

INVITATION TO BID

The City of Rochester, New Hampshire is accepting sealed bids for **New Street Sweeper**. Bids must be submitted in a sealed envelope plainly marked:

Street Sweeper

"Bid #16-14"

City of Rochester

31 Wakefield Street

Rochester, NH 03867

Attn: Purchasing Agent

All bids must be received no later than **"September 17, 2015"** at **"2:15" PM**. Actual bid opening will begin at **2:45PM**. No late bids, faxed, e-mailed or telephone bids will be accepted. Bid proposals and specifications may be obtained by visiting www.rochesternh.net, or emailing purchasing@rochesternh.net, or by contacting the Purchasing Agent at City Hall, 31 Wakefield Street, Rochester, NH 03867, (603) 335-7602. All bid questions must be submitted in writing (email preferred) to the Purchasing Agent. Bidders are to monitor website for addendums, and postings of all bid questions and answers. The period for questions or addendums will end 1 week prior to bid opening. All bid proposals must be made on the bid proposal forms supplied, and the bid proposal forms must be fully completed when submitted.

New Diesel Powered 7.3 CU. YD Heavy Duty Street Sweeper with regenerative air design, twin gutter brooms and dual steering mounted on a conventional type truck chassis. Please include trade in value.

COMPANY
NAME: _____

CONTACT
PERSON: _____

ADDRESS: _____

TELEPHONE# _____ FAX# _____ EMAIL _____

SIGNATURE: _____

Cost for one new diesel powered 7.3 CU. YD heavy duty street sweeper with regenerative air design, twin gutter brooms and dual steering

\$ _____

Trade-in allowance for (1) 1996 Johnston 3000 sweeper .

\$ _____

Trade-in allowance for (1) 2000 Johnson Sweeper

\$ _____

Net Bid Pricing for one new diesel powered 7.3 CU. YD heavy duty street sweeper with regenerative air design, twin gutter brooms and dual steering. Price less trade-ins. Please specify model year.

\$ _____ Model Year: _____

Bid results will be posted after 48 hours on the City of Rochester's web site:
www.rochesternh.net or will be available by request via e-mail at the following

General Sweeper Chassis Specification

The City of Rochester is seeking bid submissions on one diesel powered, 7.3 CU. YD. heavy duty street sweeper with regenerative air design, twin gutter brooms and dual steering mounted on a conventional type truck chassis. Any interested bidders must fully complete the following specifications. Please mark the correct column with a yes or no, each section needs to be filled out appropriately or bid may be disqualified. The technical specifications contained herein are based on a Tymco Model 600 Sweeper mounted on a conventional truck chassis. The unit upon which the specifications are based has been thoroughly tested by the City of Rochester and meets our performance requirements. Competing "equals" of model and manufacturer may be considered by the City of Rochester and may require extensive field testing prior to acceptance of low bidder to verify

General A	Yes	No
It is the intent of these specifications to assure that product reliability, design integrity, technical soundness and sweeping performance are provided.	_____	_____
The unit provided shall be new, of current manufacturing design, and the specific model and series being bid shall have been in production a minimum of five (5) years.	_____	_____
All parts not specifically mentioned, which are necessary to provide a complete street sweeper, shall be included in the bid. They shall conform in strength and quality, material and workmanship.	_____	_____
Bidder shall provide a list of five(5) customers using specific model bid.	_____	_____
The unit shall be delivered completely assembled, serviced and ready to operate. The bidder shall have a qualified service representative in attendance during start up operation to make adjustments and give instructions to assure proper operation of sweeper.	_____	_____
The following specification is based on a diesel powered, dual engine design" Regenerative Air" Heavy-Duty Street Sweeper mounted on a diesel powered commercially manufactured conventional truck chassis. (Single engine designs have been determined as unacceptable for intended use.) Different types of sweepers have been evaluated and it has been determined that this design is best suited for the intended requirements in safety, quality, performance, environmental compliance, and standardization.	_____	_____

This specification is not to be interpreted as restrictive, but rather as a measure of safety, quality and performance against which all sweepers bid will be compared.

In comparing proposals, consideration will not be confined to price only. Successful bidder will be one whose product is judged to best serve specific interests of the City when price, performance, safety, quality and field experience of specific model bid are considered.

Powered Unit B

Yes

No

The sweeper power unit shall be a diesel fueled, water-cooled, turbocharged Tier-3 industrial engine.

Piston displacement shall be not less than 275 cubic inch.

Engine shall develop not less than 99 HP @ 2400 RPM and 261 ft. lbs. torque @ 1600 RPM.

Engine shall be in line, 4 Cylinder
4.19-inch bore and 5.00 inch stroke.

Cylinder construction shall be wet sleeve type.

Spin-on replacement type oil filter to be supplied.

12-volt ignition, electric starter and minimum 05-amp alternator with charge indicator gauge mounted on sweeper control console in cab.

Auxiliary engine shall have automatic shutdown system when coolant temperature too high, coolant level too low or oil pressure to low.

Unit shall share a 50-gallon fuel tank and batteries with chassis.

Unit shall have a replaceable element, heavy-duty dry type air cleaner.

Injector pump shall have centrifugal type variable speed governor for speed control.

Fuel/water separator shall be supplied on auxiliary engine.

Hydraulic System C	Yes	No
The hydraulic system shall be adequate for use within the design requirements of the sweeper meeting minimum requirements listed. _____	_____	_____
Hydraulic reservoir shall be a minimum of 25-gallons capacity. _____	_____	_____
A combination temperature and level gauge shall be mounted on reservoir within easy view of operator. _____	_____	_____
An 80-mesh suction strainer and two (2) spin-on replaceable full flow 10-micron oil filters shall be supplied. _____	_____	_____
Air-cooled hydraulic oil cooler shall be supplied in system. _____	_____	_____
Hydraulic cylinders, gutter broom drive motors, solenoid actuated control valves, relief valves, hydraulic hoses and standard L.I.C. fittings shall be incorporated in system. _____	_____	_____
Hydraulic pump shall be of a double piggyback configuration. _____	_____	_____
Dual hydraulic pump provides for dual hydraulic systems consisting of the standard sweeper system and a separate center broom system. _____	_____	_____
Sweeper hydraulic system shall have a primary operating pressure of up to 2500 PSI for gutter brooms and 1500 PSI for pick-up head and dump door. _____	_____	_____
The center broom system shall have only a primary operating pressure of up to 2500 PSI. _____	_____	_____
An auxiliary hydraulic system that electrically operates hydraulic system to raise gutter brooms and pick-up head and facilitate all dumping functions without auxiliary engine running shall be supplied. _____	_____	_____

Gutter Brooms D	Yes	No
Dual gutter brooms shall be minimum 43" diameter, wire filled vertical digger type for removing debris from gutter area. _____	_____	_____
Gutter brooms shall be hydraulic motor driven and shall be positioned laterally and vertically by one hydraulic cylinder. _____	_____	_____

Gutter broom down pressure shall be automatically adjusted to load by a pressure sensing sequence valve in line with gutter broom torque motor.

Each gutter broom shall have adjustment for bristle contact pattern and wear compensation.

Each gutter broom shall have lateral flexibility to swing rearward 15" when encountering the impact of an immovable object thus avoiding damage to the broom assembly.

Each gutter broom shall have a single spring adjustment to allow downward compensation for bristle wear and be free floating to follow street contour.

Each gutter broom shall be held in the up and transit position by use of an electric lock valve attachment. (broom designs requiring chains or similar mechanical devices, levers, et. for travel support are unacceptable due to operator safety concerns.)

Adjustable flow control valves shall regulate upward motion of gutter brooms.

Each gutter broom shall be controlled from inside the cab by a single electric toggle switch.

Each gutter broom shall additionally shall additionally incorporate a hydraulically actuated tilt capability of 27 degrees, remotely controlled from the operator's control panel in cab to allow instant angle adjustment for removal from deep gutters (such as those resulting from multiple overlays of blacktop).

Each gutter broom shall be supplied with a gutter broom drop down feature allowing gutter brooms to drop down for road surface agitation in front of pick-up head and to reduce sweeping width for tight locations.

In-cab gutter broom rotation variable speed controls shall be supplied.

A floodlight shall be supplied for both left and right gutter brooms. Each light will have an independent in cab control switch.

12" parabolic mirror shall be supplied for both left and right gutter brooms.

Unit shall have capability of operating both gutter brooms simultaneously with pick-up head for a sweeping path of up to 142".

Dust Control System E

Yes

No

Water tank(s) shall have 220-gallon minimum capacity, constructed of recyclable polyethylene for strength and puncture resistance.

Tank(s) shall be 100% rustproof.

Tank(s) shall be bolt-in design for easy removal.

Water tank must have baffles built-in for vehicle safety or be multiple tank design for same effect.

A sight level gauge shall be supplied for water tank(s).

Water from tank(s) to be filtered by 80-mesh cleanable filter between tank(s) and water pump.

Pump shall be belt driven triplex design delivering minimum of 3.5 GPM @ 1000 PSI with an electronic solid state level sensor shut off pump and turn on low water warning lamp when water depleted.

Electric solenoid water control valves shall be in-cab controlled.

Spray nozzle system shall use 55 PSI system relief pressure setting.

Minimum of four (4) nozzles shall be supplied on pick-up head.

Minimum of two (2) nozzles shall be supplied for each gutter broom.

Set of two (2) nozzles shall be supplied for right (curb side) gutter broom in addition to base gutter broom nozzles with separate in cab control switch located at operator's panel for use in extreme dust conditions.

One (1) nozzle shall be located in hopper inlet.

High Output Water System: Shall be supplied as follows for increased dust control during peak sweeping conditions:

- a) Two (2) spray nozzles shall be mounted to each end of this (4), directed at gutter brooms.
- b) Two (2) additional nozzles, one each side, shall be mounted to chassis frame in front of pick-up head directed at gutter brooms.
- c) Nozzles to be controlled by switches located inside cab on sweeper control panel. Two (2) switches (L&R) are to be supplied for this system, each controlling three (3) nozzles.

A hopper type PM-10 nozzle shall be mounted in pressure tube with independent in-cab control switch located at operator control panel.

Water tank shall have anti-siphon/anti-pressure filler neck with air gap.

Flexible 20 ft. long water fill hose for filling water reservoir and fill hose storage rack shall be provided.

Fill hose shall have quick disconnect fitting for attachment to sweeper fill assembly, 2 1/2", size with self-cleaning cone filter screen.

Water fill hose shall include a 100 mesh stainless cleanable filter.

Wash Down System: System using 3.5 GPM@1000 PSI with a 50-ft. wash down hose mounted on sweeper with retractable/locking hose reel shall be supplied.

- a) Wash down system supplied with trigger controlled wash down gun.
- b) Wash down gun shall be supplied with a 36" removable lance assembly that includes a spray tip protector.
- c) In addition the spray gun shall be supplied with a 36" extension that easily attaches between the gun and 36" lance for a total length of 72".

Hydrant wrench shall be supplied.

An air purge system to facilitate purging dust control system during freezing conditions will be supplied.

Hopper F	Yes	No
Hopper size to be approximately seven and three tenths (7.3) cubic yards volumetric measurement with an operating load capacity of not less than 6.0 cubic yards welded stainless steel construction.	_____	_____
Stainless Steel Hopper Package: Package will have the following minimum components fabricated out of chrome-nickel, non-hardening Austenitic stainless steel with a minimum chromium content of 16-18% for strength and maximum corrosion, salt spray, and rust resistance.	_____	_____
a) Hopper weldment including entire floor, sides and roof.	_____	_____
b) Hopper dump door with port covers.	_____	_____
c) Hopper side inspection doors.	_____	_____
d) Hopper screen and screen supports.	_____	_____
e) Raker plate.	_____	_____
f) Skimmer hood.	_____	_____
h) Blower housing.	_____	_____
Manufacturer must supply at time of bid a letter certifying the entire body is made of stainless steel, stating type, grade, manufacturer, origin and chromium content which must be a minimum of 16-18%.	_____	_____
Hoppers requiring coatings and/or stainless steel liners in lieu of all stainless steel construction are unacceptable for intended service.	_____	_____
Dumping shall be accomplished by means of hydraulically actuated cylinders attached to a rear door which shall have a minimum opening of 84"x44" with a raker bar moving inside hopper as door is opened and closed to dump debris behind the rear wheels. (Raker bar dump design preferred over raise to dump designs for operator safety, unit stability, and decreased maintenance requirements.)	_____	_____
Hydraulic cylinder movement shall be controlled with the use of electric toggle switch located on the side of the hopper so discharging of debris may be viewed during dumping for maximum safety.	_____	_____
In addition to standard ump switch mounted on left side of sweeper a dump switch will be mounted on sweeper control panel inside cab.	_____	_____

Hopper floor shall have a minimum 22-degree slope.

Hopper dump door shall be opened and closed hydraulically and be held in the closed position by means of a lock valve located in the hydraulic dump circuit. (need or use of mechanical locks is not acceptable do to operator safety concerns.)

An auxiliary electric over hydraulic system to dump unit without need to run auxiliary engine shall be supplied.

An inspection door (9.75"x29" minimum) shall be provided on both left and right side of hopper for operator safety, easy viewing inside hopper and insertion of large debris.

Hopper shall be maintained airtight through use of rubber seals on all doors and openings.

Hopper inlet roof area shall have a bolt on replaceable wear resistant liner with a 3/8" minimum thickness x 11" W x 10'L.

A bolt-on replaceable Nitronic 30 stainless Steel wear flange shall be attached at hopper suction between hopper inlet flange and suction transition for added wear resistance in severe sweeping conditions.

Suction inlet wear flange shall be fitted with a set of bolt-in wear liners to increase wear resistance and reduce unit maintenance in severe sweeping conditions.

A high volume four (4) nozzle hopper deluge cleanout system shall attach to fire hydrant for flushing hopper interior. Includes quick disconnect fittings on nozzle system connection and filler hose.

Hopper shall include a hopper screen suction wall partition extension.

Two (2) LED amber beacon lights, SAE Class 1 shall be mounted on rear of hopper roof)One (1) each rear corner).

A heavy-duty protective limb guard shall be supplied for each beacon light.

Two (2) work lights shall be mounted at rear of hopper to illuminate the dump area rear of sweeper.

Two (2) amber flashing warning lights shall be mounted at rear of the hopper.

A lighted LED arrow stick Whelan TACF85LH or approved equal will be mounted on rear of the hopper.

A lighted LED arrow stick Whelan TACF85LH or approved equal will be mounted on rear of hopper below unit profile. Controls for indicating left, right, or both shall be in-cab mounted near sweeper control panel for use from either seat.

To ensure proper lubrication, all grease fittings and non-sealed bearings on sweeper unit must be lubricated through independent lines by a pre-approved Auto-Lube-System.

Dust Separator (High Capacity) G

Yes

No

Separation of dirt and refuse from the air stream shall be accomplished within the hopper by means of a multi-pass cylindrical centrifugal dust separator with a minimum size of 20" diameter and 61" width to insure proper separation efficiency.

Separator shall be a high capacity centrifugal system with oversized void space to capture separated dust and fine particles.

Separator shall be designed so that it will not plug with normally encountered debris.

The combination skimmer door/hood shall be lightweight with a welded frame and wear liner for long life.

Entire dust separator inlet area shall be lined with a bolt-in replaceable wear resistant liner for long life operation.

A 61"x84" stainless steel woven hopper screen of not less than 13 gauge shall be provided to allow air to move freely from the hopper into the centrifugal dust separator.

Filters and baffles are not acceptable due to increased cost of replacement and cleaning.

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Blower H	Yes	No
Heavy-duty die cast, wear resistant, high strength cast aluminum alloy turbine type open face blower shall be provided to efficiently create sweeper air pressure and suction. cast aluminum alloy turbine type open face blower shall be provided to efficiently create sweeper air pressure and suction.	_____	_____
Blower shall be computer balanced to within 4 grams.	_____	_____
Blower shall be coated with 1/4" wear resistant rubber bonded to each paddle for long life.	_____	_____
Blower shall be mounted on self-aligning anti-friction bearings, sealed and lubricated for bearing life. If bearings are not sealed, then an automatic lube system must be furnished on sweeper unit.	_____	_____
Blower shall be driven from PTO off auxiliary engine by heavy-duty power belt, which shall be adjustable for tension.	_____	_____
Auxiliary engine assembly shall be adjustable for tensioning the power band without removal utilizing a simple jack bolt system.	_____	_____
Blower housing shall be bolt-on design for ease of maintenance.	_____	_____
Blower housing shall be constructed of minimum 10-gauge stainless steel with a minimum chromium content of 16-18%.	_____	_____
Blower housing shall be lined with a bolt-in wear resistant, replaceable rubber liner, minimum 1/2" thick, and solid forged steel blower lid, for long life.	_____	_____
Blower speed not to exceed 3000 RPM to insure smooth efficient performance and long life.	_____	_____

Pick up Head I	Yes	No
A spring balanced all steel fabricated pick-up head with maximum length and width of 87"x41" I.D. shall be provided.	_____	_____

Pick-up head shall have a separate upper and lower chamber where pressurized air is blasted from the upper chamber through an elongated blast orifice to street replaced.

Blast orifice flange shall be bolt-on design so flange is easily replaced.

Adjustment mechanism shall be provided so blast orifice gap can be easily adjusted without removing pick-up head from sweeper.

Pick-up head shall have a minimum 14" diameter pressure inlet ring located on left side of pick-up head.

A bolt-on pressure inlet ring with turning vanes shall be provided for efficient performance and easy cost effective serviceability.

A cleanout port shall be supplied at pressure inlet ring area to facilitate flushing of pick-up head interior and blast orifice areas.

A pick up head flush with quick disconnect that matches fill and hopper deluge connections shall be supplied at pressure inlet ring area above rear broom cavity. This flush is to expedite flushing of pick-up broom cavity and work chamber areas.

A minimum 14" diameter suction hose, attached to a quick disconnect transition at the hopper for ease of cleaning, shall extend down to the right side of pick-up head and shall be attached to the pick-up head suction nozzle inlet ring which shall be attached to the pick-up head suction nozzle inlet ring which shall be constructed of 1/4" steel.

Suction inlet ring shall be supplied with a steel reinforced wear resistant liner, minimum 3/8" thick for long life.

Suction and pressure hoses shall be heavy-duty in construction with minimum 3/8" thick wall construction for long life.

Pick-up head shall be equipped with 2" wide adjustable side mounted integral alloy steel carbide runners for maximum pick-up ability and long life.

Skid runners to be warranted for two (2) years/2,000 hours prorated.

Side plates shall be symmetrical for optimum life.

Pick-up head shall be raised and lowered hydraulically by a single switch on in-cab sweeper control panel.

Pressure inlet ring shall be equipped with an adjustable pressure relief for optimum leaf and light debris sweeping.

Pressure relief control shall be centrally mounted inside cab.

Front Curtain Lift System: System shall be furnished to enhance the ability to sweep

a) Lifter shall be hydraulic with an in cab control switch to facilitate raising of front curtains without need for operator to make any manual adjustments or leave cab.

b) Unit must have the ability to hydra-mechanically lift the entire front curtain set by utilizing a hydraulic actuated and retractable roller assembly that allows the pick-up to sweep even larger volumes of leaves and light debris.

c) Curtain Lifter must be supplied in addition to a pressure relief/vacuum enhancer door as described in specification.

d) Under no circumstances is the pressure relief/vacuum enhancer door to be considered as in place of the curtain lifter, both devices must be supplied as specified.

Main Broom: A broom shall be mounted at the rear of the pick-up head and shall be fully

a) Control of the rotation and positioning shall be accomplished by a single toggle switch located on the sweeper control console in the cab.

b) Broom shall be driven hydraulically at 230 RPM.

c) A separate hydraulic pump will be provided for all broom functions.

d) The broom shall be 79" (200cm) long and 12" (305) in diameter.

e) Broom pattern shall be easily adjustable by mechanisms on top of pick-up head.

f) Nominal broom replacement shall be 15 minutes.

g) Design of broom suspension shall provide automatic independent adjustment of each broom end to surface being swept.

h) Two (2) hydraulic cylinders shall be incorporated to provide positioning and the independent suspension of the broom ends.

i) Down pressure and broom pattern shall be hydro mechanically controlled to provide maximum broom performance and life.

Automatic Sweep Interrupt (ASI) System: Electronic circuit designed to engage when transmission gear selector is placed in reverse or reset switch activated. shall consist of Following design:

- a) A switch shall be supplied to set system into auto (On) activated mode or manual (Off) mode.
- b) When unit shifted into reverse system shall down blower, auxiliary engine rpm's, water system and lift pick-up head and gutter brooms in operation.
- c) System shall have a memory to re-engage all items that were in operation when reset switch activated except auxiliary engine rpm's.
- d) System does not automatically reengage when unit put in drive for added safety and to give operator control of process to lessen possibility of damage if engaged in inappropriate area.
- e) Operator must raise auxiliary engine rpm's manually for added safety and control.
- f) Reset switch shall mirror operation of system when put in reverse for added.
- g) Reverse pick-up head system shall be furnished to allow unit to back up without damage to the pick-up. This system is to work as a mechanical backup to the ASI system for added protection.

Operating Controls J

Yes

No

All operating controls for sweeper shall be mounted inside truck cab and readily accessible to operator in either right or left driving positions.

All main electrical systems. i.e. ignition, lights, hydraulic and water shall be separately fused to isolate electrical problems to fused area to simplify and speed service.

Auxiliary engine controls and gauges shall be mounted on centered console panel, and consist of, but not limited to, ignition switch, linear actuator auxiliary engine throttle, oil pressure gauge, water temperature gauge, volt meter, and tachometer.

Sweeper controls, meters and gauges shall consist of, but not be limited to, right gutter broom, left gutter broom, right and left gutter broom tilt, right and left gutter broom dropdown controls, gutter broom variable speed control, in-cab dump switch, pick-up head, center broom, front curtain lifter, warning lights, water system switches, and work light, lighted paddle type switches.

A low water light, hour meter, and leaf pressure bleeder control shall also be supplied on centered sweeper control panel. _____

A dump control switch shall be located on the exterior of sweeper just above the left fender for operator safety and control. _____

An additional external pump on/off control shall be located on the exterior of sweeper near connection for wash down gun just above the right fender. _____

Additional Equipment K

Yes

No

Abrasion Protection Package to include hopper screen baffle, suction inlet liner, protective hopper wall liners, separator and blower housing wall liners, pressure side pick-up head wear protection pads, suction nozzle liner, and heavy duty minimum 3/8" thick pressure and suction hoses. _____

Special Wiring Package: Unit shall be fitted with a Severe Weather Sealed Wiring Package:

a) All external electrical wiring, harnesses and terminations shall be of a sealed, weather-tight design utilizing heat-shrinkable components. _____

b) Where feasible, all connectors shall utilize solid, cold formed, nickel-plated copper alloy contacts with gas tight crimps. (Duetsch) _____

Low Emissions Package: SCAQMD, Rule 1186 Compliant PM-10 particulate dust control system supplied, to meet varied environments: _____

a) System will consist of a pressure transition mount hopper type injection nozzle with independent in-cab control switch. _____

b) In addition a high capacity dust separator door/hood assembly shall be supplied to increase efficiency of separation. _____

Manuals L

Yes

No

Successful bidder shall supply two (2) sweeper operator manuals. _____

Successful bidder shall supply two (2) sweeper parts and service manuals, (1_ in booklet form and 1 on DVD) with each unit. _____

Manufacturer shall have available certifiable factory training course for complete maintenance and operation of sweeper, minimum of two days. To include transportation and lodging. _____

Manufacturer must have scheduled a minimum of twenty-five (25) training courses

Published training school schedule must be enclosed at time of bid.

Bidder shall provide operator instruction/safety/maintenance procedures on DVD with unit at time of delivery.

The entire sweeper unit shall be painted with standard white paint applied over a suitable primer system.

Entire unit shall be painted white to match chassis standard white.

Pick-up head, gutter brooms, and chassis frame shall be painted black.

Warranties M

Yes

No

The sweeper unit shall be free from defective materials and workmanship for a period of 12 months or 1000 hours.

Pick-up head skid plates carry a 2-year/2000 hour prorated warranty.

Water tank(s) carry lifetime rust through warranty.

Chassis warranties detailed in chassis specification section.

General A

Yes

No

Cab and chassis shall be commercially manufactured and fully equipped for highway operation, and totally compatible in size, weight capacity, and function for use with the sweeper unit proposed.

Chassis shall be a Freightliner Model M@ conventional cab design with tilt hood, Model Year "2016" or newer, "2013 emissions certified.

a) Chassis Manufacturer Bid:_____

b) Chassis Model Bid:_____

c)Chassis Model Bid:_____

d) Chassis Emissions Certification Year:_____

Frame to be straight channel steel rails 80,000 PSI _____

Gross vehicle weight rating to be not less than 31,000 GVW. _____

Curb weight with cab, fuel, water, oil, and tires shall be 9,000 lbs. _____

Chassis cab enclosed and quipped with tinted safety glass all around. (Sliding windows not acceptable) _____

Warranty B

Yes

No

Total chassis coverage is 24 months/unlimited mileage. _____

Engine (diesel) coverage is 36 months/ 150,000 miles _____

Drive train coverage 9s 24 months/ unlimited mileage. _____

Frame coverage is 60 months/unlimited mileage. _____

Cab corrosion coverage is 60 months/ unlimited mileage. _____

Chassis Warranty is 100% parts and labor unless otherwise noted as provided by chassis manufacturer. _____

Wheelbase C

Yes

No

Shall be maximum 167" and shall provide maximum 102" between back of cab and center of rear axle for proper load distribution. _____

Axles D

Yes

No

Front axle to be a minimum 10,000 lbs., with 10,000 lbs. Taper leaf front suspension. _____

Rear axle shall be minimum 21,000 lbs., two (2) speed. _____

Steering E

Yes

No

Dual operator controlled integral power steering with cruise control and tilt shall be supplied. _____

Dual gauge clusters shall be supplied. _____

Diameter of steering wheels to be a minimum of 18" _____

Brakes F	Yes	No
Service brakes are to be full air with 18.7 CFM air compressor. (air over hydraulic not acceptable).	_____	_____
Cam type Q-Plus brakes to be supplied w/rear dust shields.	_____	_____
Brake system shall have automatic slack adjusters-front and rear.	_____	_____
Parking brake shall be spring actuated, double diaphragm, w/warning light.	_____	_____
Brake chambers, spring relocated to rear of rear axle for maximum ground clearance.	_____	_____
Four-change anti-lock brake system shall be supplied.	_____	_____
An automatic air dryer shall be supplied on chassis brake system.	_____	_____
Cab G	Yes	No
Cab shall have in-dash chassis manufacturer's factory installed air conditioner for operator safety and comfort with fresh air filter. (After market air conditioners are unacceptable)	_____	_____
Driver and passenger seats shall be individual, air suspension, (Bostrom Tallaega 910) high-back, adjustable type with lumbar support, cloth insets, and safety seat belts.	_____	_____
Seats shall be supplied with cloth insets fro added operator comfort.	_____	_____
Tinted glass shall be provided.	_____	_____
Dual sun visors, coat hook. Storage pocket on drivers door, cigar lighter, single electric horn, electric windshield washer and 2-speed electric wipers with intermittent wiper switch shall be provided.	_____	_____
Both interior and Exterior grab handles shall be provided for ease of entry.	_____	_____
Chassis shall be equipped with a fresh air heater and defroster.	_____	_____
An AM/FM stereo radio with clock, CD, weatherband, and front input shall be provided, must have Bluetooth capabilities.	_____	_____

Gauges shall consist of voltmeter, oil, water, fuel, air pressure, and electronic speedometer

Warning indicators shall be supplied to indicate low oil pressure, and high coolant temperature.

Warning light and buzzer shall be supplied for low brake air pressure.

An LED amber beacon light, SAE Class 1 shall be mounted on top of chassis cab.

Chassis shall be equipped with West Coast Factory OEM mirrors, and two (2) 12" diameter parabolic mirrors.

West Coast factory OEM mirrors shall be electric heated and remote controlled from in-cab controls for operator safety and convenience. Controls shall be supplied on both driver and passenger doors.

A cab mounted refillable Dry chemical, DOT approved fire extinguisher shall be supplied.

Hazard triangle reflector kit shall be supplied.

Cab to be painted chassis manufacturer's standard white. (sweeper painted to match chassis).

Electricals H

Yes

No

Shall consist of two (2) multiple beam headlights with dash beam indicator, instrument panel, taillights, and stoplights.

Front and rear turn signals, self-canceling signal switch, equipped for 4-way flashing. Taillights, stop lights, and signal lamps may be in combination.

Chassis shall be supplied with two (2) Group 31, 12 volt 925 CCA heavy-duty maintenance free batteries for a total of 1850 CCA.

Chassis supplied with a 160-amp alternator.

A 12V power supply shall be supplied in dash.

Engine I	Yes	No
Engine shall be heavy-duty Cummins ISB 6.7L or approved equal diesel with a minimum of 200 HP @2300 RPM and 520 ft.-lbs. torque @1600 RPM.	_____	_____
Duel element dry type air cleaner with restriction indicator dash mounted.	_____	_____
Automatic glow plug with indicator light shall be supplied.	_____	_____
Automatic shutdown/over temperature, low oil pressure, or low coolant level engine protection system shall be furnished.	_____	_____
A fuel/water separator shall be supplied.	_____	_____
Left hand outboard frame mounted vertical after-treatment device w/top stick exhaust system shall be provided.	_____	_____
Fuel J	Yes	No
A minimum 50 gallon allow (non steel) fuel tank shall be mounted on curb side of unit and supply fuel to both sweeper and chassis engines.	_____	_____
Tires and Wheels K	Yes	No
Heavy-duty first line quality tubeless tires to be minimum 11R x 22.5, 14 ply, with duals in rear for adequately carrying full load of sweeper and for maximum stability and durability.	_____	_____
Wheels to be 10-hole disc-22.5x8.25 hub-piloted.	_____	_____
Transmission L	Yes	No
Shall be a heavy-duty Allison 2500RDS-P electronic automatic with overdrive, five (5) forward speeds, and one (1) reverse speed. Transmission shall have external oil filter with overdrive, with PTO provision.	_____	_____

Optional Item Specification Details	Yes	No
Hand Hose Assembly: Auxiliary 8" hydraulic boom mounted heavy-duty hand hose.	_____	_____
a) Heavy-duty minimum 3/8" thick hose shall be supplied. Hose shall have a minimum 8" diameter x 10 ft. length with quick disconnect fitting and rear storage brackets.	_____	_____
b) A 52" x 8" diameter aluminum suction tube with quick disconnect will be supplied with steel crown nozzle end and storage brackets on rear door.	_____	_____
c) Two (2) additional 42"x8" aluminum suction tube extensions shall be supplied with male/female quick disconnects and storage brackets on rear door.	_____	_____
d) Adequate quick disconnect clamps shall be supplied enabling utilization of all tubes simultaneously if required.	_____	_____
e) Hydraulic Boom Remote: Power to control boom (up/down), auxiliary engine RPM (up/down), and (start/stop) of auxiliary engine utilizing a wireless control system. System includes a receiver mounted in the chassis cab and two (2) transmitters; one to be a hand held FOB and one to be a box mounted on a quick release handle for 8" hand hose tubes and nozzles.	_____	_____

INSTRUCTION TO BIDDERS

PREPARATION OF BID PROPOSAL

1. The Bidder shall submit her/his proposal upon the form(s) furnished by the City (attached). The bidder shall specify a unit price for each pay item. All figures shall be in ink or typed.
2. If a unit price or lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it, and initialed by the bidder, also with ink. In case of discrepancy between the prices written in words and those written in figures, the prices written in words shall govern.
3. The bidder's proposal must be signed with ink by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, by one or more officers of a corporation, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his name and post office address must be shown, by a partnership the name and post office address of each partnership member must be shown; as a joint venture, the name and post office address of each must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles, and business addresses of the President, Secretary, and Treasurer.
4. All questions shall be submitted in writing to and received by the Purchasing Agent at the above address, a minimum of 7 days prior to the scheduled bid opening. The Purchasing Agent, will then forward both the question and the city's response to the question to all known prospective bidders.

IRREGULAR PROPOSALS

Bid proposals will be considered irregular and may be rejected for any of the following reasons:

1. If the proposal is on a form other than that furnished by the Owner or if the form is altered or any part thereof is detached.
2. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
3. If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
4. If the proposal does not contain a unit price for each pay item listed, except in the case of authorized alternate pay items.

DELIVERY OF BID PROPOSALS

When sent by mail, the sealed proposal shall be addressed to the City of Rochester, Purchasing Agent, 31 Wakefield Street, Rochester, NH 03867. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened. Emailed or faxed bid proposals are not acceptable.

WITHDRAWAL OF BID PROPOSALS

A bidder will be permitted to withdraw his proposal unopened after it has been deposited if such request is received in writing prior to the time specified for opening the proposals.

PUBLIC OPENING OF BID PROPOSALS

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

DISQUALIFICATION OF BIDDERS

Either of the following reasons may be considered as being sufficient for the disqualification of a bidder and the rejection of her/his bid proposal(s):

1. Evidence of collusion among bidders.
2. Failure to supply complete information as requested by the bid specifications.

CONSIDERATION OF PROPOSALS

1. Bids will be made public at the time of opening and may be reviewed only after they have been properly recorded. In case of discrepancy between the prices written in words and those written figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.
2. The right is reserved to reject any or all proposals, to waive technicalities or to advertise for new proposals, if in the judgment of the City, the best interest of the City of Rochester will be promoted thereby.
3. Bid results will be available on the website at www.rochesternh.net within 48 hours of the bid opening.

AWARD OF CONTRACT

The City holds the right, in its judgment, to award the contract to the bidder, which it feels is in the best interest of the City. If a contract is to be awarded, the Contractor/Vendor selection shall be based in part on possession of the necessary experience, organization, technical and professional qualifications, skills and facilities, reference checks, project understanding, approach, ability to comply with proposed or required time to completion or performance, licensing or certification, in good standing with Federal, State and Local agencies, possession of satisfactory record of performance, cost and to a responsible and qualified bidder whose proposal complies

with all the requirements prescribed as soon as practical after the bid opening. No bid shall be withdrawn for a period of (60) sixty days subsequent to the opening of bids without the consent of the City of Rochester. The successful bidder will be notified, by the form mailed to the address on his proposal, that his bid has been accepted and that he has been awarded the contract.

CANCELLATION OF AWARD

The City reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability or other claim against the City.

BID EVALUATION

In addition to the bid amount, additional factors will be considered as an integral part of the bid evaluation process, including, but not limited to:

1. The bidder's ability, capacity, and skill to perform within the specified time limits.
2. The bidder's experience, reputation, efficiency, judgment, and integrity.
3. The quality, availability and adaptability of the supplies and materials sold.
4. The bidder's past performance.
5. The sufficiency of bidder's financial resources to fulfill the contract.
6. The bidder's ability to provide future maintenance and/or services.
7. Any other applicable factors as the City determines necessary and appropriate (such as compatibility with existing equipment).

CONDITIONS AT SITE

Bidders shall be responsible for having ascertained pertinent local conditions, such as: location, accessibility and general character of the site. The character and extent of existing work within or adjacent to the site and any other work being performed thereon at the time of the submission of her/his bid.

LAWS, PERMITS AND REGULATIONS

1. The Contractor shall obtain and pay for all licenses and permits as may be required of him by law, and shall pay for all fees and charges for connection to outside services, and use of property other than the site of the work for storage of materials or other purposes.
2. The Contractor shall comply with all State and Local laws, ordinances, regulations and requirements applicable to work hereunder, including building code requirements. If the Contractor ascertains at any time that any requirement of this Contract is at variance with applicable laws, ordinances, regulations or building code requirements, she/he shall promptly notify the City of Rochester in writing.

CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

1. The Contractor shall deliver with bid documents; certificates of all insurance required hereunder. The certificate shall state that the companies issuing insurance will

endeavor to mail to the City of Rochester ten (10) days notice of cancellation, alteration or material change of any listed policies. The Contractor shall keep in force the insurance required herein for the period of the Contract. At the request of the City of Rochester, the Contractor shall promptly make available a copy of any and all listed insurance policies. The requested insurance must be written by a Company licensed to do business in New Hampshire at the time the policy is issued.

2. The City of Rochester, NH shall be listed as additional insured on all the Certificates of Insurance.
3. The Contractor shall require each Subcontractor employed on the Project to maintain the coverage listed below unless the Contractor's insurance covers activities of the Subcontractor on the Project.
4. No operations under this Contract shall commence until certificates of insurance attesting to the below listed requirements have been filed with and approved by the Department of Public Works, and the Contract approved by the City Manager.
 - a. Workmen's Compensation Insurance
Limit of Liability - \$100,000.00 per accident
 - b. Commercial General Liability
Limits of Liability
Bodily Injury: \$1,000,000.00 per occurrence, \$1,000,000.00 aggregate
Property Damage: \$500,000.00 per occurrence, \$200,000.00 aggregate
Combined Single Limit, Bodily Injury and Property Damage:
\$2,000,000.00 aggregate
 - c. Automobile Liability
Limits of Liability - \$500,000.00 per accident.
 - d. The Contractor shall indemnify, defend, and save harmless the City of Rochester and its agents and employees from and against any suit, action or claim of loss or expenses because of bodily injury. Including death at any time resulting there from, sustained by any person or persons or on account of damage to property, including loss of use thereof, whether caused by or contributed to by said City of Rochester, its agents, employees or others.

ACCIDENT PROTECTIONS

It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to the Contract. That a Contractor and any Subcontractors shall not require any laborer or mechanic employed in the performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to health or safety, as determined by construction safety and health standards of the Occupational Safety and Health Administration, United States Department of Labor, which standards include, by reference, the established Federal Safety and Health regulations for Construction. These standards and regulations

comprise Part 1910 and Part 1926 respectively of Title 29 of the Code of Federal Regulations and are set forth in the Federal Register. In the event any revisions in the Code of Federal Regulations are published, such revisions will be deemed to supersede the appropriate Part 1910 and Part 1926, and be effective as of the date set forth in the revised regulation.

SUBCONTRACTS

1. Nothing contained in the Specifications or Drawings shall be construed as creating any contractual relationship between any Subcontractor and the City of Rochester. The Division or Sections of the Specifications are not intended to control the Contractor in dividing the work among Subcontractors or to limit the work performed by any trade.
2. The Contractor shall be as fully responsible to the City of Rochester for the acts and omissions of Subcontractors and of persons employed by her/him, as she/he is responsible for the acts and omissions of persons directly employed by her/him.

PROTECTION OF WORK AND PROPERTY

The Contractor shall, at all times, safely guard the City's property from injury or loss in connection with this Contract. She/he shall, at all times, safely guard and protect her/his own work and that of adjacent property from damage. All passageways, guard fences, lights and other facilities required for protection by State or Municipal laws, regulations and local conditions must be provided and maintained.

USE OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes at his own expense:

1. To take every precaution against injuries to persons or damage to property;
2. To comply with the regulations governing the operations of premises which are occupied and to perform his Contract in such a manner as not to interrupt or interfere with the operation of the Institution;
3. To perform any work necessary to be performed after working hours or on Sunday or legal holidays without additional expense to the City, but only when requested to do so by the City;
4. To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other Contractors;
5. Daily to clean up and legally dispose of (away from the site), all refuse, rubbish, scrap materials and debris caused by his operation. Including milk cartons, paper cups and food wrappings left by his employees, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
6. All work shall be executed in a workmanlike manner by experienced mechanics in accordance with the most modern mechanical practice and shall represent a neat appearance when completed.

MATERIALS AND WORKMANSHIP

1. Unless otherwise specified, all materials and equipment incorporated into the work under the Contract shall be new. All workmanship shall be first class and by persons qualified in their respective trades.
2. Where the use of optional materials or construction method is approved, the requirements for workmanship, fabrication and installation indicated for the prime material or construction method shall apply wherever applicable. Required and necessary modifications and adjustments resulting from the substitution or use of an optional material or construction method shall be made at no additional cost to the City.

STANDARDS

1. Materials specified by reference to the number, symbol or title of a specific standard, such as a Commercial Standard, a Federal Specification, Department's Standard Specifications, a trade association standard or other similar standard. Shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of advertisement, except as limited to type, class or grade or modified in such reference.
2. Reference in the Specifications to any article, device, product, material, fixture, form or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition. In such cases the Contractor may, at his option, use any articles, device, product, material fixture, form or type of construction that, in the judgment of the City expressed in writing to all Bidders before opening of bids as an addendum, is an acceptable substitute to the specified.
3. Substitution During Bid Time: Whenever any particular brand or make of material or apparatus is called for in the Specifications, a Bidder's Proposal must be based upon such material or apparatus, or upon a brand or make which has been specifically approved as a substitution in an Addendum issued to all Bidders during the bidding time.
4. The intent is that the brand or make of material or apparatus that is called for herein establishes a standard of excellence that, in the opinion of the Consultant and Engineer, is necessary for this particular Project.
5. Substitution After Bid Opening: No substitutions will be considered after bids have been opened unless necessary due to strikes, lockouts, bankruptcy or discontinuance of manufacture, etceteras. In such cases, the Contractor shall apply to the City, in writing within ten (10) days of his realizing his inability to furnish the article specified, describing completely the substitution he desires to make.

EXTRAS

Except as otherwise herein provided, no charge for any extra work or material will be allowed unless the Director of Public Works has ordered the same, in writing.

GUARANTEE OF WORK

1. Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment or workmanship for one (1) year from the Date of Final Acceptance.
2. Make good any work or material, or the equipment and contents of said building or site disturbed in fulfilling any such guarantee.
3. In any case, wherein fulfilling the requirements of the Contract or of any guarantee, should the Contractor disturb any work guaranteed under another contract, the Contractor shall restore such disturbed work to a condition satisfactory to the Director of Public Works. And guarantee such restored work to the same extent as it was guaranteed under such other contracts.
4. If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the City of Rochester may have the defects corrected and the Contractor shall be liable for all expense incurred.
5. All special guarantees applicable to definite parts of the work that may be stipulated in the Specifications or other papers forming a part of the Contract shall be subject to the terms of this paragraph during the first year of the life of such special guarantee.

DEFAULT AND TERMINATION OF CONTRACT**If the Contractor:**

1. Fails to begin work under Contract within the time specified in the notice to proceed; or
2. Fails to perform the work with sufficient workers and equipment, or with sufficient materials to assume prompt completion of said work; or
3. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable; or
4. Discontinues the prosecution of the work; or
5. Fails to resume work, which has been discontinued, within the time frames included in specifications; or
6. Becomes insolvent or has declared bankruptcy, or commits any act of bankruptcy or insolvency; or
7. Makes an assignment for the benefit of creditors; or
8. For any other causes whatsoever, fails to carry on the work in an acceptable manner the City of Rochester will give notice, in writing, to the Contractor for such delay, neglect, and default.

If the Contractor does not proceed in accordance with the Notice, then the City of Rochester will have full power and authority without violating the Contract to take the prosecution of the work out of the hands of the Contractor. The City of Rochester may enter into an agreement for the completion of said Contract according to the terms and

conditions thereof, or use such other methods as in the City's opinion will be required for the completion of said Contract in an acceptable manner.

All extra costs and charges incurred by the City of Rochester as a result of such delay, neglect or default, together with the cost of completing the work under the Contract will be deducted from any monies due or which may become due to said Contractor. If such expenses exceed the sum which would have been payable under the contract, then the Contractor shall be liable and shall pay to the City of Rochester the amount of such excess.

OBTAINING BID RESULTS

Bid results will be available on the website at www.rochesternh.net within 48 hours of the bid opening.