steel		
DEF Tank 9.5 US Gal capacity, frame mounted outside left rail under cab		
Air Conditioner with Integral Heater and Defroster		
Gauge Cluster: Speedometer and Tachometer, for Air Brake Chassis, Engine Coolant Tem, Primary and Secondary Air Pressure, Fuel and DEF Gauges, Oil Pressure Gauge		
On board diagnostics display of fault codes in Gauge Cluster		
Driver seat air suspension, Hi back, arm rest, isolator, adjuster, 3 chamber lumbar, front adj, rear adj, angle adj, side bolster, vinyl suspension cover, heat		
Passenger seat non suspension, Hi back, Integral headrest, cloth		
Exterior grab handle with anti-slip rubber inserts		
Convex mirror, hood mounted with right and left sides, heated and electric		
Convex mirror, look down right side		
Molded plastic overhead console		
Dome light		
Sun Visors		

Windshield heated		
Power windows and locks		
Cab rear suspension air bag type		
Flat instrument panel		
Exterior sunshade, aerodynamic, painted roof color, with integral clearance/marker lights		
Windshield washer reservoir		
Access, CAB steel, driver and passenger sides, two steps per door		
Cold starting equipment automatic with engine ECM control		
Emission compliance low Nox Idle Engine		
Emission compliance low Nox Idle Engine		
Aluminum radiator, front to back crossflow system		
Federal Emissions EPA		
Exhaust system single, horizontal after treatment device, frame mounted right side under cab. Include single vertical tail pipe, frame mounted right side back of cab, for better clearance.		
Transmission shift control		
Neutral at stop omit		
Transmission TCM location located inside cab		
PTO located left side of transmission		
Steel battery box, 3 battery capacity, mounted inside the cab, under passenger seat with high ground clearance exhaust		
Accessory wiring		
Power source, additional auxiliary power outlet & USB port, located on instrument panel		
12-volt starting motor with soft-start		
Circuit breakers manual-reset (main panel) SAE Type III with trip indicators, replaces all fuses		
Switch, body circuits, MID with remote power module mounted in cab behind driver seat, up to 6 outputs and 6 inputs, max 20 amp per channel, max 80 am total, includes 1 switch pack with momentary switches		
Electrical system 12-volt, 3 battery		
Data link connector (for vehicle programming and diagnostics in cab)		
12 volt 160 amp alternator		
Chassis wiring color coded and continuously numbered		
Battery system, maintenance free, 3 (AGM) 12-Volt 2775CCA total, top threaded stud		
Rear axle brake chambers (30/30 Spring brake)		
Front axle brake chambers		

Rear brakes air s-cam type, cast spider, fabricated shoe, double anchor pin, 23,000-lb capacity per axle		
Front brakes air s-cam type, cast spider, fabricated shoe, double anchor pin, 20,000-lb capacity per axle		
Front and rear automatic slack adjusters		
Front brake dust shields for air cam brakes		
Rear brake dust shields for air cam brakes		
Axle, front non-driving, wide track, I-beam type, 20,000 capacity		
Front suspension, spring parabolic taper leaf, shackle type, 20,000-lb capacity, with shock absorbers		
Springs, front auxiliary air bag, right side only, driver control		
Brake system, air dual system for straight truck applications		
Brake lines, color and size coded nylon		
Tandem axle base chassis with 221 wheelbase, 137.50 CA, and 75.00 Axle to frame		
Axle configuration {Navistar} 6x4		
Rear tandem axle single reduction, standard width, 46,000-lb capacity, and driver controlled locking differential in forward-rear and rear-rear axle, 200 wheel ends. Gear ration 5.63		
Rear suspension tandem, walking beam, 46,000-lb capacity, 54" axle spacing, rubber springs, with transverse torque rods, rubber end bushings		
Suspension - rear-axle identity for Meritor tandem rear axles with bar-pin beam attachment type suspensions		
Spare Tire		
Front wheels: disc, powder coated steel rims, hub-piloted, flanged nut, with steel hubs, non-standard offset, with .5" thick disc		
Rear wheels: disc, powder coated steel rims, hub-piloted, flanged nut, with increased capacity disc and steel hubs		
Front wheel guards, for metric hub piloted wheels with flanged mounting nuts mounted between hub and wheel		
Rear wheel guards for metric hub piloted wheels with flanged mounting nuts, mounted between hub and wheel and between dual wheels		
Front wheel bearings		
White paint color		
Black or grey interior		
Wheelbase range 199" through including 264"		
Frame rails heat treated alloy steel		
Rubber fender extensions		
Hood hatch for servicing		

Chrome stationary grille		
Splash panels		
Bug screen mounted behind grille		
Speakers		
Radio AM/FM/Bluetooth		
Turn signals, front includes LED side turn lights mounted on fender		
Electric and Air Horn		
Horn, air single trumpet, black, with lanyard pull cord		
Triangle reflectors		
Fire extinguishers		
Arm Rests		
Mud Flaps (all black, no advertising)		
Back up camera		
Strobes - Amber and Green		
Air dryer with heater (mounted inside left rail, back of cab)		
Motorola M1225 4-channel mobile radio set up with frequencies used by the department with Antenex B132S antenna shall be installed by the City's vendor and billed to the supplier of the vehicles (whomever is awarded the bid). City staff will choose the location of the radio in the cab.		
<u>Warranty:</u>		
Standard warranty		
<u>Manuals:</u>		
Shop, parts, engine, electrical, service, and safety manuals shall be provided.		
All manuals shall be provided in hard copy and electronic formats		

**UNDER BED SCRAPER, SANDER,
AND STANDALONE SPECIFICATIONS**

Bidder shall check the yes box if they comply or the no box if they are taking exception to that line item. All exceptions must be clearly explained in the bid materials. This page must be submitted along with the Bid Form.	COMPLIANCE	
	YES	NO
<u>Hitch and Wing System</u>		
Hitch to be a J Hook design.		
Double acting cylinder for plow lift		
Three plow pin heights shall be provided		
Two horizontal tubes shall extend outward to the passenger side of the chassis to serve as support for the front wing post		
All vertical and horizontal supports shall be of tubular construction for strength. Angle iron construction shall be deemed insufficient		
The front wing post shall be bolted to the hitch.		
Front slide travel shall be actuated by a hydraulic cylinder with cable and sheave		
The front slide will travel a minimum of 60 in.		
High Lift Patrol Wing Hydraulic Design		
A 10 in. beam shall tie both chassis frame rails together with the rear post		
The rear wing post shall have a three point attachment for top and bottom push arm and lift cylinder attachment		
The lift cylinder shall provide rear of wing lift and shall be supplied complete with adjustable flow restrictors to control the speed of the wing up & down		
The Cylinder shall be fitted with an integral counter balance valve at its base, so to protect against impact load and the possibility of the wing dropping due to pressure line failure		
Push arms are adjustable in length to provide variable clearing paths		
Lower wing arm should have a compression spring		
A trip block shall be mounted between the nose of the wing and the front post to allow the wing to trip over road obstacles		
The trip block shall be able to be locked out with a pin for shelving or unpinned to allow the wing to trip		
All hitch and wing mount gear shall be sandblasted		
Epoxy primed, and painted Black		
<u>Wing</u>		

Cutting edge length: 10 ft.		
Overall Length: 11 ft.		
Wing Cutting Edge: (Qty 2) 5 ft. x 8 in. x 1 in. Standard top highway punch		
Moldboard constructed from 8 gauge high strength carbon steel and reinforced with full length ribs		
The wing shall be punched 12 in. on center. Standard top highway punch		
Wing shall come complete with Standard Edge		
Wing should come with Heavy Duty Wing Arms		
The wing shall be sand blasted, epoxy primed, painted orange		
<u>Plow</u>		
Shall be a High Speed One Way Reversible Trip Edge		
Cutting edge length: 11 ft.		
Plow Cutting Edge: (Qty 1) 6 ft. x 8 in. x 1 in. standard top highway punch		
Plow Cutting Edge: (Qty 1) 5 ft. x 8 in. x 1 in. standard top highway punch		
Moldboard Nose Height: 28 in.		
Moldboard Discharge Height: 52 in. Moldboard shall constructed of 8 gauge, with (8) 1/2 in. Ribs		
Plow shall be punched 12 in. on center		
The plow shall come with standard top Punch edge		
A rubber deflector shall be attached to the leading edge of the moldboard		
Plow drive frame shall be of box tube construction and shall have two cushion valve protected cylinders for reversing the moldboard		
Plow shall pin to hitch on standard 30 1/2 in. centers		
There shall be a Dead Sheave Leveling Device Lift		
The moldboard shall painted Orange		
Should have (2) moldboard shoes and (2) Curb Shoe		
Moldboard reinforcing structure and drive frame steel shall be painted black		
<u>Hydraulics</u>		
Cirus Hydraulic Package to Include: Spread Smart Sander		
With Knobs, 7 in. Screen, MS320 Multi Stick Control with Armadillo Arm Rest, Power Smart Centralized Power System		
Enclosure for Macko, Cirus Valves with Manual Override and Stainless Steel Enclosure Behind the Cab. Eaton Pump, and Visala Temperature Sensor and Stainless steel Lines		

A 40 gallon oil reservoir with return line filtration, shut off valve, and low oil sensor shall be mounted Behind the Cab		
<u>Dump Body</u>		
Beau Roc 14 ft. Stainless Steel Dump Body with (3) Coal Doors. Coal doors to be lifted with individually, one lever and two hinge points.		
Single Acting Telescopic Hoist with 12" Dog House		
Inside length: 14 ft.		
Sides height: 46 inches		
Tailgate height : 60 inches		
Hoist cylinder: Single acting telescopic		
Cab shield: 24 in. overhang		
The Sides, Front, Tailgate, Cab Shield shall be Constructed of 3/16 in. Stainless steel, 1/4 in. Hardox 450 Floor		
Tailgate will be double acting air tailgate design		
Tailgate shall be air operated from within cab and shall latch and unlatch with a double acting air cylinder		
A pintle plate shall be installed with 30 ton hook, D-rings, and Electrical Plug		
And electric load cover with thirty degree aluminum arms and asphalt tarp shall be installed		
A shovel holder shall be installed		
A folding body access ladder with internal step shall be Supplied and installed to the left hand side of body front		
<u>Lighting</u>		
LED Arrow Board Installed on Rear of Sander		
LED Amber and Green Strobes Front and Sides of Headboard		
LED Green and Amber Strobes, S//T/T/ Lights Shall be installed in rear body corner posts		
LED Sander and Wing Lights		
<u>Under Bed Scrapper</u>		
10' with Power Reverse Option		
1" Thick Moldboard		
Under Bed Scrapper shall have noninterference safety measures		
Moldboard Cutting Edges: (Qty 2) each should be 5 ft. x 6 in. x 3/4 in.		
<u>Slip in Sander</u>		
13' Stainless Steel Sander with Screens, Tailgate Locks		
(2) 100 Gallon Calcium Tanks Mounted to side of Sander		

Cirus Hydraulic Calcium Pump		
Painted Black Sander Leg Stand, standalone leg stand for summer storage.		
<u>Warranty:</u>		
Standard warranty		
<u>Manuals:</u>		
Shop, parts, engine, electrical, service, and safety manuals shall be provided.		
All manuals shall be provided in hard copy and electronic formats		

**ONE (1) TANDEM AXLE TRUCK WITH
UNDER BED SCRAPER, PLOW/WING, SANDER, STANDALONE**

BID PROPOSAL SHEET

One (1) New or Current Year (No Demos or Used) Tandem Axle Truck with Under Bed Scraper, Plow/Wing, Sander, and Standalone \$ _____

Optional Additional Warranty: \$ _____

Year, Make, & Model # _____

Color _____ Odometer Reading _____

Warranty _____

Delivery Time _____

Signed: _____
(Corporation, Firm or Company)

By: _____
(Officer, Authorized Individual or Owner)

Title: _____

Mailing Address (including Zip Code):

Date: _____

Telephone: _____

Email: _____

Note: Bids must bear the handwritten signature of a duly authorized member or employee of the organization making the bid.