



**TOWN OF MANSFIELD
Facilities Management Department
Request For Proposal (RFP)**

Vehicle Exhaust Extraction Systems

Submission Deadline:
Wednesday, January 17, 2018 at 2:00pm

Submission Contact and Address:

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Background:

The facilities of the Town of Mansfield are located east of Hartford in Mansfield, Connecticut. The Town takes care of four school buildings, grades pre-Kindergarten to eighth. Additional facilities the department maintains are Mansfield Daycare, Mansfield Community Center, Senior/Wellness Center, Mansfield Library, Maintenance Shop, Town Hall, Public Works Complex, three small park buildings, Historical Society, Old Eagleville School House and three Fire Stations.

The Facilities Management Department has been maintaining these buildings drawing funds from the operating budget and also making capital improvements as needed.

Overview:

The Facilities Management Department is requesting a proposal from Vehicle Exhaust Extraction System Installers and Contractors to install Vehicle Exhaust Systems for all vehicles inside three fire houses. The three stations are Mansfield Fire Houses 107, 207, and 307. The selected vendor will need to submit and cover fees for any required permits to complete the work. The selected vendor will work with the Facilities Management Department, the Fire Chief, and Fire Department Staff.

Scope of Work:

The selected vendor will be expected to perform the following:

- Install adequate Vehicle Exhaust Extraction Systems for three fire houses and all vehicles housed in the three fire houses.
- The Vehicle Exhaust Extraction Systems need to have the following components in their systems:

Magnetic Sliding Balancer Track Type System

This system shall be delivered and installed equal to the following specifications:

The exhaust blower will automatically start and evacuate the exhaust gases the moment any vehicle engine connected to the system is started.

As the vehicle leaves the apparatus floor, the flexible 4" diameter flexible exhaust ventilation hose equipped with a magnetic nozzle moves toward the exit door along a ceiling mounted aluminum track. A traveling trolley glides along the track with a spring coiled balancer which supports the flexible ventilation hose. Mounted to the aluminum track is a stop bracket that allows the spring coiled balancer to extend the stainless steel cable and provide tension to release and uncouple the magnetic nozzle from the vehicle's exhaust tailpipe near the threshold of the exit door.

Upon the vehicles return to the apparatus floor of the fire station, the flexible 4" diameter flexible exhaust ventilation hose equipped with a magnetic nozzle is attached to the vehicle's exhaust tailpipe by an operator standing in an upright vertical position at the entrance door. At such time that the vehicle's exhaust tailpipe is attached to the ventilation system, the exhaust blower will automatically and instantaneously energized to assure total collection of exhaust gases prior to the vehicle entering the building. The vehicle can then be positioned in its designated parking position.

Magnetic Sliding Balancer Track Type Source Capture Emergency Vehicle Exhaust Fume Removal System

This system shall be delivered and installed equal to the following specifications:

The track must be extruded aluminum to resist corrosion with channel to accept ball bearing rollers of the traveling trolley. Rubber impact end stops are to be mounted on each end of the track.

The traveling trolley shall be galvanized steel assembly with upper ball bearing wheels to fit inside track extrusion and lower ball bearing wheels to fit on outside of track extrusion to prevent rocking or shifting of the trolley as it moves along full length of track.

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 are not acceptable. Wire helix must be bound and protected in lamination to further protect hose. Hose with exposed wire helix is not acceptable because of possible burns or injury to personnel.

The magnetic nozzle to connect to the vehicle's tailpipe shall be constructed with encapsulated magnets and designed to mate with the conical tailpipe adaptor.

The magnetic nozzle must attach to any size vehicle's tailpipes by utilizing a conical tailpipe adaptor that makes a virtual airtight seal on the surface of the conical tailpipe adapter when connected. This will allow all of the vehicles to be parked in any bay or fire station.

The transition from the nozzle to the flexible hose shall be completely seam-welded construction to prevent leaks of exhaust fumes. Spot welded construction is not acceptable. The transition is to keep the hose from sagging and excessive fatigue. Transition shall have a metal debris screen to prevent foreign material from damaging the flexible hose or exhaust blower. The transition shall be chrome plated for durability.

The spring balancer that supports the hose assembly as it travels along the track must be enclosed type with stainless steel cable. Systems that incorporate a locking type balancer are not acceptable

Without replacement or alterations, the proposed system track must be expandable to accommodate future tandem arrangement or drive-thru arrangement of the vehicle. Systems that require the original installation to be removed and replaced to achieve tandem arrangement or drive-thru arrangement of the vehicle are not acceptable.

Magnetic Straight Rail Type System

This system shall be delivered and installed equal to the following specifications:

The exhaust blower will automatically start and evacuate the exhaust gases the moment any vehicle engine connected to the system is started.

As the vehicle leaves the apparatus floor, the flexible 4" diameter flexible exhaust ventilation hose equipped with a magnetic nozzle moves toward the exit door along a ceiling mounted aluminum rail. The traveling crabs glides along the rail, parting the rubber seals that are located on the bottom of the rail, with a spring coiled balancer which supports the flexible ventilation hose. Mounted to the aluminum rail is a stop bracket that allows the spring coiled balancer to extend the stainless steel cable and provide tension

to release and uncouple the magnetic nozzle from the vehicle's exhaust tailpipe near the threshold of the exit door.

Upon the vehicles return to the apparatus floor of the fire station, the flexible 4" diameter flexible exhaust ventilation hose equipped with a magnetic nozzle is attached to the vehicle's exhaust tailpipe by an operator standing in an upright vertical position at the entrance door. At such time that the vehicle's exhaust tailpipe is attached to the ventilation system, the exhaust blower will automatically and instantaneously energized to assure total collection of exhaust gases prior to the vehicle entering the building. The vehicle can then be positioned in its designated parking position.

As the vehicle proceeds to its designated parked position in the station, the crab shall glide along the rail, parting the rubber seals that are located at the bottom of the rail. These seals must assure that all vehicle emissions are continuously exhausted from the rail that is under negative pressure. The exhaust blower that is connected to the rail by ductwork creates the negative pressure.

Magnetic Straight Rail Type Source Capture Emergency Vehicle Exhaust Fume Removal

This system shall be delivered and installed equal to the following specifications:

The rail is to be one piece extruded aluminum to resist corrosion with bottom rubber seals and accept ball bearing rollers of traveling crab trolley. As the traveling crab trolley moves it shall continue to provide a seal to prevent fumes from escaping. Hydraulic impact end stop must be mounted at the end of the rail.

Traveling crab trolley shall be epoxy coated steel assembly with four ball bearing wheels to fit inside rail profile and tapered cone design to separate Teflon coated rubber-sealing lips to insure smooth travel along full length of rail.

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 are not acceptable. Wire helix must be bound and protected in lamination to further protect hose. Hose with exposed wire helix is not acceptable because of possible burns or injury to personnel.

The hose must be rated for 400° (F) continuous, 500° (F) intermittent temperature to insure the exhaust fume does not deteriorate the hose and leak. This is a mandatory requirement.

A copy of the hose temperature test report must be included. This is a mandatory requirement.

Flexible hose assembly shall not touch or rub the body of the vehicle because the hose may catch or snag on the many handles, knobs and latches located on the vehicle.

The magnetic nozzle must inflate to provide a positive airtight seal around the exhaust tail pipe when connected, to prevent exhaust gases from escaping when the vehicle's engine is accelerated. This is a mandatory requirement.

The magnetic nozzle must be tested for effectiveness to capture the exhaust fumes by an independent agency. This is a mandatory requirement. Copy of the test report must be included with the bid.

The magnetic nozzle to connect to the vehicle's tailpipe shall be constructed with encapsulated magnets and designed to mate with the conical tailpipe adaptor.

The magnetic nozzle must attach to any size vehicle's tailpipes by utilizing a conical tailpipe adaptor that makes a virtual airtight seal on the surface of the conical tailpipe adapter when connected. This will allow all of the vehicles to be parked in any bay or fire station.

The safety disconnect coupling shall completely separate the lower nozzle section from the upper hose assembly in the unlikely event of the exhaust nozzle becomes entangled in the wheels or the under carriage of the vehicle. This is a mandatory requirement to prevent the track or rail supports from being pulled out of the ceiling caused by excessive mechanical tension and strain. The safety disconnect coupling must be reusable. External release cables or other devices that may catch or snag on the fire fighters' turn-out gear are not acceptable.

The tailpipe termination of the vehicle is a 90° 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. This is a mandatory requirement.

The tailpipe shall not be modified to extend beyond the body of the vehicle nor shall tailpipe be increased in size to accommodate the system nozzle. This is a mandatory requirement.

The manual connection of the nozzle to the tailpipe must be done from an upright standing position without bending over. This is a mandatory requirement is to reduce personnel exposure of the toxic diesel exhaust fumes and prevent personnel from possible burns from handling the nozzle or touching the hot exhaust tailpipe. Additional, personnel bending down to connect the nozzle to the vehicle's tailpipe would be out of view of the driver, which is not acceptable.

The manual connection of the nozzle to the tailpipe must be a single operation, from an upright standing position, without requiring manual attachments or adjustments to other parts of the system. This is a mandatory requirement to eliminate operations that distracts the personnel while the vehicle is moving in to the Fire Station.

The transition from the nozzle to the flexible hose shall be completely seam-welded construction to prevent leaks of exhaust fumes. Spot welded construction is not acceptable. The transition is to keep the hose from sagging and excessive fatigue. Transition shall have a metal debris screen to prevent foreign material from damaging the flexible hose or exhaust blower. The transition shall be chrome plated for durability.

The spring balancer that supports the hose assembly must be enclosed type with stainless steel cable.

The automatic control panel shall be UL, ETL or other qualified electrical testing agency, listed and manufactured in accordance with Underwriters Laboratories standard UL-508. Panel must for listed by a qualified electrical testing agency and bear the agency label. This is a mandatory requirement. Insert qualified electrical testing agency file number for automatic control panel _____ and manufacturer name _____.

Copy of the qualified electrical testing agency Authorization Page must be attached. This is a mandatory requirement.

Installation

This installation is considered to be supplemental equipment and subordinate to and must be coordinated with any system, fixture and appurtenance that is in the existing fire station.

The means and methods of installation are the sole responsibility of the contractor and shall comply with applicable industry standards and local, state and federal regulations and codes and meet all requirements as set forth in the specifications.

All hangers, fasteners and appurtenances shall be used and/or installed in accordance of the manufacture specifications for the specific exhaust removal system(s) being bid that must meet the characteristics and performance set forth in the specification.

Installation of the source capture emergency vehicle exhaust system(s) to include mounting the track and rail assemblies with supports and bracing to ceiling.

All penetrations of the exterior wall must be core drilled to allow ductwork to exit the building. The discharge ductwork shall terminate a minimum of two (2) feet above the roofline with and EPA type backdraft damper. Ductwork is not permitted to exit the building through a window opening.

Ductwork

Duct work to connect the exhaust blower to the hose assembly or multiple hose assemblies must be round industrial spiral duct, defined in SMACNA Industrial Duct Construction to prevent deflection under use.

Duct work to be of the taper design to maintain constant velocities without the need for dampers to balance the system.

All joints must be double-lipped EPDM rubber seal type conforming to SMACNA's Class 3 leakage standards, sealed with a mechanical joint seal or welded to provide a positive leak proof seal. Ductwork joints that do not conform to the above are not acceptable.

The size and gauge of the ductwork shall be in strict accordance of the manufacture specifications to insure proper operation for the specific exhaust removal system(s) being bid that meets the above characteristics and comply with applicable industry standards and local, state and federal regulations and codes.

Warranty

Contractor must warranty all parts and labor of system for a minimum of two (2) years from final date of acceptance. This shall include preventative maintenance; inspection and adjustments on all parts of the system performed every year by the manufacture's factory authorized personnel for the duration of the warranty period.

SUBMISSION REQUIREMENTS

Submission Due Date:

Qualifications and proposals will be accepted at the Finance Office, 4 South Eagleville Road, Mansfield, CT 06268, until Wednesday, January 17, 2018 at 2:00pm. Proposals received after that time will not be considered. Submissions will be reviewed by staff. Submittals may be withdrawn 90 days after opening, if no award has been made.

Pre-bid Walk-Through:

Attendance at a pre-bid walk-through is **required** for your submission to be considered in the selection process. The project scope, site, and conditions will be reviewed, as well as any questions and answers regarding the project. The Pre-bid Walk-through will be held on an as-call basis. You will need to call the Facilities Management Office at 860-429-3320 to arrange an appointment.

Directions for Submissions:

Interested companies are required to submit one (1) original hard copy with two (2) additional hard copies or submit one (1) hard copy with an electronic (PDF) copy. Hard copies are to be delivered to the Finance Office at 4 South Eagleville Road, Mansfield, Connecticut 06268; electronic copy to be sent via email to: corsonan@mansfieldct.org.

Those companies applying must be licensed, certified, or have a proven record to perform the work, and provide evidence of experience in Vehicle Exhaust Extraction Systems and cost estimation of similar projects in the Northeast Region of the United States. Submissions must include the following sections:

- Letter of Transmittal
- Qualifications Statement (include brief history of firm, credentials, etc.)
- Scope of Services
- Specialized Expertise
- Similar Projects/References
- Drawings related to each system
- Schedule of Fees
- A concise and complete description of the work to be performed, including an explanation that your company understands the project, its approach to the work, and the key issues to resolve.

Proposal:

The proposal shall be a lump sum for the services to be provided and broken down by location and area, based on the scope. Please provide a breakdown of your fee by major task.

Bid Form

The undersigned proposes to furnish all labor and materials required for Source Capture Vehicle Exhaust Fume Removal Systems for the Town of Mansfield in accordance with the accompanying specifications, for the contact price specified below.

This bid includes Addenda numbered _____

The proposed contract price for Fire Station #107 is:

_____ \$ _____
(Written Words) (Figures)

The proposed contract price for Fire Station #207 is:

_____ \$ _____
(Written Words) (Figures)

The proposed contract price for Fire Station #307 is:

_____ \$ _____
(Written Words) (Figures)

The proposed total lump sum cost for Fire Station #107, #207, and #307 is:

_____ \$ _____
(Written Words) (Figures)

The undersigned certifies under penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

Date _____

(Signed name of bidder)

Corporate Seal

(Printed name of bidder)

(Title)

(Company name)

(Address)

(City, State, Zip Code)

(Phone)

The intent of these specifications is to set a minimum standard for the design, supply and installation of a Source Capture Emergency Vehicle Exhaust Fume Removal System that is proven, dependable and operate efficiently. These performance specifications are the result of investigations by the Fire Department of several types of Source Capture Emergency Vehicle Exhaust Fume Removal Systems. Based on the investigations, the specifications are an accumulation of benefits and features required for proper and safe operation in the Fire Station.

These specifications must be returned with bid form. Response must be noted where indicated to ensure that all bidders meet requirements of the specification. All bidders taking exception to any specification must include a valid explanation or be subject to bid refusal. The Fire Department will review all bids and evaluate the bidder's qualifications and the equipment to be supplied by the bidder.

Administration

Contractor must comply with all State and Local bidding / contract laws.

The successful bidder will be required to provide a Certificate of Insurance acceptable to the Town of Mansfield CT.

Pre-bid Conference

Contractor must attend a pre-bid conference held on _____ at Fire Station 107, 879 Stafford Road (RT 32). This is a mandatory meeting to insure the vendor has on site knowledge of the fire department requirements.

Comply Exception

Contractor must make an on-site survey of the facility and provide a detailed layout drawing showing location of vehicles, system track or rail, exhaust blower and ductwork 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.

Comply Exception

Contractor's Qualifications

The Contractor must have installed in Fire Departments at least three (3) Source Capture Emergency Vehicle Exhaust Fume Removal System of the same manufacturer and model as bid that have been installed and operating for a minimum of two (2) years in Rhode Island, Connecticut, Maine, Massachusetts, or New Hampshire. This requirement is to allow the Town's representatives to physically visit Fire Stations were systems are installed and see how the system perform after the system warranties have expired.

Comply Exception

A list of all installations made by the contractor in Fire Departments must be included with bid.

Comply Exception

Contractor must stock parts in New England for the Source Capture Vehicle Exhaust Fume Removal System and be able to provide immediate service and periodic maintenance beyond the warranty period. Insert address of where parts are stocked and service center _____.

Comply Exception

Manufacture's Qualifications

Bids will only be considered using manufactures that have established a reputation of permanency and reliability in the field of Vehicle Exhaust Ventilation Systems manufacture for minimum of five (5) years. Letter from the manufacturer must be attached.

Comply Exception

The manufacture must be ISO 9001 Certified. A copy of the certificate must be attached.

Comply Exception

Evaluation Criteria & Right to Reject:

The Facilities Management Department may reject any or all proposals or submittals for such reason as it deems proper. In acceptance of proposals or submittals, the Facilities Management Department will be guided by what it deemed to be in the best interest of the town at the time of selection. The Facilities Management Department also reserves the right to negotiate further with one or more firms as to any of the features of their proposals or submittals and to accept modifications to the work and/or price when such action will be in the best interest of the town. The award will be made to the most responsible qualified bidder, taking into consideration all criteria included in this request for proposal. The cost portion of the evaluation will be based upon a lump sum proposal fee submitted and will also be used as part of the criteria for selection.

Any and all work will need to be accomplished in the projected timeframes put forth in this Request for Proposal, or in any attached listing of projects by location and projected completion work dates. Jobs may be awarded as a package or broken down by location based on best value for the Town of Mansfield. Work will not be authorized to commence prior to the Fiscal Year 2017-2018, starting January 1, 2018, and all billing will be scheduled within Fiscal Year 2017-2018.

Responses will be reviewed and evaluated by the Facilities management Department and the candidates may be invited to participate in oral interviews. Criteria to be considered in evaluating proposals will include:

- Qualifications and required licensing or certification for stated work
- Minimum Liability Insurance for stated work
- Ability of professional personnel
- Past record and experience
- Willingness to meet time requirements
- Location
- Workload of the firm
- Technical experience of the company
- Responsiveness in clear understanding of the work to be performed
- Strength of client recommendations
- Attendance at Pre-bid Walk-through
- Local (City, County, Regional) experience

Additional Information:

Additional information may be obtained by contacting:

Allen N. Corson, Director
Facilities Management Department
Phone: 860-429-3326 or
Email: corsonan@mansfieldct.org