

-LEGAL NOTICE-

NOTICE TO BIDDERS

SEALED BIDS for one (1) Magnetic Vehicle Exhaust Evacuation System, will be received by the Village of Williamsville at the Office of the Village Clerk until 3:30pm local time on Tuesday October 6, 2020, at which time and place all bids will be publicly opened and read aloud.

Specifications and requirements for said bid are on file and may be obtained on the Village of Williamsville website at www.walkablewilliamsville.com, or at the Office of the Village Clerk, 5565 Main Street, Williamsville, New York 14221. Bid envelopes shall be designated as "BID MAGNETIC VEHICLE EXHAUST EVACUATION SYSTEM".

The Village reserves the right to waive any informality or to reject any or all bids.

Judith A. Kindron
Administrator/Clerk-Treasurer

September 23, 2020

Williamsville Fire Department

Magnetic Vehicle Exhaust Evacuation System Specifications

1.0 GENERAL INFORMATION	YES	NO
<p>Each bidder must indicate his compliance with these specifications by writing their initials of the bidder under "YES" or "NO" in the appropriate column for each paragraph or section of this specification. Indicating "YES" to a paragraph or section will mean <u>full compliance</u>; indicating "NO" will mean an exception is being taken. All exceptions must be fully explained on a separate page, titled "Exceptions", giving reference to the page and paragraph where the exception is being taken. Failure to comply with this requirement will result in the bid proposal being rejected.</p> <p>It is the intent of these specifications to secure an automated vehicle exhaust evacuation system designed and installed in compliance with national, local, standards and codes. This system shall be installed into the Williamsville Fire Department located at 5565 Main Street, Williamsville, New York 14221.</p> <p>Bids will be addressed and submitted in accordance with the advertised "Bid Notice". The words "Williamsville Fire Department FIRE DEPARTMENT VEHICLE EXHAUST EVACUATION SYSTEM", the date, and the bid opening time must be stated on the face of the bid envelope. It is the bidder's responsibility to see that their proposals arrive on time. Late proposals, telegram, facsimile or telephones bids will not be considered.</p> <p style="text-align: center;">NO EXECPTIONS</p>		
<p>3.0 SCOPE OF WORK</p> <p>The Bidder shall provide and install an emergency vehicle exhaust evacuation system at the Williamsville Fire Department located at 5565 Main Street, Williamsville, New York 14221. The system shall include A total of (5) vehicles and (1) Small Engine Exhaust Connections. All (5) emergency vehicle exhaust shall operate safely to accept and accommodate the Williamsville Fire Department emergency vehicles while operating in a forward, back-up, Drive Through and idle modes.</p>	YES	NO
<p>3.1</p> <p>All workmanship and materials shall be in accordance with applicable building and electrical codes, regulations and guidelines. The following codes, regulations and guidelines are to be considered part of these specifications and are a minimum standard of evaluation for this Hazardous Materials Exhaust System</p> <ul style="list-style-type: none"> • NIOSH • Underwriters Laboratory (UL) • National Fire Protection Agency (NFPA) <ol style="list-style-type: none"> 1. National Electric Code (NEC) 2. NFPA 1500 – 2002 Edition • Air Movement and Control Association International, Inc. (AMCA) • International Mechanical Code (IMC) • Uniform Mechanical Code (UMC) • American National Standards Institute (ANSI) • American Society of Mechanical Engineers (ASME) 	YES	NO

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<p>3.2 The Bidder shall provide and install one (1) automatic start control panel listed by UL in accordance with underwriters' laboratories standard UL-508, for station.</p>	YES	NO
<p>3.3 The Bidder shall provide and install one (1) non-sparking radial exhaust blower, for station.</p>	YES	NO
<p>4.0 STANDARD PRODUCTS</p> <p>Equipment and materials provided for the system installation(s) shall be manufactured and provided by the supplier of primary exhaust removal system (Equipment Manufacturer) and be a standard product of manufacturer currently engaged in the manufacture of vehicle exhaust evacuation systems. Where the requirement calls for a packaged exhaust System to be provided, all items shall be the product of the manufacturer. The product offering must be a product that has been offered by that manufacturer for a minimum period of ten (10) years. No prototypes or private label products by other manufacturers will be allowed.</p>	YES	NO
<p>5.0 QUALITY ASSURANCE</p> <p>If the manufacturer is ISO 9001:2000, UL and CUL Certified and certified by the Air Movement and Control Association (AMCA) to ensure quality, consistency and reliability of products, certification documents shall be provided and attached to the bid proposal. All workmanship, manufacturing procedures, airflow design and materials shall be performance guaranteed. If any findings or test studies reveal improper materials, defective components or inadequate performance as outlined in the performance/technical specifications, the bidder shall remove and replace at his expense the materials in question.</p>	YES	NO
<p>6.0 Requirements of the Vehicle Exhaust Evacuation System Upon emergency vehicle(s) starting, the exhaust ventilation fan shall be automatically energized by the output pressure generated by any internal combustion engine and evacuate the toxic exhaust fume.</p>	YES	NO
<p>6.1 The nozzle must release and disconnect near the threshold of the exit door regardless of the speed the vehicle may exit the door. Systems that limit the exiting speed are not acceptable as they can limit emergency response time.</p>	YES	NO
<p>6.2 Due to the harmful effects of diesel exhaust, the system must be designed and capable of virtually capturing 100% of the exhaust gases and particulate even in the event of a complete power failure. The system shall not detach itself from the apparatus for any reason during a power failure other than normal exiting of the apparatus bay.</p>	YES	NO
<p>6.3 Systems that require additional or alternate power source to eliminate detaching during power failure are not acceptable due to additional maintenance requirements.</p>	YES	NO
<p>6.4 Nozzle design must create positive seal around tailpipe adapter.</p>	YES	NO
<p>6.5 The nozzle must attach directly to any size exhaust tailpipe by making virtually an airtight seal around the vehicle's tailpipe when connected, to prevent exhaust gases and particulate from escaping through any opening when the vehicle's engine is at idle or accelerated to its maximum rotations per minutes.</p>	YES	NO

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<p>6.6 The tailpipe termination of the vehicle is a 90-degree angle (perpendicular) to vehicle body to prevent toxic exhaust fumes from being discharged rearward into station after the exhaust system nozzle releases at the door. All tailpipe termination must conform to this existing configuration.</p>	YES	NO
<p>6.7 The manual connection of the nozzle to the tailpipe must be done from a standing position, without bending over. Due to the Safety issues Bending over to connect nozzle to tailpipe is not acceptable due to increase of personnel's exposure to toxic diesel exhaust fume which NIOSH lists as a hazardous material.</p>	YES	NO
<p>6.8 To protect personnel and adjacent apparatus, vehicle exhaust evacuation system must incorporate an External release mechanism to ensure nozzle disconnect from tailpipe.</p>	YES	NO
<p>6.9 Due to the emergency nature of vehicles, which will be connected to the vehicle exhaust evacuation system, there must be <u>no limitations or restrictions</u> to vehicle exiting speeds.</p>	YES	NO
<p>6.10 The external nozzle release mechanism must be utilized to insure disconnect of nozzle from tailpipe to ensure safety of personnel and adjacent vehicles. Systems that do not use this feature are not acceptable due to safety issues.</p>	YES	NO
<p>6.11 The external nozzle release mechanism must be adjustable, so it may be placed anywhere over the entire length of rail.</p>	YES	NO
<p>6.12 Separate Ridged Middle and Flexible Upper hose assembly is required must be rated for 570°F. continuous, 660°F. intermittent temperature to ensure the exhaust fumes do not deteriorate the hose and leak.</p>	YES	NO
<p>6.13 Lower hose 2' section must be High temperature rated for 900°F. continuous, 1050°F. intermittent and a Spike of 1221°F temperature to ensure the exhaust fumes do not deteriorate the hose and leak.</p>	YES	NO
<p>6.14 The system hose shall be capable of maintaining continued use integrity, without degradation from engine idle at 1000 rpm, for a minimum of 20 minutes of engine idle.</p>	YES	NO
<p>6.15 A safety disconnect coupling shall completely separates the lower nozzle section from the upper hose assembly. The release tension of this device shall eliminate premature disconnect and shall prevent excessive mechanical tension and strain on the Rail and mounting supports in the unlikely event the exhaust nozzle becomes entangled in the wheels or the under carriage of the vehicle.</p>	YES	NO
<p>6.16 The safety disconnect must incorporate an Ergonomic handle to connect the magnetic nozzle to the vehicle's tailpipe. This design provides firefighter safety and ease in connecting the nozzle from a full standing position with nozzle connection in one complete motion.</p>	YES	NO
<p>6.17 The automatic control panel shall be UL listed and manufactured in accordance with Underwriters Laboratories standard UL-508. Panel must be listed by Underwriters Laboratories and bear the UL label. Insert in this space provided the Underwriters Laboratories file number for automatic control panel and manufacturer's name _____ Copy of Underwriters Laboratories Authorization Page must be attached to this bid.</p>	YES	NO

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6.18 <i>A system that must be disconnected and must not be exposed to water when washing the vehicle is not acceptable.</i>	YES	NO
6.19 <i>Manufacturer of the vehicle exhaust evacuation system must warrantee and manufacture all fans and electrical components utilized, installed and associated as part of the vehicle exhaust evacuation system.</i>	YES	NO
6.20 <i>Manufacturers for the Vehicle Exhaust Evacuation System electrical components must be Underwriters Laboratory certified.</i>	YES	NO
6.21 <i>The Bidder must be the installing contractor and provider of service for the duration of the warranty period and continuing throughout entire period of usage of system.</i>	YES	NO
6.22 <i>As required by the International Mechanical Code and the Uniform Mechanical Code for conveying hazardous materials, all connections including to tailpipe must be securely fastened and sealed.</i>	YES	NO
6.24 <i>Systems must utilize Stainless Steel adaptors which mates with a Metal Magnetic nozzle connection in order to secure nozzle to tailpipe in a fastening mode.</i>	YES	NO
6.23 <i>Manufacturer of the vehicle exhaust evacuation system must design, engineer or manufacture all system control boxes utilized as part of the Vehicle Exhaust Evacuation System.</i>	YES	NO
6.24 <i>Systems will have an adjustable opening in mating adapters.</i>	YES	NO
6.25 <i>System must be designed to ensure hose is hung at a height that will not block entrance to vehicle compartments or block isle access between vehicles.</i>	YES	NO
6.26 <i>Systems that require disconnection of nozzle from vehicle when working on vehicle's fuel system, recharging batteries or whenever there is a risk of inflammable dust or explosive gases, are not acceptable.</i>	YES	NO
6.27 <i>System must comply completely with NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, 2002 Edition and 2007 Edition of NFPA.</i>	YES	NO
6.28 <i>If the manufacturer is an ISO 9001:2000 Certified Company with Certification issued to United States Facility. Copy of Certificate must be supplied with Bid documents.</i>	YES	NO
6.29 <i>Systems that utilize internal Release mechanisms which are exposed to exhaust, gases and particulate due to adjustments requirements they cannot be utilize due to safety issues, exposure, and require to disassemble nozzle and hose to adjust cable are not acceptable.</i>	YES	NO
6.02 <i>System must utilize an external release mechanism design to ensure safe and controlled disconnect of nozzle from tailpipe connection. The system shall utilize metal surface to metal surface Magnetic connection to ensure safe and effective fastening and disconnections of the system to vehicle and apparatus tailpipe only are acceptable.</i>	YES	NO

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<p>6.32 Due to the harmful effects of vehicle exhaust emissions and NFPA requirements, system must be a sealed source capture system designed and capable of virtually capturing 100% of all vehicle exhaust emissions during vehicle operation at idle or High RPM.</p>	YES	NO
<p>6.33 System design must utilize an external adjustable nozzle release mechanism attached to rail to disconnect nozzle from tailpipe to eliminate exposure from adjustment of internal release cables in the Diesel Exhaust inside of the Hose. Adjustment mechanism must be placed in a locked position along length of rail.</p>	YES	NO
<p>6.34 Systems which require tailpipes or their adapters to protrude beyond the outside edge of chassis are not acceptable due to NFPA 1901, 2009 requirements.</p>	YES	NO
<p>6.35 The manufacturer of the electric fans installed within the vehicle exhaust evacuation system must be AMCA Certified as a standard product of bidder.</p>	YES	NO
<p>7.0 Small Engine Equipment Exhaust Extraction Arm System shall be Delivered and installed as a ball bearing extraction Arm equal to the following specifications: If the Manufacturer of the System is an ISO 9001:2000 certified, insert Certificate number of the manufacturer here _____. Attach a copy of the Certificate with the Bid.</p>	YES	NO
<p>7.1 Ball bearing Extraction Arm for wall mounting, L. 10 ft. Ø 6.25". Ball bearing mounted Extraction Arm 10 ft./ Ø6.25" with 3 friction links. Complete with mounting bracket for wall mounting and Ø 6.25" plastic flange for connection to central ducting. Manual ratcheting/locking airflow damper included in the Ring Handle. The spun steel removable hood (11.75" dia.) can be angled 110 degrees in any direction and is fitted with a safety mesh screen. The hood is powder coated. The standard Arm has yellow powder coated tubes and polyamides flex hose at the joints. This style Extraction Arm has five adjustable friction joints. This Arm has a limited amount of internal structure at the shoulder and wrist joints. The elbow joint is outside of the Arm.</p>	YES	NO
<p>7.2 Arm must be provided with external mounted middle joint together with spring – assisted joint supported in double ball bearings. Universal joint with hood collar 11.75" diameter and shut off damper. Anodized metal hood providing 110-degree angle in any direction. It must be detachable, safety mesh and a handle for control of damper.</p>	YES	NO
<p>7.3 Stanchion L. 3ft. extension mounting column. The Stanchion can be used for ceiling, floor, wall or bench mounting of Extraction Arms. 100 lbs. of equipment can be suspended from the tool anchor plate at the end. Made from steel, powder coated. Can be used with standard mounting bracket or the pivot-mounting bracket of Extraction Arms. Weight = 62 lbs.</p>	YES	NO
<p>7.4 The Small Engine Exhaust Equipment Arm shall be available in 10 Ft. length. The 6.25 " diameter wall mounted ball bearing mounted extraction arm shall include a Powder coated carbon steel mounting bracket with 3/8" bolt holes and will have a hanging flange mounted to the underside for mounting the articulated arm. The female spider pivot joint for connecting the machined steel shaft of the shoulder assembly houses two</p>	YES	NO

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sets of ball bearing rollers for easy lateral movement of the extraction arm. The fume extraction arm is provided with an external sway adjustment friction pad set.		
7.5 The internal support shoulder mechanism shall have an airfoil designed friction pad Pivot and will have a tubular steel support brace which is bolted to the inner arm 20 gauge powder coated aluminum connection tube. An externally adjustable elbow joint will be constructed from polycarbonate and connects the inner arm tube to the outer arm tube. It shall be provided with an external friction pad set for each side of the elbow and will be held in place by an external adjustment knob on each side.	YES	NO
7.6 The universal wrist joint is supplied with a double plane double pivot to allow the hood to be angled 110 degrees throughout a 360-degree rotation. The hood collar and ring handle assembly will be comprised of a durable 60-degree spun aluminum hood housed with a safety mesh screen and will have an opening of 11.75-inch diameter.	YES	NO
7.7 The removable hood will be connected to the hood positioning collar through the use of an adjustable latch. The optional SLE flexible extension hose with magnetic hood may be connected to the arm's hood collar.	YES	NO
7.8 The hood will have the capacity to be retrofitted with a halogen light kit which also includes a switch set to be mounted to the side of the positioning collar. The positioning collar will be made of a polycarbonate material including a ratcheted manual shut-off damper.	YES	NO
7.9 All sections of the Small engine exhaust Equipment Arm will be interconnected by a 6.25 " diameter flame resistant double wall, neoprene coated woven polyamide with an external spring steel helix.	YES	NO
8.0 <i>The Exhaust Evacuation Equipment shall be delivered and installed as a Magnetic Straight & Custom Rail Type System only, equal to the following Specifications If the Manufacturer of the System is an ISO 9001:2000 certified, insert Certificate number of the manufacturer here _____ . Attach a copy of the Certificate with the Bid.</i>	YES	NO
8.1 <i>The rail is to be one-piece extruded aluminum of 19.5 ft. length with bottom rubber seals and internal traveling crab trolley with sealed bearing loaded wheels designed to roll inside the internal rail profile. As the traveling crab trolley moves it shall continue to provide a seal to prevent fumes from escaping. Rubber impact end stop is to be mounted on rear end of the rail. Rail must be capable of inserting a maximum of four trolleys total.</i>	YES	NO
8.2 <i>Traveling internal crab trolley shall be epoxy coated steel assembly with four ball bearing wheels to fit inside rail profile and tapered cone design with independent wheels to separate rubber sealing lips Teflon coated to insure smooth travel along full length of rail. Systems utilizing external crabs are not acceptable.</i>	YES	NO
8.3 <i>A hydraulic brake system shall be incorporated into front-end cap of suction rail profile. It must have an adjustable hydraulic shock capable of reducing forward impact of traveling crab trolley.</i>	YES	NO

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<p>8.4 Flexible hose shall not exceed 4 inches in diameter for ease of handling and to minimize space requirements on the apparatus floor. Flexible hose greater than 4 inches in diameter is not acceptable</p> <p>The Middle and Flexible Upper hose assembly must be rated for 570 °F. continuous, 660 °F. intermittent temperature to ensure the exhaust fumes do not deteriorate the hose and leak.</p> <p>Lower hose 2' section must be High temperature rated for 900 °F. continuous, 1050 °F. intermittent and a Spike of 1221 °F temperature to ensure the exhaust fumes do not deteriorate the hose and leak.</p>	<p>YES</p> <p>YES</p> <p>YES</p>	<p>NO</p> <p>NO</p> <p>NO</p>
<p>8.5 Flexible hose assembly shall not be allowed to touch or rub the body of any vehicle at any time. No attachments to the body of the vehicle are permitted.</p>	<p>YES</p>	<p>NO</p>
<p>8.6 No mechanical attachments or alteration of the vehicle is permitted except for tailpipe modification as outlined above under tailpipe termination.</p>	<p>YES</p>	<p>NO</p>
<p>8.7 The transition from the magnetic nozzle to the flexible hose shall be one-piece construction to prevent leaks of exhaust fumes. The transition shall be Black Armor coated and shall be resistant to road salt and the apparatus bay environment.</p>	<p>YES</p>	<p>NO</p>
<p>8.8 Transition shall have a metal debris screen to prevent foreign material from damaging the flexible hose or exhaust blower.</p>	<p>YES</p>	<p>NO</p>
<p>8.9 The transition from the magnetic nozzle to the flexible hose shall be one-piece stainless-steel construction to prevent leaks of exhaust fumes. Due to higher Vehicle Exhaust Temperatures the transition shall be high temperature stainless steel for durability, high temperature and safety. The transition shall be stainless steel for durability, 1450 degrees high temperature rating.</p>	<p>YES</p>	<p>NO</p>
<p>8.10 Nozzle design must create positive seal around tailpipe with use of mating band that Metal to Metal connection.</p>	<p>YES</p>	<p>NO</p>
<p>8.11 System must use a Metal hose Saddle with hose slotted into and external welded tab to provide hose support from a spring balancer. Design protects hose and provides safety connection to trolley on Rail or rail.</p>	<p>YES</p>	<p>NO</p>
<p>8.12 A Two (2) piece safety disconnect coupling shall completely separates the lower nozzle section from the upper hose assembly. The release tension shall eliminate premature disconnect and Prevent excessive mechanical tension and strain on the Rail and mounting supports in the unlikely event the exhaust nozzle becomes entangled in the wheels or the under carriage of the vehicle.</p>	<p>YES</p>	<p>NO</p>
<p>8.13 The safety disconnect must incorporate an Ergonomic handle to connect the magnetic nozzle to the vehicle's tailpipe. This design provides firefighter safety and ease in connecting the snap-lock nozzle from a full standing position with nozzle connection in one complete motion.</p>	<p>YES</p>	<p>NO</p>
<p>8.14 Safety disconnect coupling must be reusable. External or internal release cables or other devices which may catch or sang on firefighter's gear are not acceptable.</p>	<p>YES</p>	<p>NO</p>
<p>8.15</p>	<p>YES</p>	<p>NO</p>

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<p>The safety disconnect will incorporate a snap lock mechanism as its reconnection process to ensure a quick and easy reassembly without tools fulfilling firefighter ease for reconnecting and safety requirements.</p>		
<p>8.16 Nozzle design must provide metal encapsulated magnets due to tailpipe and vehicle exhaust temperatures and to accept tailpipe with the use of mating adapter to ensure tight fit and virtually capture 100% of exhaust fumes.</p>	YES	NO
<p>8.17 <u>The spring balancer must be self-adjusting enclosed type with stainless steel cable to support hose assembly at proper height of hose during travel along the Rail. Systems that incorporate locking type balancers or external/internal cable of nylon or fabric type are not acceptable.</u></p>	YES	NO
<p>8.18 Spring balancer shall support and keep all hose at acceptable height when vehicles are in their parked positions.</p>	YES	NO
<p>8.19 The Magnetic nozzle must easily align with adapter and to eliminate exposure to Diesel Exhaust will operate from a standing position to connect magnetic nozzle to tailpipe. When Rail mounted release is activated, the magnetic nozzle will automatically release.</p>	YES	NO
<p>8.20 Protection must be provided where the spring tension cable attaches to the hanging hose. This protection shall be a metal elbow to withstand the surrounding environment and temperatures without causing degradation to the hose.</p>	YES	NO
<p>8.21 Magnetic Nozzles must be available for tailpipe sizes ranging from three inch through five-inch diameter with the use of different sized magnetic nozzles sizes must list available _____.</p>	YES	NO
<p>8.22 Tailpipe Adapters must mate with the Magnetic metal Nozzles and be Stainless Steel in Sizes of 3", 3.5", 4", 5", 6" and 7" to be resistant to road salt and the apparatus bay environment. Bidder must list the tailpipe Sizes available _____</p>	YES	NO
<p>8.23 EPDM rubber magnetic nozzles attached to tailpipe adapters on vehicle exhaust pipes are not acceptable due to temperature limitations of 200 to 300 degrees ratings and current higher Vehicle Exhaust Temperatures</p>	YES	NO
<p>8.24 Magnets must make direct open contact with tailpipe nozzle to ensure magnet metal to metal connection. This utilization of a surface to surface connection allows the magnetic attachment to occur without slipping the magnetic nozzle over the circumference of the tailpipe, ensuring a smooth release without magnetic drag over the tailpipe providing a Safe release</p>	YES	NO
<p>8.25 To fully protect nozzle magnets, design must prevent magnets from exposure to the vehicle exhaust and its temperatures. Metal to magnets connections must be kept out of vehicle exhaust air stream and nozzle must provide ambient air dilution.</p>	YES	NO
<p>8.26 <u>Nozzle construction must be encapsulated magnets into Metal sleeve to PROVIDED A PRIMARY TEMPERATURE AND FRICTION BARRIER.</u></p>	YES	NO
<p>9.0 Automatic Start Electrical Control Panel Manufactured by the Vehicle Exhaust System Manufacturer for Fan as described in section 10.0</p>		

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The control panels and electrical components engineered and installed for the Vehicle Exhaust Extraction System shall be manufactured by a UL recognized and listed manufacturer. Control panels shall carry the UL listing label as an "Enclosed Industrial Control Panel". Individual components listed by UL shall not satisfy the above requirement. Electrical equipment manufacturer must undergo inspections as outlined by UL requirements and standards.	YES	NO
9.1 The control panel shall contain the motor starter overload relay electronic timer, 24-volt transformer, indicator light and manual-auto-spring loaded off selector switch in a NEMA 12 rated key lock electrical enclosure with pressure.	YES	NO
9.3 Control panel must have system indicator LED lights on the soft touch membrane controls.	YES	NO
9.4 The control panel shall contain the motor starter, overload, solid-state circuit card with timer adjustments, fused low voltage transformer, in a NEMA 12 rated key lock electrical enclosure.	YES	NO
9.5 All system control boxes shall be provided with a key – lock integrated locking system. Padlock clasp system is not acceptable.	YES	NO
9.6 Dashboard transmitters shall signal the start of the exhaust upon Vehicle Start-up with constant signal to Receiver Box ensuring fan operation at all time when Vehicles are running to fulfill Safety requirements. Green Light switch on transmitter insures a visual indication of Fan . The variable 3 to 60-minute adjustable timer shall keep the connectors energized. After the time has expired, the exhaust blower will shut off. Dual start-up insures system operation.	YES	NO
9.7 Soft touch AUTO START- STOP - MANUAL RUN membrane controls shall be on the face of the control panel.	YES	NO
9.8 Transmitters devices installed on the vehicle to activate the exhaust blower are permitted except when these devices cause interference with original equipment and cause a delay in response time.	YES	NO
9.9 The automatic control panel shall be UL listed and manufactured in accordance with Underwriters Laboratories standard UL-508. Panel must be listed by and bear the UL label.	YES	NO
9.10 The control box must have manufacturer's outside full door covering decal with soft touch membrane controls which shall be marked and function as: <ol style="list-style-type: none"> 1. <u>AUTO START</u>: This LED shall show the system is in fully automatic mode of operation and electrical power is supplied to the control panel. 2. <u>FAN ON</u>: This LED shall show that electrical power is supplied to the exhaust blower. 3. <u>STOP</u>: This LED shall show the exhaust blower is manually shut down. After three seconds this will return to AUTO START ready mode to prevent the exhaust blower from inadvertently being shut down. 4. <u>MANUAL RUN</u>: This LED shall show the exhaust blower is operating in a continuous mode until interrupted by the STOP mode being activated. 5. <u>NO AIRFLOW ALARM</u>: This shall monitor the exhaust blower and advise when the exhaust blower is not operating properly 	YES	NO

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9.11 <i>Control panel will utilize an external low voltage receiver box with built-in Transients protection circuitry to protect from emergency power, line voltage, lightning Transients.</i>	YES	NO
9.12 <i>The Vehicle Exhaust Extraction System's Manufacturer must be UL certified and supply certificate.</i>	YES	NO
10.0 Exhaust blower (Shall meet or exceed HP & RPM) <i>High pressure radial flat wheel type</i>	YES	NO
10.1 <i>Blower must provide <u>minimum</u> conveying velocities of 3500-4000 FPM and capture velocities of 5500 to 6000 FPM as required by Uniform Mechanical Code without usage of ambient air.</i> <i>A total of (5) vehicles and (1) Small Engine Exhaust Connections to Manufactured AMCA Certified Fan, Energy Efficient, High performance, spark resistant, fan cooled 3450 RPM direct drive motor rated 3550 CFM of total exhaust @ 5" S. P., with a 7.5 HP, 20 amps., 208v., Three phase fan motor, (Inside Mounted – Wall penetration)</i>	YES	NO
10.2 <i>Constructed of power coated steel housing and aluminum wheel with Teflon shaft seal. Tested in accordance with AMCA Standard 210.</i>	YES	NO
10.3 <i>The exhaust fans/blowers engineered, manufactured by vehicle exhaust evacuation systems manufacturer and installed by the manufactured certified installer, and shall have prior AMCA certification.</i>	YES	NO
10.4 <i>Copy of Air Movement & Control Association International, Inc. Certification Page in the name fan/blower manufacturer shall be attached.</i>	YES	NO
11.0 DUCTWORK <i>Ductwork to connect the radial exhaust blower to the hose assembly or multiple hose assemblies must be round industrial duct, defined in <u>SMACNA Industrial Duct Construction</u> to prevent deflection under use.</i>	YES	NO
11.1 <i>Duct gauge shall be a minimum 20 to 22-gauge galvanized sheet metal round spiral as outlined in International Mechanical Code.</i>	YES	NO
11.2 <i>All non-welded ductwork, fittings and joints must be securely fastened and sealed with a mechanical internal Teflon duct collar with locking bolt mechanism which seals all not Welded Joints as required by the International Mechanical Code and the Uniform Mechanical Code.</i>	YES	NO
11.3 <i>Duct work to be of the taper design to maintain constant velocities without the need for dampers to balance the system.</i>	YES	NO
11.4 <i>All non-welded joints must be sealed with a mechanical Teflon duct collar with locking bolt mechanism or welded to provide a positive leak proof seal.</i>	YES	NO
11.5 <i>Backdraft damper exhaust rain cap must provide protection from rain and other inclement weather on all exterior exhaust discharges.</i>	YES	NO
11.6	YES	NO

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<i>Silencer/Muffler must be connected to exhaust discharge to reduce discharge air noise for all Fans 7.5HP or larger.</i>		
12.1 <i>Transmitters are required to be installed in proper location of each vehicle utilizing transmitting devices for each Vehicle by Williamsville Fire Department designated Licensed Fire Apparatus Mechanic only at Bidders expense.</i>	YES	NO
12.2 <i>Provide complete electrical connections into facility system in compliance with electrical codes.</i>	YES	NO
12.3 <i>Control panel will utilize transmitting devices to activate fan operation in AUTO MODE. Vehicle mounted, and battery-operated types are acceptable.</i>	YES	NO
13.0 TRAINING <i>Training is to be provided by Bidder at the time of installation to the Williamsville Fire Department for the use and operation of the vehicle exhaust evacuation system.</i>	YES	NO
13.1 <i>An operation/training manual will be supplied as a permanent training aid.</i>	YES	NO
14.0 WARRANTY <i>Bidder must warranty all Vehicle Exhaust System Manufacturer's parts for a minimum of Five (5) /Ten (10) Years.</i>	YES	NO
15.0 ADMINISTRATION <i>Bidder must make an onsite survey of the facility and provide a layout drawing showing location of vehicles and equipment to be supplied. This is a mandatory requirement to ensure the proposed system meets the intent of the specifications and fits within the building space. Drawing must be included with the bid.</i>	YES	NO
15.1 <i>Bids will only be considered using manufacturers in the United States which have established a reputation of permanency and reliability in the field of vehicle exhaust evacuation systems manufacturer and are certified by ISO 9001: 2000, UL and AMCA.</i>	YES	NO
15.2 <i>Bidder shall list only their previous completed installations of magnetic type vehicle exhaust evacuation systems of the same Manufacturer as being bid within the past three years. References of the same manufacturer as this bid and which have been installed and operating for a minimum of 12 months. Information shall include agency name, agency contact person and title, address, phone number</i>	YES	NO
15.3 <i>A list of all installations made by the Bidder of the same manufacturer as this bid in Fire Department/Rescue Stations must be included with bid</i>	YES	NO
15.4 <i>All Williamsville Fire Department apparatus tailpipes and Transmitters will only at Bidders expense be modified and installed by a provided designated Licensed Fire Apparatus Mechanic as required to accommodate tail pipe nozzles and transmitters supplied by the vehicle exhaust evacuation system certified installed at the Bidders expense.</i>	YES	NO
15.5		

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<i>Independent Hose testing for Diameter specified and certification by third party independent Testing Lab for Sections 7.3 and 7.4A, temperature ratings completed. and provided upon request.</i>	YES	NO
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