

City of Portsmouth  
Portsmouth, New Hampshire  
Public Works Department

INVITATION TO BID

**Sealed** bid proposals, **plainly marked** "Public Works – Sewer Division Truck #65 Combination Sewer Cleaner Bid #51-07" **on the outside of the envelope**, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until **July 25, 2007 @ 2:30** p.m. at which time all bids will be publicly opened and read aloud.

**Scope: The Portsmouth Public Works Department – Sewer Division is seeking to purchase a 60,000 lb. GVWR, Cab and Chassis Truck COMBINATION SEWER CLEANER.**

Bid Specifications may be obtained from the Finance/Purchasing Department on the third floor at the above address, on-line at **www.cityofportsmouth.com**, or by calling the Purchasing Coordinator at 603-610-7227. **Please continue below for the complete bid document.**

The City of Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, and to accept any bid that it may deem to be in the best interest of the City.

Questions may be directed to the Purchasing Coordinator at 603-610-7227.

## **INSTRUCTION TO BIDDERS**

### I. Preparation of Bid Proposal

- A. The Bidder shall submit its proposal upon the form furnished by the City (attached). Prices shall be given in both in words and figures.
- B. Corrections made to amounts or information requested on the bid form should be made by crossing out the error and entering the new price or information above or below it. The correction must be initialed. In case of discrepancy between the prices written in words and those written in figures, the prices written in words shall govern.
- C. The bidder's proposal must be signed 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 if 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.
- D. All words, figures, corrections shall be in ink or typed. All signatures shall be in ink.

### II. Delivery of Bid Proposals

When sent by mail, the sealed proposal shall be addressed to the owner at the address and in the care of the official in whose office the bids are to be received. 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. Faxed bid proposals are not acceptable.

### III. 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.

### IV. 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.

V. Irregular Proposals and Disqualification of Bidders

Bid proposals that are irregular may be rejected. Irregular bid proposals include the following:

- A. Failure to use the bid form provided or alteration of the form.
- B. Unauthorized additions, conditional or alternated bids, incomplete bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
- C. The addition of any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

Bidders may be disqualified and the bid proposal rejected for the following reasons:

- A. More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- B. Evidence of collusion among bidders;
- C. Failure to submit all required information requested in bid specifications;
- D. Bidder is not qualified or able to provide the provide the services or product(s) described in the bid specifications; or
- E. Disqualification is in the best interest of the City of Portsmouth.

AWARD

I. Consideration of Proposals and Award

After the proposals are opened and read, bid results will be available to the public. In case of discrepancy between the prices written in words and those written figures, the prices written in words shall govern.

Within 30 calendar days after the opening of proposals, if an award is made, it will be made to the lowest, responsible, qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by mail at the address indicated on the proposal.

II. Reservation of Rights

The City reserves the right to cancel the award at any time before final notification of the successful bidder without any liability against the City. The City of Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, and to accept any bid that it may deem to be in the best interest of the City.

**BID SPECIFICATIONS**

For

**Water Truck #65**  
COMBINATION SEWER CLEANER

**City of Portsmouth, New Hampshire**

**Public Works Department**

Specifications for a 2008 7500 International Cab and Chassis  
with a Combination Sewer Cleaner

## MINIMUM SPECIFICATION

60,000 lb. GVWR, Cab and Chassis, - COMBINATION SEWER CLEANER

City of Portsmouth, New Hampshire  
Public Works Department  
Sewer Division

**SCOPE**

It is the intent of this specification to describe a 60,000 lb. GVWR cab and chassis with Combination Sewer Cleaner following minimum specifications considered necessary to perform the function indicated. The unit shall be new, unused, of current production, design and source from an established, recognizable, manufacturer. Standard items in the manufacturers published literature, furnished by the bidder, shall be included in the bid. A copy of the specifications for the unit being proposed shall be included with the bid. Any exceptions variations, and/or deletions must be noted or the bid may be rejected. The vehicle described herein will be utilized as a Combination Sewer Cleaner. All components furnished under this specification shall be capable of the stress of municipal Sewer Cleaning, and Jet rodding.

**60,000 lb. GVWR CAB and CHASSIS****DIMENSION:**

Wheelbase: 244, CT: 169, Axle to frame: 73

**ENGINE, DIESEL:**

Max Force 10 - 310 HP @ 2100 RPM

**ENGINE EQUIPMENT:**

1. Anti-freeze to be permanent, to minus 40 degrees Fahrenheit.
2. A water to oil engine oil cooler
3. Starter Motor 42MT
4. Gauge, Air Cleaner Restriction Air Cleaner Mounted
5. Air cleaner with Vacuator
6. Engine Shutdown Electric, Key operated
7. Governor Electronic
8. Throttle, Hand Control Electronic, instrument Panel Mounted
9. Engine oil drain plug Magnetic
10. Oil filter, Engine Spin-on type
11. Water Filter Engine Mounted
12. Fuel Filter Engine Mounted
13. Fan Drive {Horton model HTS} Automatic On/Off Type Control; with Normally Closed Temperature Control;
14. Front PTO adapter
15. Fan Nylon

- 16. Radiator cross Flow, Series System, 1150 Sq.In. Area and 1030 Sq.In. Charge Air Cooler, Front PTO Provision
- 17. Deaeration System with remote-mounted surge tank and sight glass
- 18. Radiator Hoses Premium, rubber
- 19. Block Heater, Engine {Phillips}120 volt/2500 Watt; includes 20 AMP plug

**TRANSMISSION, AUTO:**

Allison Model 3000 RDS 6 speed with PTO provisions

**AXLE, FRONT, I-BEAM TYPE:**

20,000-lb capacity

**AXLE, REAR, TANDEM:**

Meritor Single Reduction, 40,000-lb Capacity, with Lubepump, Driver Controlled Main Locking Differential in Rear-Rear Axle and 200 Wheel Ends

Gear ratio: 6.14

**CAB:**

Conventional, Steel, 80" Wide

**TIRE, FRONT:**

(2) 425/65R22.5 UNISTEEL G159 (GOODYEAR) 478 rev/mile, load range L, 20 ply and (1) spare rim and tire mounted

Front rims are to be disc type hub pilot 22.5 x 12.25

**TIRE, REAR:**

(8) 11R22.5 UNISTEEL G124 (GOODYEAR) 476 rev/mile, load range G, 16 ply (2) spare rims and tires mounted

rear rims are to be disc type hub pilot 22.5 x 8.25

**SUSPENSION, REAR, TANDEM:**

40,000-lb Capacity rubber springs and rubber end bushing, transverse torque rods

**SUSPENSION, FRONT SPRING**

Multileaf front shackle type; 20,000 lb. Capacity

**FRAME AND FRAME REINFORCEMENT:**

Outer "C" Channel, Heat Treated Alloy Steel (110,000 PSI Yield); 10.813" x 3.812" x 0.312"; and twenty [20] inch front frame extension for mounting PTO pump and plow  
Frame rails Heat treated alloy steel[110,000PSI Yield ] 10.813"x 3.812" x0.312

**ELECTRICAL SYSTEM:**

Electrical system to be 12 volt, standard equipment includes the following:

1. Turn signal flasher,
2. Turn signal switch, self canceling with integral switch,
3. Headlight dimmer switch integral turn signal switch,

4. Parking light integral with front turn signal and light,
5. Stop, turn, tail and backup lights dual, rear, reflector,
6. Starter switch electric key operated, with buzzer warning tone,
7. Turn signals, front flush mounted with reflectors and turn signals,
8. Windshield wipers with switch for intermittent operation,
9. Cigar lighter,
10. Electric horn, 1 each,
11. Alternator to be maximum capacity of 130 amps.
12. Battery system to be, maintenance free, (4) 12-volt, to be SEO single 770 Cold Cranking Amps @ 0 deg F.
13. Radio to be AM/FM stereo with speakers in cab,
14. Radio filter noise suppression shall be required with all electronic engines,
15. Electronic controlled indicators shall include low oil pressure and high temperature with light in audible alarm,
16. Roof marker lamps,
17. Headlights to be long life halogen,
18. Light set up for daytime running,
19. Dome light with LH & RH door switch.
20. Dual covered power points.
21. Hour Meter

**CAB / CHASSIS:**

1. Front bumper
2. Flare wheel openings
3. Grille to be stationary and painted argent
4. Paint color to be WHEATLAND YELLOW CAB & BODY-code #B9545, or manufacturers nearest color to be approved by City of Portsmouth.
5. Cab to be conventional, steel, and to include the following:
  - Passenger assist handles,
  - Floor covering to be black rubber;
  - Interior sheet metal to be painted, color based on the exterior color;
  - Headliner color keyed vinyl;
  - Steering wheel to be simulated leather;
  - Sunshades both sides, vinyl
  - Front head restraints
  - Windows all glass
  - Interior color to be charcoal
  - Mirrors to be stainless steel senior west coast type;
6. Convex mirrors, 2 each, to be stainless-steel, 8 in. diameter, mounted below primary mirrors;
7. Fuel tank-63 gallons
8. Gauge cluster to be English with English electronic speedometer with trip odometer, engine oil pressure gauge, electronic water temperature gauge, voltmeter, hour-meter.

9. Drivers seat, [National 2000 Model 295] Air suspension, intermediate back, vinyl isolated adjustments, two [2] position front cushion adjustment, minus 2-degree to plus 15-degree back cushion adjustment, mechanical lumbar support.
10. Passenger seat, mid-back fixed base.
11. Heater to be blend air type, with defroster, heater hoses to be premium rubber; front side window defoggers and a/c.
12. Cab interior trim to be deluxe, to include the following:
  - Storage pocket, door molded plastic, charcoal in color, mounted on door
  - Instrument to handle trim to be molded plastic, charcoal in color
  - Theft deterrent security passlock
  - Dual hood hatch
13. First-Aid kit 25 person, mounted in area for quick access
14. Fire extinguisher and triangle flare kit;
15. Full mud flaps shall be installed at all four (4) tires.

## **COMBINATION SEWER CLEANER**

### **GENERAL**

1. The machine shall be capable of removing stones, grit, grease, sludge and other debris from sanitary sewer and/or storm drain lines by the flushing action of high-pressure water.
2. The high-pressure sewer cleaner shall operate independent of the vacuum system.
3. The machine shall include an air conveying vacuum system to provide for the simultaneous removal of the debris flushed to the manhole by the high-pressure water system or for the removal of debris from sewers, sumps, catch basins, digesters, wet wells, bar screens, etc.
4. The machine shall be capable of being operated by one man, with all operating controls for high-pressure water pump, hose reel, and vacuum, located at the front of the machine for safety. This is an essential feature, no exceptions will be allowed.

### **DEBRIS BODY**

1. Debris storage body shall have a minimum usable liquid capacity of 11 cubic yards.
2. The body shall be round for maximum strength and constructed of 3/16 inch Corten A steel for corrosion resistance.
3. Bidder shall submit a letter specifying the type of steel used for construction.
4. The rear door shall be full opening, hinged at the top (hinges shall be adjustable) with a minimum 5" diameter liquid drain for removing excess liquids.
5. The drain to have a butterfly valve installed at the opening. Drain will have 10 feet of 6 inch lay-flat hose.
6. The rear door shall be supplied with a debris deflector shield located inside the debris tank that encompasses 75 percent of the rear door.
7. The debris deflector shield shall deflect material from rear door and aid in draining off excess liquids.



8. A rear door safety prop shall be provided.
9. The debris body shall have five (5) externally mounted door locks that lock hydraulically.
10. One manual T bolt will be installed for operator safety.
11. Rear door is opened and closed hydraulically. The hydraulic locks shall be operated by one (1) sequential control.
12. A double acting power up/power down hydraulic scissors lift mechanism will be provided to raise body to a minimum 50 degree angle.
13. The scissors lift mechanism shall be designed to support a minimum of 24 inches of the debris tank width to provide stability and when dumping on uneven ground. The lift capacity of hydraulic scissors lift cylinder is 56,000 lbs.
14. Dump controls shall be located on the curbside mid-ship of the unit, well forward of the dumping area for operator safety. A manual override system shall be provided in case of system failure.
15. The debris body shall have a five year warranty. Copy of warranty statement shall be enclosed with bid.
16. An internal polyethylene float device with external indicator shall be supplied to show when body is loaded to capacity.

#### **AUTOMATIC VACUUM BREAKER**

1. The automatic vacuum breaker assembly shall be located inside the body.
2. A full indication will activate an automatic vacuum breaker shut down systems that completely shuts down 100 percent of the airflow to the vacuum system to prevent overfilling and wastewater discharge into the atmosphere.
3. The vacuum breaker system shall be automatically activated (closed) when the parking brake system is released to eliminate carryover during transit.
4. The system shall also be controlled, activated, at the front hose reel control station.
5. There shall be no hydraulic components located INSIDE of the debris body will enable the operator to pick up large debris with boom and place debris on the road surface.
6. This system will be used for safety in the event suction must be shut off in case of an emergency.

#### **CENTRIFUGAL COMPRESSOR (FAN DESIGN)**

1. The centrifugal vacuum compressor shall be a maximum of 27" diameter and of 3-stage construction (i.e. 3-27" minimum diameter fans in tandem).
2. The centrifugal compressor (fans) shall be constructed of Corten steel. The fans outer housing shall be spun from one piece of 3/16" steel for strength and provide proper airflow in operation.
3. The housing shall have a coal tar epoxy coating to prevent corrosion.
4. The centrifugal compressor fans shall operate independent of the high-pressure water system.
5. The compressor is driven by the chassis engine via a closed loop hydrostatic system using a variable piston pump and motor.
6. This system shall include a heat exchanger for extreme ambient conditions and to maintain the pump suction oil temp at 160 deg. F. max.

7. The heat exchanger shall be protected by a 30-micron filter and cold weather by pass valve. Hydrostatic loop filtration shall be accomplished by a 10 Beta micron return filter and a 10-micron Absolute (no bypass) charge filter.
8. To maximize long term durability by reducing the load on one side of the compressor, the compressor shaft shall extend through the compressor and shall be additional stabilized by using two high speed bearings, one at each side of the shaft. **No exceptions will be allowed to this requirement.**
9. A means of starting, stopping, and varying the vacuum suction from operator station at the front of the machine must be provided.
10. A centrifugal separator located in the inlet chamber to the fans with cleanout box shall be provided. The separator shall remove particles from the air stream, thus enabling unit to vacuum wet or dry material. The separator shall be separate from the debris body.
11. The centrifugal compressor (fan) system must be capable of producing 90% vacuum with no airflow. This is an essential feature in the application where material needs to be vacuumed under the water surface, i.e. lift stations, plugged manholes, etc.
12. System must be capable of vacuuming under water 16.6' (200") without special attachments.
13. A manometer/vacuum test may be required to demonstrate the system performance.
14. The centrifugal compressor fans shall have a 5-year replacement warranty.

### **VACUUM PICK UP HOSE**

1. Shall be front loading, attached at the front of the machine in order to provide ease of positioning the machine over the manhole, as well as afford maximum safety for the operator.
2. The 8 inch diameter hose will be mounted on a boom that will provide a minimum of 18' vertical lift utilizing dual hydraulic cylinders and 230 degree of boom rotation powered hydraulically for non-interrupted smooth movement.
3. Boom to have a lift capacity of 500 lbs. at the front bumper.
4. The boom will be powered by an electric over hydraulic system: up/down by dual lift cylinders.
5. The right/left movements shall be hydraulic. The boom shall hydraulically telescope a minimum of 10' forward from the operator's station. The height of the pick up hose shall not change while telescoping out.
6. A wireless remote control is provided with the following functions: Boom, Vacuum Breaker, chassis throttle, and debris body.
7. A manual override system shall be provided for right/left, and up/down functions in case of system failure.

A boom coverage chart shall be provided.

Pipe extensions with clamps will be provided and carried on the truck as follows:

- 1 (one) 6-1/2' Catch Basin Nozzle
- 1 (one) 6' Aluminum Pipe Extension
- 2 (two) 5' Aluminum Pipe Extension

- 1 (one) 3' Aluminum Pipe Extension
- 1(one) 3' x 8" clear demo tube
- 4 (four) spare quick clamps
- 1 (one) 8" Air Regulator
- 1 (one) Circular Operators Handle

### **WATER SUPPLY**

1. The water tank shall have a minimum usable capacity of 1300 U.S. gallons
2. The water tanks shall be constructed of non-corrosive, non-metallic, durable, cross-linked polyethylene to eliminate rust, corrosion, and stress cracking.
3. The water tank shall be mounted at and below the truck frame level to provide a low center of gravity for truck stability.
4. A 2-1/2 inch diameter x 25 feet long hydrant hose with hydrant wrench shall be supplied on the unit.
5. An anti-syphon fill device shall be installed on the unit.
6. Quick removal hatches shall be provided on all water tanks for access for flush out, to fill tanks, or to add chemicals to the water tank.
7. A sight gauge to indicate water level shall be located within sight of the operator station.
8. The water tanks shall be protected by a minimum of 11 gauge steel plating mounted below the water tanks for protection against road hazards when unit travels over the road, off the road or to land fills.
9. The water tanks carry a ten year replacement warranty.

### **AUXILIARY ENGINE (WATER PUMP DRIVE ENGINE)**

1. The shrouded auxiliary engine used to drive the water pump shall be liquid cooled, turbo charged, diesel powered, 4 cylinder heavy-duty industrial engine.
2. The engine shall have a minimum displacement of 239 CID and a rated gross horsepower of 110 bhp at 2500 rpm.
3. The engine shall come equipped with a counter balanced crankshaft, rubber-isolating mounts, automatic safety shut downs for low oil pressure and high water temperature, as well as an exhaust silencer.
4. All gauges, auxiliary engine tachometer, oil pressure, water temperature, hour meter, and shut down system shall be located on the driver's side of the unit in a lockable control panel.
5. The auxiliary engine start and stop controls will be at the front hose reel operator station for safety and convenience.
6. The shrouded auxiliary engine will have a hinged driver's side door for access to the engine.
7. Oil checking shall be accomplished from ground level on driver's side of auxiliary engine.

**HIGH-PRESSURE WATER PUMP**

1. The high pressure water pump shall be rated to deliver smooth continuous pressure and flow through the entire flow range of the pump.
2. The high pressure system shall have smooth continuous flow for both the high pressure system and the hand gun
3. High-pressure relief valves shall be provided for both the high-pressure system and hand gun system.
4. The water pump shall operate independently of the vacuum system and be powered by the auxiliary engine via clutch less, direct dual power band drive system.
5. The high-pressure water pump drive system shall carry a five year replacement warranty.
6. Warranty excludes the drive engine, i.e. auxiliary engine.
7. The water pump shall be capable of running dry.
8. Controls for starting and stopping the water pump and to vary the flow and pressure shall be at the front hose reel operator's station.
9. The high-pressure water pump will be equipped with cold weather drain valves.
10. The valves will allow operator to completely drain the high-pressure pump.

**HOSE REEL ASSEMBLY**

1. The hose reel shall be mounted on the front of the vehicle.
2. Hose reel shall have a minimum of 30" inside diameter with a capacity of 600' x 1" hose.
3. The hose reel will be hydraulically powered in both directions by means of a double chain and sprocket drive.
4. The controls for operating the motor shall have a flow control device to regulate the rotational speed of the reel in both directions.
5. All hydraulic hoses shall be behind a steel housing to protect operator from hydraulic oil if a hose fails.
6. The hydraulic motor, chain, and sprockets will have a protective cover or be mounted on the radiator side of the hose reel for operator safety.
7. The hose reel will articulate 180 degrees to the drivers side allowing operator to work in any position through this arc. This allows greater flexibility in truck placement for manholes located in tough areas and provides greater safety to the operator.
8. Reel will extend beyond the width of unit for greater flexibility for positioning reel over offset manholes, catch basins, etc.
9. A hydraulically controlled outrigger leg shall be supplied that comes in contact with the ground at any one position.
10. A warning light is located in the cab to warn the operator that the outrigger leg is not in its transported position prior to moving the unit.
11. A manual bypass system for the hose reel assembly shall be provided to manually pull the reel assembly away from its transported position. This feature allows operator to check fluids without starting engines.

12. 500' x 1" jet rodder hose will be supplied rated for 3000 psi working pressure and 7500 psi burst pressure. A heavy duty hose guide with 25' of nylon rope will be provided.

Nozzles will be provided as follows:

- 1(one) Chisel head penetrator
- 1(one) Sanitary.
- 1(one) 30 gpm nozzle, spare
- 1(one) 30 gpm Penetrator Chisel nozzle, spare
- 1(one) 50 gpm aluminum storm nozzle
- 1(one) Storm nozzle pipe assembly (skid)
- 1(one) 1"NPT Intruder nozzle
- 1 (one) 1"NPT Aluminum Grease Nozzle
- 1 (one) 1" Jet Nozzle 60 GPM@2000 PSI

### **MANHOLE CLEANING WATER SYSTEM (HAND GUN)**

1. The high-pressure pump and independent water tank assembly supplied shall be used for manhole cleaning.
2. A smooth continuous flow of 20 g.p.m. and pressure of 600 p.s.i. shall be provided for ease of operation.
3. A hand gun pressure relief valve set at 600 p.s.i. shall be provided.
4. One full functioning hand gun with on/off hand control, replaceable nozzle tip, 12 inch extension, adjustable spray 50' hand gun hose with quick disconnects with retractable reel will be provided.
5. The hand gun will attach to the system via a quick couple connection at the curbside of the unit.
6. To avoid being coiled at the operator's station a hand gun holder will be provided at the front bumper.

### **HYDRAULIC SYSTEM AND LUBRICATION**

1. The hydraulic system shall have a 45-gallon capacity.
2. The hydraulic system shall incorporate a main shut off valve in case of hydraulic failure.
3. The hydraulic system shall incorporate hydraulic pressure relief valves and pressure gauges for ease of trouble shooting and maintenance.
4. The unit shall be equipped on the passenger side, mid-section of the module, a permanent weatherproof with vinyl lubrication chart.
5. The chart will point out lubrication points on the module and specify what type of lubrication and hydraulic fluids are required. The chart will also specify the frequency of each lubrication point.
6. Remote plumbed grease fittings shall be provided for the vacuum compressor, boom rotation, and water pump drive areas.

**ACCESSORIES**

1. A minimum twelve (12) month manufacturer's guarantee on the unit will be provided.
2. A storage box behind the cab will be provided, 16" x 42" x 96"  
Bidder to supply dimensions for the tool box(s) being supplied:
  - 1 (one) Debris body power flush out system
  - 1(one) Winter recirculation system incorporates the hose reel and hand gun systems
  - 1(one) Air purge system
  - 1 (one) 2 1/2" water drain gate valve assembly
  - 1(one) Automatic level wind guide
  - 1(one) Lazy Susan style, deck mounted pipe rack, holds 4 pipe
  - 1 (one) Storage box shall be provided with dry decking
  - 1(one) Centrifugal compressor fan flush out system
  - 1(one) Debris tank inspection hatch, 8" - driver side front
  - 1(one) Ceramic coating in debris tank
  - 1 (one) Nozzle rack
  - 1(one) 10' leader hose
  - 1(one) Hose footage counter, curb side
  - 1 (one) Rear mounted tow hooks
  - 1(one) Centrifugal Compressor Quiet Package

**PAINT**

1. Unit paint surface shall be shot blasted, primed and sanded prior to paint.
2. Unit shall be painted with DuPont Imron 5000 Paint.
3. Unit shall have Chassis Cab and COMBINATION SEWER CLEANER shall be painted by manufacturers- Wheatland Yellow –paint code B9545

**MOUNTING AND DELIVERY**

The unit described shall be mounted on the truck chassis at the factory of the body Manufacturer. Transportation charges shall be included in proposal pricing.

Bidder shall state delivery time after receipt of order: No later than January 31, 2008.

It is the intent of this specification to describe a Combination Sewer Cleaner following minimum specifications. The units shall be new, unused, of current production, design and source from an established, recognizable, manufacturer. Standard items in the manufacturers published literature, furnished by the bidder, shall be included in the bid. Any exceptions variations, and/or deletions must be noted or the bid may be rejected. This vehicle shall be in accordance with all federal and state standards, in effect at the time manufacturer.

**WARNING SYSTEMS and Body Lighting:**

1. The back-up alarm to be mounted on rear of truck chassis .
2. The entire module electrical system shall be vapor sealed to eliminate moisture damage.
3. A Whelen Engineering DOT 3 SYSTEM 102-D three light strobe system is indicative of the type and quality desired but not restricted thereto.
4. Rear facing two strobe lights, two oval taillights to be installed in rear post of the body. The two oval backup lights to be in the rear apron.
5. A strobe light is to be mounted on the top of cab in the center with no interference with the boom.
6. The cab-mounted strobe shall operate in conjunction with the rear units.
7. All wiring to be sealed wiring harnesses.
8. All controls and power pack shall be mounted inside the cab.
9. Controls shall be a five switch rocker panel to function lights and the clutch pump.
10. All module circuits shall be protected by circuit breakers
11. All wiring shall be color-coded, labeled and run in sealed terminal enclosures
12. Arrow Stick
13. Hand held spot light
14. Boom mount flood lights

**TWO-WAY RADIO:**

A two-way radio, antenna, wiring and noise filter shall be installed. The bidder shall obtain frequency and rapid call programming information from the city of Portsmouth, Public Works Department once the bid has been awarded. The radio shall be, with no exceptions, a Motorola CDM1250 Mobile, catalog #AAM25KKD9AA2-N, ASP 7450 antenna.

**MANUALS:**

At least one (1) parts manual, one (1) operational manual, and one (1) COMPLETE SET of SHOP MANUALS for both the truck and all the components (I.E.: engine, transmission, rear ends, plows, hydraulic systems, lights, and radios) are required, also wiring manual - (can be in CD-ROM.)

**TRAINING:**

A minimum of four (4) hours of operational and four (4) hours of mechanical factory training are required on the complete unit.

Operator training to be conducted by a factory-trained representative for a minimum of one day at the time of delivery.

2 copy(ies) of the operating and maintenance manual for the sewer cleaner module shall be provided upon unit delivery.

An operational video will be provided with the unit. Training and manuals shall be included. Operator training to be conducted by a factory-trained representative for a minimum of one day at the time of delivery.

**WARRANTY:**

Bidder to supply copy of warranties.

Warranty will go in to affect on date unit is placed in service by City of Portsmouth.

Warranty shall be 3( three) year / 36,000 miles bumper to bumper with an extended 5 year warranty on the drive train.

Warranty shall be 5 (five) years on fan unit, auxiliary engine, water pump drive components and debris tank shall be free from defects in materials and workmanship

The water tanks carry a 10 (ten) year replacement warranty.



**BID PROPOSAL FORM**  
**Page 1 of 2**

**Sewer Truck #65**

**Combination Sewer Cleaner:**

\$ \_\_\_\_\_  
Price in Figures

\$ \_\_\_\_\_  
Price in Words

**Extended Warranty:**

**5 year extended warranty** \$ \_\_\_\_\_  
Price in Figures

\$ \_\_\_\_\_  
Price in Words

**Total Bid Proposal= Base Bid plus Extended Warranty:**

\$ \_\_\_\_\_  
Price in Figures

\$ \_\_\_\_\_  
Price in Words

**WARRANTY:**

Warranty shall be 3 year / 36,000 miles bumper to bumper with an extended 5 year warranty on the drivetrain.  
Warranty shall be 5 (five) years on fan unit, auxiliary engine, water pump drive components and debris tank shall be free from defects in materials and workmanship.  
The water tanks carry a 10 (ten) year replacement warranty.

**DELIVERY:**

Bidder must state approximate date from receipt of order delivery will be made: \_\_\_\_\_ . Not later than January 31, 2008.

The undersigned agrees that he/she on behalf of Bidder has read the bid proposal documents, the instruction to bidder's specifications and agrees to the terms and conditions set forth herein. Bidder understands that bid price shall include delivery FOB to the Public Works Department, 680 Peverly Hill Road, Portsmouth, NH.

Bidder further agrees that this bid is not made jointly or in conjunction, cooperation or collusion with any person, firm, corporation or other legal entity. Bidder agrees no officer, agent or employee of the Owner is directly or indirectly interested in this Bid.

**BID PROPOSAL FORM**  
**Page 2 of 2**

Submitted by Authorized Agent:

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(Print Name & Title)

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_