

The following Request for Quotation No. 153020 is a Sealed Bid and is due by Bid Opening: June 15, 2017 at 2:50 p.m. This RFQ is for a Sewer Wash and Vacuum Vehicle.

Any additions, deletions, or variations from the attached specifications must be noted. Provide complete product description and specifications, including manufacturer, model number, etc. and provide necessary back-up literature if applicable.

Any questions MUST be submitted in writing to lmajeski@oakridgetn.gov
Deadline for questions is June 9, 2017 at 12:00 p.m., EST.

All bids must be completed and submitted on the Bid Form provided including: Vendor Name, Payment Terms, F.O.B. (Quote delivered price F.O.B. Oak Ridge or notate ESTIMATED freight charges), Delivery Date, Ship Via and Signature.

Bid Submittal Instructions

Each bid must be submitted in a sealed envelope, show request number and bid date on front of the envelope and marked and addressed as follows:

From: Bidder's Name
Bidder's Address

To: In Person or By Overnight Delivery

Attn: Lyn Majeski
Finance Department
City of Oak Ridge
100 Woodbury Lane
Oak Ridge, TN 37830

Regular Mail

Attn: Lyn Majeski
Finance Department
City of Oak Ridge
P.O. Box 1
Oak Ridge, TN 37831-0001

If the bid is submitted by mail rather than hand-delivery, the sealed envelope containing the bid must be enclosed in another envelope addressed as stated above. Bids submitted by mail should indicate on the outside envelope, lower left corner, the following: "Sealed Bid RFQ # 153020 - June 15, 2017 at 2:50 p.m." to ensure it is delivered to the appropriate person at the City in a timely fashion.

The bids shall be submitted on or before the time set for the opening of bids. Bids received after the time so set are late bids and will not be accepted, opened or returned.

No Electronic (emailed), telephoned or faxed bids will be accepted.

The City of Oak Ridge reserves the right to reject all or any part of any bid submitted.

Vendor Name: _____
Payment Terms: _____
F.O.B.: _____
Delivery Date: _____
Ship Via: _____
Signature: _____

SHIP City of Oak Ridge - Materials Management
TO 100 Woodbury Lane / P.O. Box 1
Oak Ridge, TN 37830
(865) 425-1819 FAX (865) 482-8475
Lyn Majeski lmajeski@oakridgetn.gov

Ordered - 05/19/17 Freight - Default - Handling Code
Requested - 06/15/17 Taken By -
Delivery - Deliveries are accepted 8 a.m. TO 3 p.m.

Description / Supplier Item	UM	Unit Cost	Extension	Req. Dt
SEWER WASH AND VACUUM VEHICLE PER ATTACHED SPECIFICATIONS	1	EA	EA	06/15/17

Total Order

SPECIFICATIONS FOR SEWER WASH AND VACUUM SYSTEM VEHICLE

City of Oak Ridge

Attachment for RFQ #153020

		COMPLY	
		YES	NO
1. GENERAL			
a.	The machine will be used for removing stones, bottles, cans, grease sludge, and other debris from sanitary sewer and/or storm drain lines by the flushing action of high pressure water. The machine will be equipped with a self contained, non-corrosive, non-metallic water tank supply as the water source for the high pressure pump.		
b.	The high pressure cleaner shall operate <u>independent of the vacuum system</u> . 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 sumps, catch-basins, digesters, wet wells, bar screens, etc.		
2. BODY			
a.	Debris storage body shall have a minimum useable liquid capacity of 10 cubic yards.		
b.	The body shall be round for maximum strength and constructed of corrosion resistance material.		
c.	There shall be a 6" diameter liquid drain valve, "knife valve type" and screen weldment inside for removing excess liquids. Drain will have 10 feet of 6 inch lay flat hose.		
d.	The rear door shall have externally mounted "door grabbers" that <u>latch</u> hydraulically with a minimum of 5 latches. Three manual "T" bolts will be installed for operator safety or hydraulic failure. The hydraulic latches shall be controlled by one hydraulic cylinder externally mounted for ease of servicing.		
e.	The rear door shall be supplied with a debris deflector shield located inside the debris tank that encompasses 75 percent of the rear door. The debris deflector shield shall deflect material from rear door, and aid in draining off excess liquids. A double-acting, power-up, power-down mechanism will be provided to raise body to a minimum <u>50 degrees angle</u> . To prevent the possibility of hydraulic oil contamination, body hoist mechanism shall be mounted on the outside of the debris tank. Vacuum hose and boom must not dump with debris body.		
f.	Dump controls shall be located on the curb-side of the unit, well forward of the dumping area for safety.		
g.	Debris Tank will be pre plumbed, manufactured for a hydraulic pump off if customer elects to install pump off system off of rear door at a later date. Also must have a 6" port on the rear door. All hydraulic controls and hoses to be supplied.		
h.	The debris body shall have a Five-year warranty.		
3. AUTOMATIC VACUUM BREAKER			
a.	An internal polyethylene float device with the indicator shall be supplied to show when body is loaded to capacity. A full indication will activate an <u>automatic vacuum breaker</u> shut down system that completely shuts down air flow to vacuum system to prevent body overfilling and wastewater discharge into the atmosphere. This system shall also be <u>automatically activated when the parking brake system is released</u> . Vacuum breaker to also operate manually at the control panel. This will completely eliminate any wastewater from entering vacuum system while being driven. Stainless steel check ball systems with vacuum relief are also acceptable.		

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4. CENTRIFUGAL COMPRESSOR	YES	NO
a. The centrifugal vacuum compressor shall be of 3-stage construction and shall be capable of up to 200" of negative water pressure without air induction.		
b. The compressor shall operate independent of the high pressure water system and be powered by the truck chassis engine via hydrostatics or fluid coupler drive.		
c. Control of the centrifugal compressor regarding start, stop and the rate of vacuum suction shall be performed from the front of the truck. A vacuum suction breaker disconnect switch shall be provided to enable operator to pick up large debris with boom and place debris on road surface.		
d. Centrifugal compressor fan(s) shall have a 5-year replacement warranty.		
5. WATER SUPPLY	YES	NO
a. The water tank shall have a minimum useable capacity of 1000 gallons.		
b. The water tank shall be constructed of non-corrosive, non-metallic, durable, cross-linked polyethylene to eliminate rust, corrosion, and stress cracking.		
c. The water tank shall have a ten year replacement warranty for any rust or cracking.		
d. A 2-1/2" diameter, 25' long hydrant hose with anti-siphon device will be installed on unit.		
e. A minimum of one (1) each removal hatches shall be provided for access to the water tank.		
f. A sight gauge to indicate water level will be located within sight of the operator station.		
g. The water tanks carry a ten year replacement warranty.		
6. AUXILIARY ENGINE	YES	NO
a. The shrouded auxiliary engine used to drive the water pump shall be liquid cooled, turbo charged, diesel powered, 4-cylinder heavy duty industrial engine. The engine shall have a minimum displacement of 276 CID and a rated gross horsepower of 115 bhp at 2600 rpm. If the auxiliary engine is used to power the vacuum system it shall be a minimum 6 cylinder heavy duty diesel engine, and shall have a minimum displacement of 359 CID and a rated gross horsepower of 165 bhp.		
b. The engine shall come equipped with a balanced crankshaft, automatic safety shut downs for low oil pressure and high water temperature as well as an exhaust silencer.		
c. All gauges for normal operation shall be located on the driver's side of the unit. The control panel will be mounted on isolated mounts. The control panel will consist of tachometer, water temp gauge, oil pressure, hour meter and automatic shutdown feature.		
d. Auxiliary engine start/stop control will be located at the hose reel at the operator station for safety and convenience.		
7. VACUUM SYSTEM PICK UP HOSE	YES	NO
a. Shall be front loading, attached at the front of the machine in order to afford maximum safety for the operator.		
b. The 8" will be mounted on a boom that will provide a minimum of 18' vertical lift utilizing dual hydraulic cylinder and 230 degree of boom rotation powered hydraulically for non-interrupted smooth movement. Boom to have a lift capacity of 500 lbs. at the front bumper.		
c. Pipe extensions to clean to 20.5' will be carried on the truck as follows: i. 1-6.5' catch basin nozzle ii. 1-6' aluminum pipe extension iii. 1-5' aluminum pipe extension iv. 1-3' aluminum pipe extension		

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d. A boom tie down with lock shall be supplied to keep boom in stationary position while unit is traveling over the road.		
e. 10' telescoping boom shall be supplied that will telescope minimum 10' straight forward from fully retracted position to provide greater work area in front of the vehicle. There shall be a heavy duty steel elbow affixed to end of the boom.		
f. Control of the boom is by means of a joystick control at the operator's station, requiring no cables at the operator's feet for boom operation. A 6-way remote pendant station is also supplied. A manual override system shall be provided for right/left, and up/down functions in case of system failure.		
8. HIGH PRESSURE WATER PUMP	YES	NO
a. A variable flow high-pressure water pump. A minimum continuous duty flow delivery of 80 gpm at 2,000 psi.		
b. The water pump shall operate independently of the vacuum system and be powered by the auxiliary engine via clutchless, direct dual power band drive system, or off the chassis engine.		
c. Controls for starting/stopping the water pump and to vary the flow and pressure shall be at the front hose reel operator's station.		
d. The high-pressure water pump drive system carries a five year replacement warranty.		
e. The water pump is capable of running dry.		
9. JET RODDER HOSE REEL ASSEMBLY	YES	NO
a. The hose reel assembly shall be mounted on the front of the vehicle.		
b. The hose reel shall be a minimum of 30" inside diameter with a capacity of 600' of 1" hose.		
c. The hose reel will be hydraulically powered in both directions by means of a double chain & sprocket drive. The controls for operating the motor incorporating a flow control device to regulate the rotational speed of the reel in both directions. All hydraulic hoses shall be mounted behind a steel housing to protect operator from hydraulic oil if a hose fails.		
d. The hose reel will <u>articulate</u> 180 degrees allowing operator to work in any position through this arc.		
e. All controls for operating the high pressure water system will be mounted on this reel assembly frame.		
10. MANHOLE CLEANING WATER SYSTEM (Hand Gun)	YES	NO
a. The high pressure (jet rodder) pump and independent water tank assembly furnished for the rodding system shall be mounted on the curb side of the vehicle.		
b. A minimum of 20 GPM and a maximum of 600 psi (smooth continuous operation) for safety.		
c. One full functioning hand gun with on/off handle, replaceable nozzle tip, one foot extension and 50' of 1/2" high pressure hose with retractable hose reel will be provided.		
d. The hand gun should attach to the system via quick couple type connection, at curb side of the unit to avoid hose being coiled at operator's feet for safety.		
11. JET HOSE	YES	NO
a. 600' x 1" high pressure jet hose, rated for 2,000 psi working pressure and 6,250 psi burst will be provided on the unit.		

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b. A heavy-duty hose guide will be provided.		
c. Nozzles will be provided as follows: i. 1-15 degree sand type penetrator ii. 1-30 degree round head sanitary		
12. LUBRICATION	YES	NO
a. The unit will be equipped with a permanent weather proof white vinyl lubrication chart that is attached to the unit. This chart will point out every lubrication point on the module and specify what type of lubrication is used, as well as recommended time for lubrication		
b. Remote plumbed grease fittings shall be provided for the vacuum compressor, boom rotation, debris tank and water pump drive areas that require lubrication.		
13. MISC. ITEMS	YES	NO
a. (2) 35" x 14" x 24" sealed and locking tool and accessory tool boxes will be supplied, one on each side of the unit with dry decking.		
b. Debris body flush out system		
c. Winter recirculating system		
d. Air purge system		
e. 50' Retractable hose reel		
f. Hose footage counter		
g. Gravity drain		
h. Low water alarm with light		
i. Rear mounted tow hooks		
j. Cone storage rack		
k. Pre PlumbRear hydraulic pump off system 575		
l. Gravity drain system consisting of plumbing to the mid-passenger side of the unit. Includes a 3" knife valve with cam-lock connection, 30' of layflat hose with storage rack allowing return of liquids to the manhole without having to reposition vehicle.		
14. PAINTING	YES	NO
a. Unit to be painted acrylic polyurethane white with black side stripes and rear chevrons.		
b. The cab will be painted manufacturer's white.		
15. LIGHTS	YES	NO
a. Clearance lights and reflectors shall be furnished in accordance with D.O.T. requirements.		
b. Rear LED strobe light, with limb guard – Whelen L21HAP LED Beacon with Whelen BGH Branch Guard		
c. LED strobe light with limb guard, rear debris tank door mounted – Whelen L21HAP LED Beacon with Whelen BGH Branch Guard		
d. 4 LED strobes – (2) front bumper, (2) rear bumper – Whelen 50A03ZCR - Amber		
e. LED arrow board, rear debris tank door mounted – Whelen TA1251NF1 Traffic Arrow		

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16. MOUNTING AND DELIVERY	YES	NO
a. On a truck chassis of approved size at the factory of the body manufacturer. Transportation charges shall be included. Sewer cleaner shall remain the property of the manufacturer until delivered to and accepted by authorized personnel.		
b. Unit to be delivered to the following address: City of Oak Ridge 100 Woodbury Lane Oak Ridge, TN 37830		
c. Truck chassis shall be equipped with 300hp minimum Cummins diesel engine and Allison automatic transmission.		
d. Maximum overall height not to exceed 11'6". Must be able to pass through 12' high garage door.		
17. OPERATOR TRAINING	YES	NO
a. Operator training is to be conducted by a factory representative, or a factory-trained representative for a minimum of 1 day at the time of delivery with follow-up training of up to three additional days to be included.		
b. Two copies of the operating and parts maintenance manuals for sewer cleaner module shall be provided upon unit delivery.		
18. AWARDING OF THE BID	YES	NO
a. The owner will award the bid on the basis of price, quality of the equipment with this set of specifications, and date of delivery. The owner reserves the right to reject any or all bids and to waive all informalities.		
19. ATTENTION TO BIDDERS:	YES	NO
a. Bidder to check "YES" box if each specification section exactly meets specification. Check "NO" if bidder does not meet specifications exactly. Bidder must explain on a separate sheet of paper how they do not meet specification. "Exceeds Specification" is not an acceptable answer - bidder must state how they exceed or deviate from specification in detail.		
b. Failure to comply with this will be cause for rejection of bid.		

Any items not specifically described, but required for operation or provided as standard equipment by the manufacturer are to be provided.