

B24-102

**TOWN OF DERRY, N.H.**  
**DEPARTMENT OF PUBLIC WORKS**  
14 Manning Street, Derry, NH 03038  
(603) 432-6144

**REQUEST FOR PROPOSALS (RFP)**

The Town of Derry, NH (here after referred to as the Town) is soliciting a Request for Proposals for the construction and delivery of a **COMBINATION SEWER CLEANER VAC TRUCK**.

Responses to this RFP shall be submitted to the Town of Derry Department of Public Works, due not later than Tuesday, February 27, 2024 at 2:00pm. The Town reserves the right to reject any or all proposals if it deems such to be in the best interest of the Town of Derry.

Questions regarding the Request for Proposals should be directed to Thomas Carrier, Deputy Director of Public Works by e-mail at [tomcarrier@derrynh.org](mailto:tomcarrier@derrynh.org). Any responses received after the above scheduled due date and time may not be accepted or considered.

Respondents are required to submit one (1) copy of their proposal by no later than February 27, 2024 at 2:00pm at Derry Department of Public Works, Derry Municipal Center, 2<sup>nd</sup> floor, 14 Manning Street Derry, NH 03038.

## **GENERAL:**

1. Proposals will be received by the Town of Derry, New Hampshire at the Derry Municipal Center, 14 Manning Street, 2<sup>nd</sup> floor until the time specified in the RFP.
2. The following meanings are attached to the defined words when used in this document:
  - a. The word “Town” means the Town of Derry, New Hampshire.
  - b. The word “Firm” means the person, firm, or corporation submitting a proposal on these specifications or any part thereof.
  - c. The word “Contractor” means the person, firm, or corporation with whom the Contract is being made by carrying out the provisions of this RFP Invitation and the Contract.
  - d. The words “firm price” shall mean a guarantee against price increase during the life of the Contract.
3. Strict compliance with the requirements of the RFP, terms and conditions, and instructions printed is necessary. All blank spaces must be filled in. Any changes and/or corrections shall be marked in red and initiated by the person making such corrections. The signatures of the responsible owner/representative of the firm must be in ink.
4. Each proposal must give the full business address of the Firm submitting the RFP and be signed by an authorized official with their usual signature. Proposals by partnerships must furnish the full names of all partners and must be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and title of the person signing. Proposals by corporations must be signed with the legal name of the corporation, followed by the state of incorporation and by the signature and title of the president, secretary, or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below the signature. A proposal by a person who affixes to his signature the word ‘president’, ‘secretary’, ‘agent’ or other title without disclosing his principal may be held to be the proposal of the individual signing. When requested by the Town, satisfactory evidence of the authority of the signing officer signing on behalf of the corporation shall be furnished.
5. Proposals must be securely sealed in a suitable envelope, addressed, and marked on the outside as follows:

### **DERRY COMBINATION SEWER CLEANER VAC TRUCK**

6. It will be the responsibility of the Firm to see that their proposal is received by the Public Works Department as specified.
7. Each proposal is received with the understanding that the acceptance in writing or via email by the Town to the Firm to furnish any or all of the products /services described therein or as otherwise negotiated, shall constitute a contract between the Firm (Contractor) and the Town, which shall bind the Firm (Contractor) on his part to furnish and deliver the articles offered at the prices agreed upon and in accordance with the terms and conditions of said accepted proposal; and the Town on its part to order from such Firm (Contractor), except for causes beyond reasonable control; and pay for, at the agreed prices, all products/services specified and delivered.
8. Proposals may be withdrawn upon written or electronic request received from Firms prior to the time of opening. Negligence on the part of the Firm in preparing the proposal confers no right for the withdrawal of the proposal after it has been opened.
9. The solicitation document maintained by the Public Works Department shall be considered the official copy. In the case of any inconsistency between proposal documents submitted to the Town, but not clearly listed on the exception page of the document or as an exception by the Firm, the language of the official copy shall prevail. Furthermore, any exception or changes to the specifications made by the Firm may be cause to disqualify your proposal.
10. Proposals that are incomplete, not properly endorsed or signed, or otherwise contrary to these instructions may be rejected as informal by the Town. Please explain in detail any exceptions or deviations taken on this proposal. Separate pages may be used if necessary.
11. Proposal prices shall be clearly and fully stated in units of quantities specified. No additional charges shall be passed to the Town, including all applicable taxes, delivery or surcharges that have not already been disclosed on the proposal schedule. In case of discrepancy in computing the amount of the proposal, unit prices quoted will govern.
12. Proposals shall include all charges for delivery, packing, crating, containers, etc. Unless otherwise stated by the Firm, prices quoted will be considered as being based on delivery to the destination designated, including any and all freight and packing charges.
13. As the Town is exempt from the payment of federal excise taxes, all prices quoted herein are not to include these taxes.
14. Prices stated shall remain firm for the duration of the contract.

15. Should the successful Contractor fail to make delivery or complete the contract within the time specified, the Town reserves the right to procure the equipment/product from other sources and hold the Contractor liable for any excess cost.
16. The Town reserves the right to postpone the delivery date to allow for any change in operating conditions or for any other cause not now foreseen. In the event the Town elects to exercise this right, all prices quoted pursuant to this Sealed Proposal Invitation will remain firm, and the Town shall incur no additional obligation to the Contractor on account of any delay of delivery date ordered by the Town.
17. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and acts of God.
18. The time of proposed delivery must be stated.
19. The apparent silence of these specifications and any supplemental specifications as to any detail or the omission from the specifications of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to shall and correct type, size and design are to be used. All interpretations of these specifications shall be made on the basis of this statement.
20. The Town reserves the right to waive any informality in proposals, to reject any and all proposals wholly or in part, and to make awards in a manner deemed in the best interest of the Town.
21. Awards will be made in the best interest of the Town. In determining what would be in the best interest of the Town, the following shall be considered:
  - a. The ability, capacity, and skill of the Firm to perform the Contract or provide the service required.
  - b. Whether the Firm can perform the Contract or provide the service promptly or within the time specified, without delay or interference.
  - c. The character, integrity, reputation, judgment, experience, and efficiency of the Firm.
  - d. The quality of performance of previous contracts or services.
  - e. The previous and existing compliance by the Firm with laws and ordinances relating to the Contract or service.

- f. The sufficiency of the financial resources and ability of the Firm to perform the Contract or provide the service.
  - g. The quality, availability, and adaptability of supplies or contractual services to the particular use required.
  - h. The ability of the Firm to provide future maintenance and services for the use of the subject of the Contract.
  - i. The number and scope of additions attached to this proposal.
22. The Town reserves the right to make awards on this proposal by item or to accept all or part of the proposal or prices quoted. In addition, the Town reserves the right to award materials based on the lowest total cost of the proposal item to the Town, including the Town's cost of transportation to and from the source.

In cases where two or more Firms have the same net proposal, the Town may give preference to firms located within the Town.

23. Upon making an award, or giving notice of intent to award, the Town will place appropriate notice on its website:  
[http://www.derrynh.org/Pages/DerryNH\\_Proposals/](http://www.derrynh.org/Pages/DerryNH_Proposals/)
26. The Firm must certify that no official or employee of the Town or State of New Hampshire, has a pecuniary interest in the proposal or in the Contract that the Firm offers to execute or in the expected profits to arise there from, and that this proposal is made in good faith without fraud, collusion or in connection with any other person submitting a proposal.
27. The Firm, if awarded an order or contract, agrees to protect, defend, and hold the Town harmless against any demand for the use of any patented material, process, article or device that may enter into the manufacture, construction or form a part of the work covered by either order or contract.
28. The Firm, if awarded an order or contract, agrees to defend, indemnify, and hold harmless the Town from all damages to life and property arising out of the performance of this Contract due to the Firm's negligence, that of his employees, subcontractors, etc., or due to the negligence of the Town, its employees, representatives, agents, etc.
29. The Revised Statutes Annotated of the State of New Hampshire, the Charter of the Town, and all Town Ordinances insofar as they apply to the laws of competitive bidding, contracts and purchases are made a part hereof.
30. The Firm to whom a contract is awarded guarantees to the Town that all warrants of merchantability and fitness for a particular purpose as provided for in  
New

Hampshire RSA 382A-2-314 and 2-314 shall remain in force and will not be disclaimed.

31. The Firm, if awarded an order or contract, agrees to provide to the Town proof of Federal Identification Number (IRS Code Section 6723). Acceptable forms of documentation are a copy of a federal tax depository ticket, copy of IRS label showing name and Federal ID Number, IRS letter of taxpayer Identification Number assigned, other correspondence from the IRS with both individual/business name and Federal Identification or stationery/bills with Federal ID Number (and firm name and address) PREPRINTED on it. Any impertinent information may be blackened out before being sent to the Town. Copies of tax returns must show taxpayer section and signature.
32. Payment Terms: Payments shall be made within 30 days of completion and acceptance of the project.

## **SPECIFICATIONS**

The following minimum specifications must be included in any proposal.  
Specifications and Conditions for TOWN OF DERRY DEPARTMENT OF PUBLIC  
WORKS COMBINATION SEWER CLEANER VAC TRUCK PURCHASE 2024

**PURPOSE:** The intent of these specifications is to set forth minimum requirements for the purchase of a one (1) new and unused 2024 single engine combination sewer and sewer manhole cleaner vacuum truck used for removing all debris commonly found in sanitary sewer line / manholes using a front mounted operating station.

### **SCOPE OF WORK:**

This unit will be used for safely cleaning sewer lines and structures. The unit shall consist of a Dual Stage fan vacuum system, a hydraulically driven high pressure water pump, and enclosed sealed body for storage of collected debris and equipped with a self-contained water source supply as the source for the water pump system. The unit shall have the capability of operating both the vacuum and the water system simultaneously at full operating speeds continuously. The module is to be truck mounted on a new chassis as described in this specification. Use will be on local roadways, work sites, and easements for operations and dumping of loads.

Bids will be accepted for consideration on any make or model that is equal to or superior to the equipment specified. Decisions of equivalency will be at the sole interpretation of the Town of Derry.

Bidder shall demonstrate a reasonable likeness of the equipment being offered within a reasonable time of request. Equipment demonstrated shall be equipped with all accessories and components required in this specification to ascertain equivalence.

A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. The original manufacturer's brochures of the proposed unit are to be submitted with the proposal.

### **REFERENCES**

To ensure adequate local availability of parts and competent service from experienced suppliers, proposals are preferred from local vendors who have sold and serviced at least 10 units of same manufacturer within service area of Derry, NH and should include contacts with phone numbers.

### **SERVICE AND SUPPORT**

The location of warranty service center may be verified and inspected. Years of servicing equipment being proposed shall be included with the proposal.

## **GENERAL**

The specification herein states the minimum requirements of the Town of Derry, NH. All proposals must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection.

Proposals shall clearly indicate compliance with the following list of specifications by circling **YES**, meets the specification, or **NO** does not meet the specification. Proposals which do not meet the specification shall note the variation of their proposal from the listed specification.

## **SUBFRAME**

**The overall length of the completed truck shall not exceed thirty-nine (39) feet. (this specification is intended to ensure the completed truck fits into the existing Town garage space without any building modifications). YES / NO**

The equipment shall be of modular design consisting of the vacuum system, water tanks system, debris body and drive system. **YES / NO**

The subframe shall be fabricated to the exact dimensions of the truck chassis for mounting modular components. All components of the module shall attach to the sub frame and not directly to the chassis. **YES / NO**

The subframe shall be designed to ASME standards for maximum applied loads, chassis frame movement and even distribution of weight to the chassis and suspension. **YES / NO**

The subframe shall be continuous and uninterrupted from the back of cab to end of frame. **YES / NO**

## **DEBRIS BODY**

Efficiency of air movement through debris body will be measured for minimal restriction as measured by vacuum pressure gauge while operating blower at full speed. Pressure drop throughout entire system (from 8" hose inlet to blower inlet) including specified filtration and blower protection devices shall be no greater than 3" hg as measured at blower. **YES / NO**

The body shall be cylindrical having a minimum usable liquid capacity of 10 cubic yards. **YES / NO**

The body shall be capable of high dump height of 60". Dump height of 60" must be achieved without the use of scissor lift mechanism. **YES / NO**

The debris storage body shall be constructed with a minimum 1/4" corrosion and abrasion resistant steel. **YES / NO**



The debris storage body shall have a minimum yield point of 50,000 PSI and a minimum tensile strength of 70,000 PSI. **YES / NO**

Body shall have a rear door that is hinged at the top and is equipped with a replaceable type seal. Adjustable for periodic compensation of door seal wear. **YES / NO**

Dual outward mounted rear door props shall be included as standard to prevent operator from entering door swing path when engaging rear door prop. **YES / NO**

For optimal particulate separation, vacuum shall be drawn from separate ports in the top of the debris body. **YES / NO**

Body shall be dumped by raising the body to a 50-degree angle utilizing a forward mounted, double acting hydraulic dump cylinder. **YES / NO**

Dump controls, accessory controls, e-stop control shall be provided at a central curb side location directly behind the cab of the truck. **YES / NO**

For stability and safety, dumping must be accomplished while the pivot point of the body remains fixed to the subframe. **YES / NO**

Industrial style rear debris body door shall be flat, and shall open and close hydraulically by cylinders mounted at the top of the body. Door shall open 50 degrees from the fully closed position. Door shall be unlocked, opened, closed, and locked by a failsafe hydraulically activated sequential positive locking system, cam operated by a single hydraulic cylinder, with all controls located behind truck cab, forward of the debris body, so operator is not subject to sewage when dumping. **YES / NO**

Debris body shall have a body flush out system with a fan-type spray nozzle located in the front wall of the debris body to aid in the flushing of heavy debris. The nozzle shall also utilize (2) spray nozzles to flush the front most area of the debris body. System must produce a flow of 80 GPM. Control valve shall be on the curb side of the unit. **YES / NO**

Body shall have a float type automatic shut-off system with 10" stainless steel shut-off ball located in the debris body. Float ball housing shall be within a non-corrosive slide-out screen assembly and be accessed without the use of tools. **YES / NO**

The debris body shall be equipped with a rear door drain to drain off excess liquids while retaining solids and shall include a manually operated 6" knife valve with cam-lock coupler and 25' of lay flat hose having camlock quick connects. **YES / NO**

The debris body shall be equipped with a rear door drain at bottom dead center to drain off excess liquids with an internal screen to prevent large solids from passing. A manually operated 6" knife valve with cam-lock coupler and 25' of lay flat hose having camlock quick connects shall be included at this location. **YES / NO**

Vertical (cyclone) centrifugal separators shall be installed in-line between the debris body and the air mover, for each debris body discharge port. Each separator shall include large fallout chamber cleanout door. **YES / NO**

For safety, a minimum of (5) vacuum tubes shall be stored on curbside storage racks to minimize operator exposure to traffic side of unit. Shall include quick release retainer handles (no bungees or clamps) **YES / NO**

A curb-side, folding 3-pipe rack shall be provided, constructed of steel tubing, spring assisted and shall include quick release retainer handles (no bungees or clamps). **YES / NO**

A street-side, folding 3-pipe rack shall be provided, constructed of steel tubing, spring assisted and shall include quick release retainer handles (no bungees or clamps). **YES / NO**

A rear door mounted folding 2-pipe rack shall be provided, constructed of steel tubing, spring assisted and shall include quick release retainer handles (no bungees or clamps). **YES / NO**

(2) Pipe Storage Racks on rear door with quick releases and (2) Pipe Storage Racks Curbside waist level. **YES / NO**

A stainless steel micro-strainer (to 30 microns) shall be provided prior to the blower inlet, with (3) removable cartridge style screens and bottom drain port. Or equivalent filtration system. **YES / NO**

A splash shield shall be mounted around the lower 60% of door opening to direct liquid and debris away from the chassis. Shield shall be minimum 1 0" deep bolted assembly with no openings. **YES / NO**

A lubrication manifold system shall be provided to allow ground level greasing of boom lift and swing cylinders, float level indicator, top rear door hinges and debris body hoist cylinder pins. **YES / NO**

A plastic lube chart shall be provided to call out when specific points on the unit should be greased. **YES / NO**

A 6" valve, electrically activated, air operated valve debris body vacuum relief system shall be located in the inlet of the vacuum system to allow the venting of the tank and relieve vacuum at the debris intake hose.(3) Kunkel relief valves shall be included. **YES / NO**

A debris inlet deflector distributing load evenly in debris body shall be included. **YES / NO**

## **WATER TANKS**

The water tanks shall be manufactured from a non-corrosive material to prevent rust yet still provide for maximum strength. **YES / NO**

The water tank material shall require no internal coating and shall be repairable if patching is required. **YES / NO**

The water tanks shall be easily removed from the subframe to provide complete access to the truck chassis for maintenance purposes. **YES / NO**

The water tanks shall be adequately vented and connected to provide complete filling. **YES / NO**

The water tanks shall be totally separate from the debris tanks and provide no structural support. **YES / NO**

The water tanks shall share no common walls with the debris tanks to prevent corrosion. **YES / NO**

The water tanks shall come equipped with an anti-siphon device and 25' of hydrant fill hose and fittings. **YES / NO**

The water tanks shall carry a 10-year warranty against corrosion or cracking at a minimum. **YES / NO**

All water tanks shall be fully baffled to form a maximum compartment storage of 150 gallons for each compartment. Merrimack NH Sewer has determined that for the stability of the vehicle when turning and stopping and for safety of personnel that systems baffled at 150 maximum gallon compartments are preferred. Exceptions of requirement shall be explained in detail accompanied with detailed engineering drawings. **YES / NO**

The water tank shall be located for the lowest possible center of gravity while providing 100% gravity flooded intakes to water pump. **YES / NO**

Fresh water shall enter the tanks through an in line 6" air gap, all aluminum covered anti-siphon device. **YES / NO**

Water level sight tubes of non-yellowing plastic shall be installed on both tanks. **YES / NO**

The sides of these water tanks shall not extend more than 48" out from the centerline of the truck chassis. **YES / NO**

A fresh water drain system shall be provided to completely drain the fresh water system from one location utilizing the 3" Y-strainer. **YES / NO**

A minimum 6" connection between tanks shall be provided. For stability safety, the water tanks shall not elevate with debris body during dump cycle, **YES / NO**

An air purge system utilizing the chassis air system shall be provided to assist displacing of residual water out of the high-pressure water system. System shall utilize the truck chassis air compressor to fill a 13-gallon auxiliary air storage chamber with pressure gauge and pressure protection valves to isolate the holding tank from the chassis compressor. System shall be equipped with ball valve and all necessary high pressure piping hoses, couplings and controls. **YES / NO**

A 3 in-line 'Y' trap strainer shall be located at inlet of water tank fill air-gap. **YES / NO**

A 3 in-line "Y" trap stainless steel strainer shall be located between the water cells and water pump. **YES / NO**

A Gate Valve shall be provided at water pump. **YES / NO**

Water tank must be a certified metered capacity of 1300 gallons, at a minimum. **YES / NO**

Water tanks shall be constructed of 1/8" aluminum with baffled compartments maximum 150 gallons each. Or other equivalent material. **YES / NO**

Liquid Float Level Indicator shall be provided. **YES / NO**

### **WATER PUMP SYSTEM**

For most efficient use of horsepower and reduced fuel consumption, high pressure rodder pump shall be hydraulically driven via (2) variable displacement pumps **YES / NO**

High pressure water pump shall be rated capable of continuous delivery of 100 GPM at 2500 PSI. **YES / NO**

High-pressure water (rodder) pump system shall be completely controlled through the range with use of the onboard computer-controlled system. Control and throttle located on the control panel. **YES / NO**

Digital flow meter shall be displayed in front LCD display. Flow meter shall be capable of displaying system flow in all pump operating modes. In addition, a low water alarm shall be provided. **YES / NO**

Water pump speed to remain fully adjustable via an independent operator input regardless of the selected vacuum drive speed. **YES / NO**

Variable flow systems routing water back-to-tank are not considered equal due to additional wear, horsepower and fuel consumption. Any deviation from this drive requirement should have full explanation of horsepower consumption. **YES / NO**

Water (rodder) pump shall include smooth and pulsation operation mode feature without altering pump flow. **YES / NO**

When required to assist nozzle breaking through obstructions, water pump "pulsation mode" shall provide a forward-acting nozzle surge. Pulsation surge wave shall allow nozzle to punch forward 2" to 18" depending on flow dynamics and length of hose in sewer pipe. **YES / NO**

Explanation of forward-acting pulsation method shall be submitted with the proposal or explained below. Systems that require the use of air induction into the water pump shall not be accepted. **YES / NO**

The water pump location shall provide a flooded gravity suction inlet to eliminate potential cavitation damage. **YES / NO**

An oil to water heat exchanger will be provided in the water system to cool all hydraulic fluids on the unit. State horsepower requirement to operate hydraulics at full speed: **YES / NO**

The water pump shall provide precise 0-80 GPM controlled flow at variable pressure up to 2500 PSI. **YES / NO**

An extreme cold weather recirculation system - minimum 25 GPM via transmission PTO at chassis engine idle speed. **YES / NO**

A hydro-pneumatic nitrogen charged accumulator system shall be provided with all control valves, piping and hoses for either continuous flow or jackhammer rodding. The accumulator shall be a 2.5-gallon capacity and 1000 to 2500 PSI pressure rating. **YES / NO**

Two (2) 1/2" high pressure ball valves shall be provided for draining the water pump and flushing sediment from the bottom of the pump. **YES / NO**

A nozzle rack accommodating (3) nozzles shall be provided in curbside toolbox. The nozzles shall be labeled on storage rack for pipe size/flow and application. **YES / NO**

System shall be relieved to protect operator. **YES / NO**

Handgun shall be supplied that allows for changing of flow pattern from a fine mist to a steady stream. **YES / NO**

Handgun shall come equipped with quick connect couplers. **YES / NO**

An additional 1" water relief valve shall be provided. **YES / NO**

A mid-ship quick disconnect handgun couplers shall be provided. **YES / NO**

Front and rear quick disconnect handgun couplers shall be provided. **YES / NO**

Hydro-Excavation Package - Includes Lances, Nozzles, Storage Tray, and Vacuum Tubes. Water system shall allow precise variable flow control range of 0-22 GPM at 2500 PSI with digital flow meter in clear view of adjustment control. **YES / NO**

A water pump hour meter shall be provided. **YES / NO**

A high-pressure hose reel capable of operating at system pressure shall be provided. **YES / NO**

Minimum of 1,300-gallon freshwater capacity. **YES / NO**

### **VACUUM/VACUUM DRIVE SYSTEM**

Vacuum shall be provided by a dual fan type blower driven via chassis engine and heavy duty split transfer case direct to the blower. **YES / NO**

Interlock safety system shall prevent drive axle from engaging. **YES / NO**

A horizontal silencer with rain cap shall exhaust above the cab. **YES / NO**

A blower tachometer / hour meter shall be provided and displayed digitally on front control screen. **YES / NO**

For most efficient use of horsepower and fuel consumption, full vacuum and/or combination operation shall be approximately 1750 RPM of chassis drive engine. **YES / NO**

Blower shall be driven by the chassis engine and shall produce inlet volume of 4500 cfm @ 0" hg @ 2250 rpm, and 3490 cfm @ 18" hg @ 2250 rpm vacuum (Roots 824RCS 18 or equal). Drive engine not to exceed 1750 RPM. **YES / NO**

For added protection, the vacuum system shall have three (3) relief valves set at 18" hg, heavy duty horizontal mounted noise muffler, removable and cleanable filter screen, and shall be enclosed with a steel cage guard for safety. **YES / NO**

The transfer case shall be activated by air via a one touch control located in cab with animated confirmation on screen. **YES / NO**

A hot shift blower drive system shall be provided, including transfer case, air shift control, vacuum relief, and front control for blower engagement. **YES / NO**

The blower shall be driven from chassis engine via the transmission drive shafts and heavy duty split shaft transfer case direct to blower, engagement via one touch control on front control panel. **YES / NO**

The blower drive mechanism shall be engaged and disengaged via an electrical switch located at the operator's station on the front mounted hose reel. This feature shall reduce blower runtime and to extend the blower service life. **YES / NO**

Blower shall be provided with a horizontal silencer with exhaust above the cab and rain cap protecting the silencer from rain water. **YES / NO**

Blower shall draw air from two (2) separate ports in the debris body. **YES / NO**

Hydraulic shut off valves shall be provided at the suction, return and filter lines to permit servicing of the hydraulic system.

### **VACUUM BOOM SYSTEM**

Vacuum hose shall be designed for front operation with hose mounted and stored at front mounted work station. Front mounted location is required for ease of positioning vacuum hose as well as minimizing need for operator to swing hose into traffic. **YES / NO**

All connections between debris body and vacuum system will be of the self-adjusting pressure fitting type. **YES / NO**

Vacuum hose will remain stationary and not rise with debris body. **YES / NO**

Upper debris tube shall consist of an anchored steel tube and elbow. **YES / NO**

A sub-frame mounted cab guard shall be mounted behind cab with boom rest cradle. **YES / NO**

All vacuum pipes shall be connected to vacuum pick up tube and extension pipes by adjustable over-center quick clamps to join the aluminum flanges on pipes. **YES / NO**

One (1) quick clamp for each pipe supplied shall be provided. Boom pedestal shall be directly mounted to module subframe. Boom support used for travel mode shall not interfere with access or require removal to tilt hood forward. **YES / NO**

A control station shall be equipped with a control joystick for all directions as well as a safety emergency shut-down button, which shall automatically eliminate power to boom. **YES / NO**

The vacuum boom shall have a heavy-duty flexible hose assembly joining the transition pipe to the debris body, and a 70-degree elbow and 5-1/2 heavy duty hose at the suction end of the boom. **YES / NO**

Boom shall rotate 180 degrees and shall be operated by an electric over hydraulic system. Lift and swing movements shall be actuated by hydraulic cylinders. **YES / NO**

A joystick for hydraulic control of the boom shall be installed on hose reel front panel. **YES / NO**

A removable 4" diameter storage "Post" to stabilize the lower boom hose during transport. Storage device shall not interfere with raising hood. **YES / NO**

A cordless remote boom control system equipped to activate boom functions, throttle, water pump on/off, hose reel in/out, hose reel speed, vacuum relief on/off and emergency disengagement e-stop shall be provided. **YES / NO**

A rotatable inlet hose for telescopic boom shall be provided. **YES / NO**

A detailed engineering drawing must be supplied showing the relationship of the hose reel in relation with the vacuum boom range of motion. Drawing shall show module mounted on chassis, full arc of vacuum hose both retracted and extended, full rotation of arc for hose reel in the extended position and dimension all arc lengths of vacuum boom retracted and extended. Drawing shall highlight intersection areas whereby combination cleaning is possible (within full arc on telescoping boom system). **YES / NO**

Unit must be capable of a lift of 35' of sewer flow (including liquids, rags, grease, and other solids) **YES / NO**

#### **HOSE REEL**

Hose reel assembly shall be direct frame mounted. Hose reel assembly shall be mounted on an independent frame that can be removed from brackets attached permanently to the front of main truck frame members. Reel will be manufactured out of 1/4" spun steel for added structural strength and shall require no internal or external reinforcements that could damage rodder hose. **YES / NO**

Hose reel shall be driven by adjustable gear reduction chain and sprocket assembly. **YES / NO**

Hose reel shall operate at full rotational speed while chassis engine is at idle. **YES / NO**

Hydraulic Telescoping Rotating Hose Reel - 800' capacity of 1" hose shall be provided. **YES / NO**

The front mounted hose reel shall telescope 15" forward down centerline of truck. **YES / NO**

Entire reel assembly shall rotate 270 degrees on a large diameter ball bearing. **YES / NO**

Hose reel shall include a dual locking device to positively lock reel in any position across operating range. **YES / NO**



The hose reel shall rotate about the reel assembly centerline so the reel shall never extend beyond the truck width. Reel coverage diagram shall be submitted with proposal. **YES / NO**

Controls shall be accessible on both sides of the hose reel via a mounting station for the wireless remote control, allowing operator to work at either side of unit for safety purposes. **YES / NO**

800' x 1" Piranha Sewer Hose / 2500 Psi shall be provided. **YES / NO**

An automatic hose level wind scroll device shall be supplied. An air-cylinder actuated pinch-roller shall exert downward pressure across full width of reel to retain hose on reel when encountering nozzle blockages. **YES / NO**

An air-cylinder actuated pinch-roller shall exert downward pressure across full width of reel to retain hose on reel when encountering nozzle blockages. Pinch roller must be activated via a one touch, backlit button with lighted feedback on the control panel. **YES / NO**

Digital footage counter displaying footage values shall be provided. System must be capable of resetting value to ensure operator safety. Accuracy To Within One Percent Of Actual Distance, Large Easy To Read Led Screen located on the front control panel screen. **YES / NO**

10' Leader Hose **YES / NO**

#### **WASHDOWN EQUIPMENT**

A handgun with 1/2" x 35' hose shall be provided at mid-ship to which allow the operator to deliver water to area served by pick up hose and to the inside of the debris body for clean out. **YES / NO**

Hand sprayer with adjustable spray-pattern to be provided with trigger-style gun. **YES / NO**

#### **FRONT OPERATING STATION AND CONTROLS**

Primary operator station will be located at front of hose reel. **YES / NO**

All operator controls should be located on a single control panel that can be rotated on a 90 degree arc for an operator customizable location. The control panel shall also feature the ability to raise and lower to accommodate operators of different height. **YES / NO**

Station shall include a 7" Touch enabled display screen with corresponding tactile buttons for reading critical machine data including (hose footage, hose reel speed settings, water pressure, water flow. Air mover information, chassis data, mode indicator, chassis fuel level, and diagnostic controls), Back lit button keypads with, laser etched function icons, and 4 light feedback indicators. These buttons shall operate the following

functions: All setup functions (remote/panel selector, work lights, hose reel extend/retract, hose reel lock, and pinch roller activation) and vacuum functions. Additionally, there will be separate sealed rocker switches for water pump on/off and throttle up/down. There shall be a multi flow control dial for controlling the full range of the water pump. **YES / NO**

There shall be a hose reel joystick to control the pay in and pay out of the hose reel, this joystick shall offer speed control that increases the further the joystick is moved in either direction. There shall be an additional hose reel speed dial for setting specific speed ranges of the reel. There shall be a boom joystick that controls all functions of the boom including up/down, left/right, and extend/retract. There shall be an E-Stop button to bring the machine to safe operating condition. **YES / NO**

Tachometer and hour meter for chassis engine provided at control station shall be provided. **YES / NO**

Tachometer and hour meter for blower provided at control station shall be provided. **YES / NO**

All Hydraulic Functions - Color Coded, Sealed Electric/Hydraulic NEMA 4 switches shall be provided. **YES / NO**

Blower Engagement/Vacuum Relief - Sealed Electric/Air NEMA 4 Switch shall be provided. **YES / NO**

Water pump hour meter shall be provided. **YES / NO**

PTO hour meter shall be provided. **YES / NO**

A temperature light and alarm shall be provided. Light and alarm will be activated when hydraulic temperature reaches 180 F. **YES / NO**

Front control screen shall display a water level indicator to show level of water through the range of the tank. **YES / NO**

Front control screen shall display the debris body level. **YES / NO**

### **IN CAB CONTROLS**

All In cab controls are to be located on a single in cab control screen. This shall be a full color display screen. It shall utilize 12 back lit tactile (glove ready) buttons on the sides of the screen as well as feature touch screen operation. **YES / NO**

All Back up camera features shall be displayed on the In Cab Control Screen. **YES / NO**

All work lights shall be able to be activated or deactivated in cab with on screen controls. **YES / NO**

All work lights shall be able to be activated or deactivated in cab with on screen controls. **YES / NO**

All work lights shall be able to be activated or deactivated in cab with on screen controls. **YES / NO**

All work lights shall be able to be activated or deactivated in cab with on screen controls. **YES / NO**

All work lights shall be able to be activated or deactivated in cab with on screen controls. **YES / NO**

All work lights shall be able to be activated or deactivated in cab with on screen controls. **YES / NO**

All standard arrow boards or arrow stick shall be controlled via an on-screen controller. **YES / NO**

All safety strobes and beacons shall be controlled via on screen controller. **YES / NO**

Jet or Combo mode shall be activated via one touch button on the control panel. Control screen must display an on-screen representation of the chassis drive system and must animate to show as drive systems activate or deactivate. **YES / NO**

Recirculation must be activated on the in-cab control screen and visibly show that it is active at all times. **YES / NO**

### **ELECTRICAL & SAFETY LIGHTING**

The entire system shall be vapor sealed to eliminate moisture damage, "Nema-4" type or equal. **YES / NO**

Logs, reports, and hour meters will be accessible via the display. **YES / NO**

All electrical connections shall be void of exposed wires or terminals nor should they be painted. Paint process shall be completed prior to installation of wiring. **YES / NO**

All wiring shall be color-coded and encased in conduit to scaled terminal boxes with circuit breakers. **YES / NO**

All other lights required by State and Federal Laws. **YES / NO**

One-piece directional 10-light arrow board (Signal Master or equal) shall be mounted on rear door of debris body, with controls mounted in cab. **YES / NO**

Handheld, Pistol Grip LED Spot light with rechargeable Lithium Ion battery. **YES / NO**

Operator station shall have back lit buttons for low light operation. **YES / NO**

Hose reel manhole work lights shall be provided. **YES / NO**

(2) L.E.D. Boom work lights shall be provided. **YES / NO**

L E D. Work light at midship curbside shall be provided. **YES / NO**

L.E.D. Work light at midship street side shall be provided. **YES / NO**

(2) L E D. Rear door work lights shall be provided. + **YES / NO**

L.E.D. Lights, Clearance, Back-Up, Stop, Tail & Turn shall be provided. **YES / NO**

Mid-Ship L.E.D Bubble Type Turn Signals shall be provided. **YES / NO**

### **SAFETY EQUIPMENT**

E-stop shall be located at each operator interface location. Standard locations to include: front hose reel, mid-ship curbside dump controls, & wireless controller (if equipped.)  
**YES / NO**

Electrical system controls shall be configured to allow for single point operation only. Upon engagement of controls at specified locations, additional controls shall be disabled.  
**YES / NO**

Electrical system must enable self-check to ensure all switches are in home position prior to critical function enablement. System must "lock out" controls when switch is not in home position. **YES / NO**

Rear work lights shall be activated upon engagement of reverse gear. **YES / NO**

(1) Emergency Flare Kit **YES / NO**

(1) 5# Fire Extinguisher. **YES / NO**

7" dash monitor, 2-camera system shall be provided. A Front Hose Reel Color Camera with 130 degree Viewing Angle shall be provided to provide a front visual of the manhole cover to aid in equipment set-up. A rear back-up color camera with 130 degree viewing angle shall be provided. Camera to have automatic activation when the unit is switched to reverse. **YES / NO**

The unit shall utilize a high temperature monitoring safety device to automatically disable the vacuum system when the outlet temperature of the positive displacement blower reaches a high temperature limit. **YES / NO**

Digital water pressure shall be displayed in front LCD display. Pressure gauge shall be capable of displaying water system pressure in all pump operating modes. **YES / NO**

#### **SEWER TOOLS AND ACCESSORIES**

(1) 30 Sand Nozzle **YES / NO**

(1) 30 deg. Sanitary Nozzle **YES / NO**

(1) 15 deg. Penetrator Nozzle **YES / NO**

(1) 1" Small finned nozzle pipe skid **YES / NO**

#### **VACUUM TOOLS AND ACCESSORIES**

The basic vacuum tube package shall include the following:

(1) 8"x3' aluminum pipe **YES / NO**

(2) 8" x 5' aluminum pipe **YES / NO**

(1) 8" x 6'6" catch basin tube **YES / NO**

(4) 8" quick clamps **YES / NO**

#### **CHASSIS EQUIPMENT AND STORAGE**

Two (2) front tow hooks shall be provided. **YES / NO**

Two (2) rear tow hooks shall be provided. **YES / NO**

A safety cone storage rack shall be provided to contain safety cones in the inverted position. **YES / NO**

Aluminum Toolbox - Behind Cab **YES / NO**

(1) 18" x 24" x 24" Aluminum Toolbox Mounted street side shall be provided. **YES / NO**

(1) 48" x 22" x 24" Aluminum Toolbox Mounted curb side shall be provided. **YES / NO**

(2) 18 In. x 16 In. x 12 In. Aluminum Toolbox - Front Bumper shall be provided. **YES / NO**

(1) 60" x 24" x 24" Aluminum Toolbox Mounted curb side shall be provided. **YES / NO**

(4) Long Handle Tool Storage Locations Behind Cab shall be provided. **YES / NO**

#### **MODULE FINISH**

Painting of the module shall be with a DuPont Imron Elite Polyurethane Enamel Top Coat. Application is to be a wet top coat applied to a dried and sanded primer base. **YES / NO**

### **CHASSIS SPECIFICATION**

The unit shall be a new model. No discontinued models will be accepted. **YES / NO**

Tandam Axel, 2025 Western Star 47X, SFA 6x4, short WB, 455 HP, Auto, 66,000 GVWR, GHG **YES / NO**

The unit must be compliant with all DOT and FMCSA regulations. **YES / NO**

### **ADDITIONAL PARTS**

- (1) 8" x 3' Aluminum Vacuum Tube **YES / NO**
- (1) 8 x 5' Aluminum Vacuum Tube **YES / NO**
- (1) 8" x 7'-6" Aluminum Vacuum Tube **YES / NO**
- (1) 8" x 78" Higbee C/B Nozzle Assembly **YES / NO**
- (6) 8" Quick Clamp Assembly **YES / NO**
- (1) 8" Adjustable Air Adapter **YES / NO**
- (1) Flexible Hose Guide **YES / NO**

### **DEALER**

Equipment dealer must be within 40 miles of Derry, NH Wastewater Treatment facility. **YES / NO**

Equipment dealer must have road trucks available for travel to customer's site. **YES / NO**

Parts must be in stock at dealer's location, and on occasion from manufacturer within 48 hours. **YES / NO**

Equipment dealer must have been representing offered product for over 20 years **YES / NO**

Dealer must have over 50 units of the model offered out in the field. **YES / NO**

### **WARRANTY:**

Minimum engine warranty of 60 months 6,000 hours 100% parts and labor on any internally lubricated part of the engine including turbo charger and fuel transfer pump. All harnesses and connectors of the engine control system, IDM, ECM, fuel injectors. Warranty to begin on the date that the completed vehicle is accepted and put into service by the Town of Derry. **YES / NO**

- Minimum transmission warranty of 3-year unlimited mileage. **YES / NO**
- Combination Sewer Cleaner / Vacuum Truck warranted against defects in material and workmanship for a period of 36 months **YES / NO**
- Water Tank Warranty: 10-year warranty against corrosion or cracking **YES / NO**
- Debris Tank, centrifugal compressor, fan Warranty: 5-year warranty against leakage **YES / NO**
- Water Pump Warranty: 2-year warranty **YES / NO**
- Electrical & Electronics: 2-Year **YES / NO**

Extended warranty on emissions system pricing to be included in proposal (pricing for all warranty periods offered to be included with proposal.)

Warranties to be included in proposal bid package on all aspects of Unit. Listed out in individual line items for clarity.

### **Training**

Training in the operations and maintenance of the unit to be included.

Two complete sets of shop manuals shall be provided upon delivery. Such manuals shall cover the truck chassis and all equipment installed thereon. Failure to provide these manuals at the time of delivery may subject the completed unit to rejection as incomplete and further may delay payment of the invoice.

The completed unit shall be equipped with the manufacture's equipment and accessories which are included as standard in the published literature for the unit. No such item of equipment or accessory shall be removed or omitted for the reason that it was not specified. Standard product items may be removed only where it is necessary to install other items in lieu thereof in order to comply with these specifications

All articles provided shall be new, unused and of current design and production

### **OTHER**

Questions regarding technical items contained in these specifications should be directed to: Sam Palmer, Utilities Crew Chief, Town of Derry Department of Public Works 14 Manning Street Derry, NH 03038 sampalmer@derrynh.org (603) 432-6149

The Town of Derry reserves the right to reject any or all bids or any part thereof, and to waive any minor technicalities. A contract will be awarded to the bidder submitting the

lowest responsible bid meeting the requirements of this specification. Decisions of equivalency will be at the sole interpretation of the Town of Derry.

**MISCELLANEOUS:**

When delivered, the vehicle shall comply with all applicable NH DOT, EPA, OSHA and FMVSS regulations.

A valid State of NH Inspection sticker shall be affixed.

Delivery date of new vehicle before December 31, 2024. Vehicle to be delivered to the Town of Derry Department of Public Works 50 Transfer Lane Derry, NH 03038.



**PROPOSAL SCHEDULE**

1. PROPOSAL OF \_\_\_\_\_  
(Name and Address of Bidder)

ONE NEW (1) COMBINATION SEWER CLEANER VAC TRUCK, equipped in accordance with and as specified in these proposal documents.

AMOUNT FOR One (1) Combination Sewer Cleaner Truck: \$\_\_\_\_\_ LS  
Total: \$\_\_\_\_\_

Anticipated Delivery Date: \_\_\_\_\_

Delivery of vehicle is to include price of delivery to Town of Derry, NH Department of Public Works, 50 Transfer Lane, Derry, NH 03038

SUBMITTED BY: \_\_\_\_\_  
Print Name of Company

BY: \_\_\_\_\_  
Signature of person authorized to sign Proposal

TITLE \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

PHONE (\_\_\_\_) \_\_\_\_\_

DATE \_\_\_\_\_

**AGREEMENT**

THIS AGREEMENT is entered into on the date stated below by and between the between the Town of Derry, (hereinafter “Town”) and

\_\_\_\_\_ (hereinafter “Contractor”).  
in consideration of the mutual promises of the parties set forth in the Contract Documents, the Contractor agrees to timely perform all work, furnish all labor and materials necessary for the proper completion of the work; and the Town agrees to pay for the work as set forth in the Contract Documents.

The Contract Documents shall consist of the following documents which are hereby made part of this Agreement:

- 1) Notice/Certifications/Attachments/Checklist
- 2) Legal Notice to Bidders
- 3) Instruction to Bidders
- 4) General Conditions
- 5) Specifications and Conditions
- 6) Proposal Form (consistent with Contract Documents)
- 7) Affidavits
- 8) Addenda

IN WITNESS WHEREOF, the Town and the Contractor, by their duly authorized representatives have hereunto set their hands this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

TOWN OF DERRY, NH,

By: \_\_\_\_\_  
David Caron, Town Administrator

Print name of Contractor \_\_\_\_\_

By: \_\_\_\_\_

Print Name/Title: \_\_\_\_\_

The undersigned hereby declares that before preparing this proposal, he/she carefully read the specifications and hereby agrees that if the proposal is accepted he/she will contract with the Town in accordance with the specifications, terms, and conditions as spelled out in this sealed proposal invitation.

**Derry Combination Sewer Cleaner Vac Truck:** Supply and install all components specified in this proposal document:

Subtotal I. \$ \_\_\_\_\_ Price in Words \_\_\_\_\_

---

Authorized signature & title of Firm

---

Print or type name & title of Firm

---

Company Name (Corporation/general partnership organized & existing under the laws of the State of \_\_\_\_)

---

Address

---

City, State, Zip

Date Proposal Made: \_\_\_\_\_ Email Address \_\_\_\_\_

Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_