

**REQUEST FOR PROPOSALS FOR
PURCHASE OF MINI PUMPER
GREENEVILLE FIRE DEPARTMENT**



Issued by:

Greenville Fire Department
Chief Alan Shipley
710 W. Summer St
Greenville, TN 37743

Phone (423) 638-4243 Fax (423) 638-2469
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Date of Issue: December 28, 2020

**Due Date/Time: January 12, 2021; 9:45 a.m.
DEADLINE FOR RECEIVING PROPOSALS**

CALENDAR OF EVENTS/RFP TIMELINE

Listed below are the important dates and times by which the actions noted must be completed. All dates are subject to change by the Greeneville Fire Department. If the Greeneville Fire Department finds it necessary to change any of these dates or times prior to the RFP due date, the change will be accomplished by addendum.

<u>ACTIONS</u>	<u>COMPLETION DATE</u>
Distribution of RFP	December 28, 2020
Proposals Due	January 12, 2021 by 9:45 a.m.
Proposal Opening	January 12, 2021 at 10:00 a.m.
Consideration of RFP	Fourteen Days
Expected adoption of RFP	February 2, 2021

FORMS AND SPECIFICATIONS

Details, proposal forms, and specifications are available from the Town of Greeneville website, www.greenevilletn.gov. Vendors are required to use the official "PROPOSAL FORMS", and all attachments itemized herein are to be submitted as a single document.

PROPOSAL SUBMITTAL

One (1) original and one (1) copy (for a total of 2), of each proposal shall be submitted in a sealed envelope, prominently marked on the outside with the words, "MINI PUMPER RFP". Proposals submitted in express, overnight or courier envelopes, boxes or packages must be prominently marked on the outside with the words, "MINI PUMPER RFP" and contents sealed as required.

- Deadline for Submissions in response to the Request for Proposals: Proposals must be received no later than 9:45 a.m., January 12, 2021. Proposals submitted by FAX or other electronic media will not be accepted under any circumstances. Late proposals will not be accepted, and will be returned, unopened, to the Vendor, at the Vendors' expense.
- The Greeneville Fire Department (hereinafter called "the department") reserves the right to reject any and/or all proposals, reserves the right to waive any informalities or irregularities in the proposal, and reserves the right to award contract(s) in the best interest of the department.
- Proposals are to be submitted to the following address:

Town of Greeneville
Attn: Chief Alan Shipley (MINI PUMPER RFP)
200 N. College St.
Greeneville, TN 37743

VENDOR QUESTIONNAIRE AND REFERENCES

(You may use a separate sheet for additional information)

VENDOR: _____

DATE: _____

1. Where are your corporate/ business headquarters located?
2. Where is your factory located?
3. Where is the nearest full-service center?
4. How many years has your organization been in business under your present business name?
5. List all previous business names of your organization:
6. Will you furnish a written guarantee that sufficient replacement equipment and/or replacement parts and components will be available at your facility if requested within a minimum 24-hour period?
7. Will your company provide a written copy of the manufacturer's written or expressed warranty on the equipment? Vendor must state length of standard warranty and any extended warranties available as well as all requirements for the department to remain within warranty compliance.
8. Does your company contract out warranty repair work? If so, how long has your company done this? How long has the current vendor been with your company? Please provide name, address, and phone number of vendor.

9. Have you ever failed to complete any work awarded to you in the last 3 years? Yes___ No___
If yes, where, and why?

10. List/describe five (5) contracts/projects with similar specifications that you currently have or have recently completed.

Project	Location
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Date	Contract Amount
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Contact Name, Phone Number and Fax Number

Project	Location
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Date	Contract Amount
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Contact Name, Phone Number and Fax Number

Project	Location
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Date	Contract Amount
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Contact Name, Phone Number and Fax Number

Project	Location
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Date	Contract Amount
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Contact Name, Phone Number and Fax Number

Project	Location
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Date	Contract Amount
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Contact Name, Phone Number and Fax Number

PROPOSAL FORM

GREENEVILLE FIRE DEPARTMENT



Name of Firm Submitting Proposal _____

Name of Person Submitting Proposal _____

PROPOSAL ACKNOWLEDGMENT

"The undersigned, as Vendor, hereby declares that he/she has informed himself/herself fully in regard to all conditions to the work to be done, and that he/she has examined the RFP and Specifications for the work and comments hereto attached. The Vendor proposes and agrees, if this proposal is accepted, to contract with the Greeneville Fire Department in the form of a Purchase Order, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, labor and service necessary to complete the work covered by the RFP and Contract Documents for this Project. The Vendor agrees to accept in full compensation for each item the prices named in the schedules incorporated herein."

TOTAL SUM PROPOSAL \$

Signature

Date

This document must be completed and returned with your Submittal

NO-PROPOSAL RESPONSE

**GREENEVILLE FIRE DEPARTMENT
Statement of "No Proposal"**

If you do not intend to submit a proposal for this project, please complete and return this form prior to date shown for receipt of proposals to:

Town of Greeneville
Attn: Chief Alan Shipley (MINI PUMPER RFP)
200 N. College St.
Greeneville, TN 37743

 We, the undersigned, have declined to submit a proposal on your "MINI PUMPER RFP" for the following reasons:

 Specifications are too "tight", i.e., geared toward one brand or manufacturer only (please explain below)

 Insufficient time to respond to the Request for Proposals.

 We do not offer this product or equivalent.

 Remove us from your proposers' list for this commodity or service.

 Our product schedule would not permit us to perform to specifications.

 Unable to meet specifications.

 Unable to meet insurance requirements.

 Specifications unclear (please explain below).

 Competition restricted by pre-approved owner standards.

 Other (please specify below).

Remarks: _____

Company Name: _____

Address: _____

Signature and Title: _____

Telephone Number: _____ Date: _____

NOTICE OF REQUEST FOR PROPOSAL

The **Town of Greeneville, TN** hereby gives Public Notice of the request for proposal for the purchase of one (1) **“mini-pumper”** fire apparatus and auxiliary equipment per the specifications described on the attached pages.

INTENT OF SPECIFICATIONS

It is the intent of these specifications to cover the furnishings and delivery to the Greeneville Fire Department a complete and soundly engineered fire apparatus equipped as hereinafter specified. These specifications address only general requirements regarding the type of construction and tests to which the apparatus must conform. Also, only general requirements of certain details concerning finish, equipment, and appliances with which the successful vendor must comply are included in these specifications. Where not otherwise specified, minor details of construction and materials are left to the discretion of the contractor, who shall be solely responsible for the design and construction of all features. The apparatus shall conform to the requirements of the current National Fire Protection Association Standard 1901 for Pumper Fire Apparatus, as if they were written out in full detail, insofar as they apply, unless otherwise indicated in these specifications.

CONDITIONS FOR SOLICITATION OF PROPOSALS

1. Price quotations shall be firm FOB, Greeneville, TN and exclusive of any Federal excise tax and all State of Tennessee tax.
2. Each proposal shall be accompanied by a set of contractor's specifications consisting of a detailed description of the apparatus and equipment proposed, including warranties and guarantees, a ½" – 1' scale drawing of the exact apparatus, and specifications indicating size, type, model, and make of all component parts and equipment.

Manufacturer's specifications shall be submitted in the same order as the published specifications, in order to facilitate effective proposal review by the fire department.

Each proposal shall include a “Statement of Exceptions” as indicated in NFPA 1901 Section 4.21. The statement of exceptions shall specifically describe each aspect of the completed apparatus that will not be fully compliant with the requirements of the standard at the time of delivery.

The drawing and specifications must be approved by the department prior to construction. The written specifications shall take precedence over the drawing where discrepancies may arise. Any proposal received without these specifications and drawing shall be automatically rejected. There shall be No Exceptions to any of these requirements.

3. Proposals will only be considered from companies which have established a favorable reputation in the field of fire apparatus construction. Therefore, each vendor shall furnish the following information:
 - a. A customer listing of like units in service and their location.
 - b. The location of the closest factory representative in proximity to department.
 - c. The manufacturer's closest factory staffed facility to Customer.
 - d. Documentation of the length of time manufacturing aluminum fire apparatus bodies.

Vendor Complies	
YES	NO

4. Each proposal shall furnish satisfactory evidence of the ability to construct the apparatus as specified and show proof that the manufacturer is able to render prompt service and furnish replacement parts for said apparatus.

5. The proposal shall specify the location(s) of warranty work. If the warranty work is to be performed at a location other than the manufacturer, a statement must be made naming the party or parties responsible for delivery and pick-up of the apparatus to the location. Expenses that are covered by the manufacturer should be included along with a listing of acceptable firms for performing warranty work. A statement indicating whether warranty work performed by a vehicle maintenance shop would be compensated by the manufacturer shall also be included.

6. Total delivery time from contract award and receipt of order to the department must not exceed 240 calendar days from the formal acceptance of this request for proposals. Proposals exceeding this schedule may be considered on a case-by-case basis. The successful manufacturer shall acknowledge the receipt of the order and certify the delivery schedule within 14 calendar days of contract signing.

7. The successful manufacturer must submit a full set of accurate drawings and specifications to the department for approval before the apparatus goes on the production line.

8. Failure to comply with any of the above items may be cause for immediate rejection of the proposal.

SERVICE

The vendor must have "Factory Direct Service". The vendor must include all information about the "Factory Direct Service Center", including the distance from the service center to the Greeneville Fire Department. If the vendor does not have a "Factory Direct Service Center", all information about the factory authorized service center shall be included. The information shall include but not be limited to the following:

- Number of miles from the service center to Greeneville, TN.
- Number of EVT (Emergency Vehicle Technician) certified mechanics
- Description of all repair work (major or minor) that can be performed
- Description of all repair work that would have to be sent back to factory for repair.
- Description of all chassis and chassis related work that can be performed at the service facility including warranty work

If any repair or warranty work shall be contracted to a facility not owned by the vendor, the address of the contracted facility must be noted.

Vendor Complies	
YES	NO

INSTRUCTION OF VENDORS

1. Proposals must be typewritten, legible, and in their original form. No copies will be accepted.
2. When requested, samples or descriptive matter shall be filed prior to the opening of the proposals.
3. In submitting the proposal, the vendor agrees that acceptance of the proposal by the department within the stated period of proposal validity, constitutes a contract. No delivery shall become due or be accepted unless notification in writing is first made.
4. The successful vendor shall indemnify and save harmless the department, its officials, agents, and employees, against all claims for royalties and patent infringements thereon which may be involved in the manufacture or use of the apparatus or equipment to be furnished.
5. All goods shall remain the property of the seller until delivered to and accepted by the department.
6. The following chassis, pump, and body specifications have been written to those of the Greeneville Fire Department. Exceptions may be allowed if they meet the full intent and function of the specifications and are equal or superior to those specified and provided they are listed and fully explained on a separate page entitled "Exceptions to Specifications". The proposals exception list shall refer to the specification by page and paragraph to prevent misinterpretation. All exceptions shall be listed. Any exceptions not taken shall be assumed by the department to be included in the vendors proposal and will conform to the published specifications, regardless of the cost to the vendor. Failure to adhere to these instructions, or specifications contained herein, will be just cause for rejection of the proposal quotation. Proposals taking total exception to these specifications will not be accepted.
7. All proposals must be valid for a minimum of thirty (30) days from proposal opening date.
8. The department reserves the right to accept the proposal they shall deem in the best interest, regardless of whether the accepted proposal is low in the amount proposed, and to waive any informalities, omissions, oversights, or irregularities in any proposal and to reject any and all proposals when unsatisfactory.
9. The department does not intend to consider proposals on prototype, experimental, or unproven types of apparatus.
10. These conditions, instructions, and specifications have been developed and written in good faith.
11. A preconstruction conference shall be held at the vendor's determined location within thirty (30) days of contract award. Upon completion of the conference, a set of notes and drawings for the department's approval shall be forwarded prior to the start of any construction. (The Greeneville Fire Department may wave this requirement.)
12. The Vendors should submit a proposal price for the apparatus and the specified loose equipment.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

QUALITY AND WORKMANSHIP

The apparatus and equipment herein specified shall be the vendor's latest model of production embodying, the latest improved automotive engineering practices. All materials, workmanship, and finish must be of superior quality and conform to the nature of service and the character to which the apparatus is intended, in order to insure long life, dependability, and low costs of maintenance and repair.

DESIGN CRITERIA

The apparatus shall be designed, constructed, and equipment mounted with due consideration to the distribution of the load to be sustained and to the general type and character of service to which the apparatus will be subjected. All parts of the apparatus shall be sufficiently strong, with ample safety factors provided to withstand the general service under load, meeting both on and off-road requirements.

The design of the apparatus must allow for ease of operation, symmetrical proportions, and ready access to the various parts requiring lubrication, inspection, adjustment, and repair.

Welding that would prevent the removal of any component part for service or repair shall not be employed in the assembly of the apparatus.

The electrical system shall be designed to meet and exceed the anticipated electrical load requirements of the devices indicated in the specifications. The vendor shall provide an amp load performance chart for the apparatus as specified.

The chassis must be designed for fire apparatus use.

WARRANTY REQUIREMENTS

- A standard one (1) year warranty applies to defects in materials and workmanship under normal use and service.
- A ten (10) year warranty applies to the body structure.
- A seven (7) year prorated warranty applies to the paint.
- A ten (10) year warranty applies to the stainless-steel plumbing.
- A three (3) year warranty applies to the lettering and striping lamination.
- A five (5) year warranty applies to electrical components.
- A lifetime warranty applies to the water tank

A copy of each of the above warranties shall be supplied with the proposal for review.

Vendor Complies	
YES	NO

DELIVERY

A qualified and responsible vendor's representative shall deliver the apparatus and equipment, remaining at the department for enough time to instruct personnel in the operation, care, and maintenance of the apparatus and equipment.

Responsibility for the apparatus and equipment shall remain with the vendor until satisfactory completion of the acceptance tests and formal acceptance by the department occurs.

To ensure proper break-in of all apparatus components while still under warranty, the apparatus shall be delivered under its own power by the vendor. The apparatus and equipment shall be ready for immediate use at the time of delivery.

The apparatus will be inspected upon delivery for compliance with the specifications. Deviations will not be tolerated and will be cause for rejection of apparatus unless listed in the vendor's original proposal.

The apparatus shall be covered by comprehensive and liability insurance during the delivery period. The department will assume the insurance obligation on acceptance and at that time, shall present to the vendor a certificate of verification, showing liability, comprehensive and collision insurance coverage.

INFORMATION REQUIRED FROM VENDOR

The vendor must supply at the time of delivery at least two (2) copies of the complete operation and maintenance manuals covering the completed apparatus and equipment as delivered, two (2) destination effective wiring diagrams, copies of electrical and mechanical component manuals for equipment purchased on or with the apparatus, and a sketch of the booster tank indicating all dimensions and baffle locations.

INSPECTION TRIP

One inspection trip during the construction phase will be provided to the Chief and his designees (up to 4) with all travel and living expenses paid by the vendor. The trip shall allow the department's representatives to inspect the apparatus for quality, compliance with the specifications and to make all necessary additions and deletions. The travel and living expenses shall be included in the price of the apparatus. (The Greeneville Fire Department may wave this requirement.)

Vendor Complies	
YES	NO

DESIGN SPECIFICATIONS

1. Personnel Capacities

To meet the spirit of N.F.P.A. 1500 paragraph 6.3.1, this apparatus has been designed to transport not more than four (4) people.

6.3 Riding in Fire Apparatus

6.3.1 All persons riding in fire apparatus shall be seated and belted securely to the vehicle by seat belts in approved riding positions and at any time the vehicle is in motion. Standing or riding on tail steps, sidesteps, running boards or in any other exposed position shall be specifically prohibited.

2. Component Protection

Hydraulic lines, air system tubing, control cables, and electrical lines shall be clipped to the frame or body structure of the apparatus and shall be furnished with metal protective looms or grommets at each point where they pass through body panel or structural members.

3. Vehicle Stability

a. The height of the fully loaded vehicle's center of gravity shall not exceed the chassis vendor's maximum limit.

b. The front to rear weight distribution of the fully loaded vehicle as defined by NFPA shall be within the limits set by the chassis manufacturer. The front axle loads shall not be less than the minimum axle loads specified by the chassis manufacturer, under full load and all other loading conditions.

c. The difference in weight on the end of each axle, from side to side, when the vehicle is fully loaded and equipped as defined by NFPA shall not exceed 7 percent (7%).

INFORMATION TO BE PROVIDED:

The successful vendor shall supply, at the time of delivery, the following documents:

1. The manufacturer's record of apparatus construction details, including the following information (as applicable):
 - (a) Owner's name and address.
 - (b) Apparatus manufacturer, model, and serial number.
 - (c) Chassis make, model, and serial number.
 - (d) GAWR of front and rear axles.
 - (e) Front tire size and total rated capacity in pounds.
 - (f) Rear tire size and total rated capacity in pounds.
 - (g) Chassis weight distribution in pounds with water and manufacturer mounted equipment.
 - (h) Engine make, model, serial number, number of cylinders, bore, stroke, displacement and compression ratio, rated horsepower and related speed, and no-load governed speed.
 - (i) Type of fuel and fuel tank capacity.
 - (j) Electrical system voltage and alternator output in amps.
 - (k) Battery make and model, capacity in CCA.
 - (l) Transmission make, model, and type.
 - (m) Pump to drive through the transmission (yes or no).
 - (n) Engine to pump gear ratio and transmission gear ratio used.
 - (o) Pump make, model, rated capacity in gpm, serial number, number of stages, and impeller diameter in inches.
 - (p) Pump transmission make, model, and serial number.
 - (q) Priming device type.
 - (r) Type of pump pressure control system.
 - (s) Water tank certified capacity in gallons.
 - (v) Paint numbers.
 - (w) Company name and signature of responsible company representative.
2. The pump manufacturer's certification of suction capability.
3. A copy of the apparatus manufacturer's approval for stationary pumping applications.
4. The engine manufacturer's certified brake horsepower curve for the engine shall be furnished, showing the maximum no-load governed speed.
5. The pump manufacturer's certification of hydrostatic test.
6. The certification of inspection and test for the fire pump.
7. Weight documents from a certified scale showing actual loading on the front axle, rear axle(s), and overall vehicle (with the water tank full but without personnel, equipment, and hose) shall be supplied with the completed vehicle.
8. Written load analysis and results of the electrical system performance tests.
9. The certification of water tank capacity.
10. Two (2) copies of the pump operation and maintenance manual.
11. Two (2) destination effective wiring diagrams.
12. Copies of electrical and mechanical component manuals for equipment purchased on or with the apparatus.
13. A sketch of the booster tank indicating all dimensions and baffle locations.
14. One (1) certification of third-party pump test.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

LENGTH AND/OR HEIGHT LIMITATIONS:

OVERALL HEIGHT:

The overall height shall not exceed 9 ft exceptions will be considered on a case-by-case basis.

OVERALL LENGTH:

The overall length shall not exceed 30 ft.

CHASSIS:

The chassis shall be a heavy duty, 4 door, 4 wheel drive chassis capable of a minimum rating of 19,500lbs GVWR. The color of the chassis shall be red.

FRONT BRUSH GUARD:

A brush guard shall be installed on the front of the apparatus. The guard shall be polished stainless steel and contain a fixed flush mount winch system with a minimum rating of 16,500lbs.

WHEELS:

The front and rear wheels, including inside duals, shall be OEM factory polished wheels. (No simulators, Alcoa type wheels only or similar)

FUEL TANK:

The chassis shall incorporate a rear fuel tank installed by the chassis manufacturer. The fill and vent shall be installed behind the left rear wheel. The fill shall be labeled with the type of fuel intended.

DIESEL EXHAUST FLUID TANK:

The chassis shall incorporate a DEF Fluid tank installed by the chassis manufacturer. The fill shall be installed in the right-side pump panel. The fill shall be labeled with the type of fluid intended.

HELMET STORAGE:

Helmet for each occupant shall be stored in an exterior compartment.

PUMP AND PIPING:**MIDSHIP PUMP:**

The midship pump shall be capable of producing 1500 gallons per minute(gpm) with a rated capacity of 1000gpm @ 150 psi of suction.

SIZE: 6" NST

PUMP ASSEMBLY

The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis and have the capacity of 1000 gallons per minute (U.S. GPM), NFPA- 1901 rated performance.

The entire pump shall be assembled and tested at the pump manufacturer's factory.

The pump shall be driven by a driveline from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance.

The entire pump shall be hydrostatically tested to a pressure of 600 psi. The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Pamphlet No. 1901. Pump shall be free from objectionable pulsation and vibration.

The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 psi. (2069 bar.) All metal moving parts in contact with water shall be of high-quality bronze or stainless steel. Pump utilizing castings made of lower tensile strength cast iron not acceptable.

Pump body shall be vertically split, on a single plane for easy removal of entire impeller assembly including clearance rings

Pump shaft to be rigidly supported by two bearings for minimum deflection. The bearings shall be heavy-duty, deep groove ball bearings in the gearbox, and they shall be splash lubricated.

Pump impeller shall be hard, fine grain bronze of the mixed flow design, accurately machined hand ground and individually balanced. The vanes of the impeller intake eyes shall be hand ground and polished and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

Impeller clearance rings shall be bronze, easily renewable without replacing impeller or pump volute body.

The pump shaft shall be heat-treated, electric furnace, corrosion resistant stainless steel. Pump shaft must be sealed with double-lip oil seal to keep road dirt and water out of gearbox.

Vendor Complies	
YES	NO

GEARBOX

Pump gearbox shall be of sufficient size to withstand up to 16,000 lbs. ft. of torque of the engine. The drive unit shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.

The gearbox drive shafts shall be of heat-treated chrome nickel steel and at least 2¾" in diameter, on both the input and output drive shafts. They shall withstand the full torque of the engine.

All gears, both drive and pump, shall be of highest quality electric furnace chrome nickel steel. Bores shall be ground to size and teeth integrated and hardened, to give an extremely accurate gear for long life, smooth, quiet running, and higher load carrying capability. An accurately cut spur design shall be provided to eliminate all possible end thrust. (No exceptions.)

The pump ratio shall be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected.

PRIMING PUMP:

The priming pump shall be a positive displacement, oil-less rotary vane electric motor driven pump conforming to the requirements of NFPA 1901. The pump body shall be manufactured of heat-treated anodized aluminum for wear and corrosion resistance.

The pump shall be capable of producing a minimum 24 Hg vacuum at 2000 feet above sea level.

The electric motor shall be a 12 VDC totally enclosed unit. The priming pump shall not require lubrication

The priming pump shall be operated by a single push-pull control valve mounted on the pump operator panel. The control valve shall be of all bronze construction.

DRIVELINES:

The chassis drivelines shall be modified to accept the pump drivelines. The pumping system drivelines shall be manufactured by the apparatus manufacturer. The drivelines shall be professionally balanced by the apparatus manufacturer to ensure complete system balance.

6" SUCTION:

One (1) 6" NST suction shall be located on each side of the apparatus body. The suctions shall be open and not gated. An inlet screen and a 6" handle cap shall be included, as well as a 6"NST x 5" Storz with cap.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

PIPING:

The piping will be stainless steel material throughout the waterway system. The suction waterway shall be 6" 304 stainless steel material. The suction waterways shall be designed to flow a minimum of 17% in excess of the rated capacity from draft. The suction piping shall incorporate a 4" suction inlet to allow for full flow from the tank valve assembly. The suction piping shall be adapted from 6" TIPT to NST with a chrome adapter. The suction system shall be designed with 6" victaulic couplings to allow ease of access for maintenance or removal of the pumping system.

The discharge system shall incorporate a 4" x 6" stainless steel distribution system. The manifold shall be fed from the 4" piping system. The discharge system shall incorporate a 4" victaulic system to allow ease of access for maintenance or removal of the pumping system. Each discharge shall be fed from above the manifold system.

PUMP DRAINS:

The entire pump and its controls shall be drainable with a master drain piped to the lowest points of the pump and its control piping. The master drain shall be of a threaded design that will seal all drain points without allowing recycle.

MECHANICAL SEAL:

Optional mechanical seal in place of pump packing. One (1) only required on the suction (inboard) side of the pump. The mechanical seal must be 2" in diameter and shall be spring loaded, maintenance free and self-adjusting. Mechanical seal construction shall be a carbon sealing ring, stainless steel coil spring, rubber cup, and a tungsten carbide seat with backup seal.

AIR PUMP SHIFT:

The shifting mechanism shall be a heat-treated, hard anodized aluminum power cylinder, with stainless steel shaft. The assembly shall be plumbed utilizing a 3/8" air line for maximum performance. An in-cab control for rapid shift shall be provided, that locks in road or pump.

For automatic transmissions, three green warning lights shall be provided to indicate to the operator(s) when the pump has completed the shift from Road to Pump position. Two green lights to be located in the truck driving compartment and one green light on pump operators' panel adjacent to the throttle control.

INTAKE PRESSURE RELIEF VALVE

One (1) pressure relief valve shall be provided. The valve shall have an easy to read adjustment range from 90 to 300 PSI with easy to read 90, 125, 150, 200, 250, 300 psi settings and an "OFF" position. For corrosion resistance the cast aluminum valve shall be hard coat anodized with a powder coat interior and exterior finish. The valve shall be configured for Hale pump, and have a 2-1/2" male NH threaded discharge outlet and a "DO NOT CAP" label near discharge outlet. The valve shall meet NFPA 1901 requirements for pump inlet relief valve. The unit shall be covered by a five-year warranty.

REQUIRED PUMP TESTING:

The pump shall be tested after the pump and all its associated piping and equipment have been installed on the apparatus. The tests shall be conducted at the OEM facility and certified by an EVT Certified pump operator. The certification shall include (at least) the following tests: the pumping test, the pumping engine overload test, the pressure control system test, the priming device tests, and the vacuum test. If the apparatus is equipped with a water tank, the water tank to pump flow test shall be included.

A test plate shall be provided at the pump operator's position that gives the following information: the rated discharges and pressures, the speed of the engine determined by the certification test for each unit, the position of the parallel/series pump as used, and the no-load governed speed of the engine stated by the engine manufacturer on a certified brake horsepower curve. The plate shall be completely stamped with all information at the factory and attached to the vehicle prior to shipping.

PUMP CERTIFICATION:

Upon final apparatus delivery, the original copy of the certificate of inspection by an independent third party shall be furnished. Pump shall have a rated capacity of 1000gpm.

The pumping system shall be capable of delivering:

- 100 % of rated capacity at 150 psi. net pump pressure
- 70 % of rated capacity at 200 psi. net pump pressure
- 50 % of rated capacity at 250 psi. net pump pressure

PUMP MODULE - SIDE CONTROL:

A free-standing pump module shall be located between the chassis cab and the body.

The pump module shall be a self-supported structure mounted to the frame separate from the cab and body. Pump module design beginning with a formed framework assembly that are precision manufactured from corrosion free heavy 7-gauge stainless steel forms. This framework mounts to the truck frame through a mounting design complimented with four (4) elastomer cushions. The result shall be a mounting system that allows for the twisting movement of the truck frame without undue stress loading of the pump module.

The pump operator's panel shall be located on the left side of the apparatus, and the suction/discharge panels shall be located on the left and right sides of the apparatus.

An automotive rubber seal shall be adhered to the pump panel to reduce vibration that may occur during pump operation or road application. The panel shall be attached to the framing with 3/16" pin, 1" knuckle, continuous stainless-steel hinges. The hinges shall be attached with stainless steel fasteners.

Each panel shall be secured with latches at the top and bottom of the door opening.

The top left operator's panel shall be hinged for access to the individual gauges and the electrical components. No exceptions.

Once the module is designed, the valve control placements on a control module shall result in a neat and orderly layout. The horizontal control rods appear neat and orderly. Control handles shall be color coded for each discharge.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

PUMP OPERATOR'S PANEL:

The pump operator's panel shall include the following:

PRESSURE GOVERNOR SYSTEM

The apparatus shall be equipped with a Pressure Governor System (PGS). The Pressure Governor System (PGS) shall be a J1939 CAN based pressure governing system that consists of a display, twist throttle, pressure transducers and associated wiring. The PGS shall be capable of dual station control allowing the system to be operated from separate locations on the apparatus (dual systems do not require additional transducers). The PGS' diagnostic capability shall instantly notify the operators of any out of parameter condition. It shall also suggest operational methods in the event of an out of parameter condition. Diagnostics shall also provide wiring and troubleshooting information.

THE DISPLAY

The display shall be bonded for direct sunlight viewing. The display shall be sealed to IP67 rating and allow for flush, pedestal, or rear mounting options. The display shall be able to be oriented in either the portrait or landscape orientations. The display shall provide the interface to the Engine Control Module (ECM) mounted on the engine. The display shall operate as a pressure sensing governor (PSG) utilizing the engines J1939 CAN data for optimal resolution and response. If J-1939 engine control is not supported by the engine manufacturer, then analog remote throttle control shall be provided by the display. The display shall utilize control algorithms that minimize pressure spikes during low or erratic water supply situations. The display shall be backwards compatible to any engine that supplies J1939 RPM, Temperature, and Oil Pressure information providing the ability to maintain a consistent fleet fire-fighting capability and reduce operator cross training and confusion. The display shall have the ability to use either a 300 PSI or 600 PSI pressure transducers for intake and discharge pressures.

The display shall be capable of storing multiple languages. It shall provide the operator with the ability to adjust the display brightness for day and night mode operations.

The following parameters shall be visible at all times:

- Pump Intake Pressure
- Pump Discharge Pressure
- Engine RPM
- Engine Oil Pressure
- Engine Coolant Temperature
- Transmission Temperature
- System Voltage
- Throttle Ready Interlock Status
- Pump Engaged Interlock Status
- OKAY to Pump Interlock Status
- Operating Mode Status (RPM or Pressure)
- Target Pressure Indication (when in pressure mode)

TWIST THROTTLE CONTROL

The twist throttle control shall be a J1939 CAN based throttle device that communicates directly with the display. It shall feature a knob that can be configured to operate the engine throttle in either the clockwise or counterclockwise directions. It shall feature a large stationary idle button in the center of the knob. It shall also provide the operator with “Throttle Ready” and “Throttle Active” LED indicators. The twist throttle shall be mounted away from the display giving the operator hand control at waist level. This shall also allow the display to be mounted at eye level assuring that the operator has the most comfortable and ergonomic control possible.

MASTER GAUGES:

- One (1) 4½" compound gauge with a range of 30-0-400 PSI.
- One (1) 4½" pressure gauge with a range of 0-400 PSI

TANK LEVEL GAUGE

The apparatus shall be equipped with a Tank Level Gauge for indicating water and/or foam level. The Tank Level Gauge shall indicate the liquid level or volume on an easy to read LED display and show increments of 1/8 of a tank.

Each tank level gauge system shall include:

- 1) A pressure transducer that shall be mounted on the outside of the tank in an easily accessible area. Sealed foam tanks will require zero pressure vacuum vents.
- 2) A super bright LED display shall be viewable from 180 degrees with a visual indication at nine accurate levels.
- 3) A set of weather resistant connectors to connect to the digital display, to the pressure transducer and to the apparatus power. Additional (slave) displays are to be easily integrated and shall receive data from the same source as the Master Display. No additional transducers shall be required.
- 4) The system shall include the ability to display “text messages”
- 5) The system shall include built-in diagnostic capabilities.

LINE READING GAUGES:

One (1) line reading gauge shall be supplied for each discharge. The gauge shall have a 2½” diameter face with a graduated output scale of 0-400 PSI with black print on a bright white background. The gauges shall be constructed with a nylon resin housing, acrylic lens, and polished stainless-steel bezel. The nylon case shall be temperature compensated with an internal breathing diaphragm to permit a fully filled case and to allow for a rigid lens with a distortion free viewing area.

Vendor Complies	
YES	NO

A 1/4" brass male NPT fitting shall be centrally located on the rear of the housing and feature a freeze protection system that isolates the gauge from contaminants. The gauge shall utilize a phosphor bronze tube filled with a freeze proof liquid isolated by a diaphragm. The gauge shall be filled with low temperature glycerin for an operating range of -40 to +150 degrees Fahrenheit, which prevents bouncing of the readout needle and provides for an accuracy rating of plus or minus 1% across the entire scale of the gauge.

COLOR CODED TAGS:

Color coded tags with chrome plated bezels shall be provided. Unless otherwise specified all tags shall be color coded to NFPA recommendations and shall be located at the control location, intake/discharge location, and at the drain port location.

TEST PORTS:

Vacuum and pressure test ports shall be provided on the pump operator's panel for connection of the pump test gauges.

RUNNING BOARDS

The running boards shall be constructed of 12-gauge star punched stainless steel material. The material meets NFPA standard 13-7.3: all exterior surfaces have a minimum slip resistance of .68.

RUB RAILS - RUNNING BOARDS:

Bolt on aluminum rub rails shall be installed one (1) each side on the running boards. Said rub rails shall be fabricated of a polished "C" channel aluminum, mounted to the running board utilizing 1/4" plastic spacers.

PERIMETER GROUND LIGHTS:

There shall be a total of six (6) LED weatherproof lights provided on the apparatus.

Two (2) lights shall be provided under the side body area, two (2) lights shall be provided under the pump panel running boards and two (2) lights shall be provided under the rear step bumper to light all areas around the apparatus.

The perimeter ground lights shall be activated automatically when the parking brake is applied.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

STAINLESS STEEL PUMP MODULE:

The area above the side discharge panels on each side shall be manufactured of 14 gauge brushed stainless steel material.

STAINLESS STEEL PUMP PANELS:

The pump operator's panel and discharge panels shall be manufactured of 12-gauge stainless steel and shall include a full width stainless steel light hood which shall have three (3) E10 Series LED lights.

The side discharge panel on the passenger side of the apparatus shall be manufactured of 12- gauge stainless steel and shall include two (2) E03 Series LED lights on the side panel above the discharge panel.

The lights shall be activated by a switch located on the pump operator's panel.

PUMP MODULE TOP:

TWO (2) 1½" PRECONNECTS:

Two (2) 1½" pre-connects shall be located across the top of the apparatus body. The pre-connects shall incorporate a 1½", 180° swivel adapted to 1½" fire hose thread. The waterways shall be 2" i.d. and include a 2" full flow quarter turn ball valve that is remote controlled from the operator's panel (NFPA 4-7.2).

Each pre-connect shall have the capacity to contain a minimum of 200 ft. of 1¾" hose. The pre-connects shall be designed as to allow the extension of hose to the left or right side of the apparatus body. The pre-connect openings shall incorporate aluminum abrasion plates to protect the body finish from the hose and its couplings when the hose is being extended or relayed.

Each above valve shall be manually controlled.

FOAM SYSTEM:

Class A foam system shall be included and capable of flowing from multiple discharges.

Minimum 20-gallon foam tank.

MASTER INTAKE VALVE:

Master intake valve (MIV) mounted behind the right pump panel and controlled remotely from the left pump panel.

PRECONNECT COVER:

The pre-connect area shall be covered with a fire and chemical resistant material. It is to be retained to the apparatus with a shock cord and nylon clip system.

2 ½" DISCHARGE PIPING:

Two (2) 2 ½" discharge(s) shall be located on the left side of the apparatus. Each discharge valve shall be located behind the body panel and controlled from the side control pump operator's panel. Each discharge shall include a self-locking 2½" quarter-turn ball valve, a 2½" chrome cap with chain, and a sweep elbow of at least 30 degrees downward.

2 ½" DISCHARGE, APPARATUS REAR:

One (1) 2½" discharge shall be located on the rear of the apparatus. Each discharge shall be controlled from the side control pump operator's panel. Each shall include a self-locking 2½" quarter-turn ball valve, a 2½" chrome cap with chain, and a sweep elbow of at least 30 degrees downward.

LOCATION: Rear

3" DISCHARGE(S), APPARATUS RIGHT SIDE:

One (1) 3" discharge(s) shall be located on the right side of the apparatus with each valve behind the body panel. Each discharge shall be controlled from the side control pump operator's panel. A 2½" gauge shall be adjacent to each control. Each valve shall measure 3" and include a slow close adapter.

TANK TO PUMP LINE:

One (1) 3" tank to pump line shall be installed into the tank to the suction side of the pump. It shall have 4" piping and valved with a 3" full flow valve. The valve shall be controlled from the pump operator's panel. The tank line shall incorporate a check valve in the line to meet NFPA 1901.

LINE DRAINS FOR DISCHARGES:

The drain valves shall be ¾" ball brass drain valves with chrome-plated lift lever handles and ergonomic grips. Each lift handle grip shall feature built-in color-coding labels and a verbiage tag identifying each valve. The color labels shall also include valve open and close verbiage.

GATED SUCTION, LEFT SIDE:

One (1) 2½" gated suction shall be located on the left side of the apparatus. It shall be piped 2½" i.d. including a 2½" full flow quarter turn valve and a 2½" NST female swivel with plug and chain. It shall be remote controlled from the suction location.

Each above valve shall be manually controlled.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

DIRECT TANK FILL, RIGHT SIDE:

One (1) 2½" gated direct tank fill shall be located on the left side of the apparatus. It shall be piped 2½" i.d. including a 2½" full flow quarter turn valve and a 2½" NST female swivel with plug and chain. It shall be remote controlled from the suction location.

Valve shall be manually controlled

SUCTION LINE DRAINS:

Each 2½" gated suction and those of larger sizes shall incorporate a ¾" quarter turn drain hoses to ground. The drain shall be located behind the body panel, remote controlled from the suction location.

FIXED MONITOR DECK GUN:

One (1) 3" discharge shall be located on the deck over the pump compartment. The discharge shall be flanged to adapt to a permanent mounted deck pipe. The piping shall be reinforced to allow rated deck pipe flow without piping distortion. The discharge valve shall be a quarter turn 3" full flow valve located in the pump compartment. It shall be controlled from the pump panel. The deluge and its control shall be positioned so the pump operator shall have complete control. The valve shall be a slow close valve per NFPA requirements.

Extendable type discharge appliance shall be included.

TANK FILL RECYCLE:

One (1) 2" waterway shall be incorporated from the pressure side of the pump to the tank. The line shall be controlled from the pump panel and valved with a 2" ball valve to allow for recirculating tank water or tank fill when pumping from draft or pressurized water source. When fully opened, it shall have the capacity to refill the tank at 750 gpm when pumping at 100 psi.

VALVING:

Each apparatus valve must be a Stainless-Steel Ball Valve, per the following specifications.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats. The valve body shall be of universal design and accept multiple actuators. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. All stainless-steel parts must be 316-grade for increased resistance to corrosion. The valve shall not require lubrication of seats or any other internal waterway parts and must be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall be compatible with a slow closing device. This valve shall be actuated using a manual handle. The handle shall be quickly adjustable to one of eight handle positions and require only 90° travel. The valve shall be manufactured and assembled in the United States. Product must carry a 10-year manufacturer's warranty.

Vendor Complies	
YES	NO

PIPING:

All waterways described herein shall be of schedule 40 threaded stainless-steel pipe, schedule 10 welded stainless steel, or "aeroquip" hose. Each shall be installed with the proper couplings to allow apparatus twisting, flexing, and complete removal for service or replacement.

PIPING CERTIFICATION:

Upon final apparatus delivery, *a certification sheet* shall accompany the unit stating that all piping and the pump have been hydrostatically tested to 250 psi.

BODY:

The body system shall be a lightweight, corrosion-resistant body designed for emergency service application. The body shall be manufactured of 304 #4 finish stainless steel or 3/16" extruded aluminum to give the product superior strength and dependability.

An independent custom structural stainless-steel or extruded aluminum sub-frame shall support the body. The sub-frame shall float independent of the chassis frame.

The sub-frame shall be designed for emergency service application by using stainless steel or extruded aluminum structural tubing. It shall provide each compartment with total support to prevent the body from prematurely cracking under the extreme conditions common to the emergency service field.

FRONT BODY PANELS:

The front of the body shall be manufactured with 14 gauge 304 #4 finish stainless steel for ease of maintenance.

REAR BODY PANELS:

The rear of the body shall be manufactured with 14 gauge 304 #4 finish stainless steel for ease of maintenance.

STAINLESS STEEL WHEEL WELLS:

The rear wheel housing shall be constructed of 304 #4 finish stainless steel material, which shall incorporate a polished stainless steel fenderette. The circular inter-liner shall be manufactured of 3/16" polymer material.

The wheel well shall be a bolt in wheel well assembly for ease of maintenance in the apparatus.

The polymer material is a chemical and corrosion resistant material, thereby preventing excess wear and corrosion from occurring due to wintertime road chemicals. The polymer material shall be held in place using polymer retainers or bolts for ease of repair and access to the wheel well area.

COMPARTMENT AREA:

The compartments shall be constructed of 304 #4 finish stainless steel or 3/16" extruded aluminum for longevity and dependability.

The compartments shall be bolted sweep out design for ease of cleaning. After construction, the compartment seams shall be seam sealed with a material to give the compartment a contiguous design throughout the apparatus system

Each compartment top shall offer support for 500 lb. of weight

REAR BUMPER:

A bumper shall be installed at the rear of the apparatus. The bumper shall be designed as to allow access to the rear compartment without interference.

HOSE BED:

The hose bed shall be located over the booster tank and must be accessible from the tail step and from its open top.

The hose-bed shall be designed to efficiently carry the maximum amount of 5" LDH. With the ability of also carrying 300 feet of 2.5" hose incorporating 3 dividers.

REAR TOW EYES:

Two (2) 3/4" thick steel tow eyes shall be securely fastened to the rear frame rails, one (1) each side.

HOSE BED COVER:

One (1) cargo net shall be supplied on the rear of the apparatus secured with buckles.

PAINTED ROLL-UP DOORS:

The side compartments shall have Roll-up Shutter Doors with a **paint**ed finish. The doors shall be made of an anodized aluminum slat incorporating an exclusive seal that prohibits water intrusion, absorbs shock, eliminates clatter, and provides quiet, vibration-free performance. The lift bar shall be a D-shaped bar for strength and ease of use.

The rear compartment shall have Roll-up Shutter Door with a **sat**in finish. The door shall be made of an anodized aluminum slat incorporating an exclusive seal that prohibits water intrusion, absorbs shock, eliminates clatter, and provides quiet, vibration-free performance. The lift bar shall be a D-shaped bar for strength and ease of use.

DOOR GUARD:

There shall be a .125" aluminum treadplate door guard located at the top of the compartment to protect the painted surface of the door from damage while the door is open. The door opening height as stated will be reduced by approximately 2" to accommodate the door guard. A drain shall be ran below the body level.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

LEFT SIDE:

L1

A roll-up door compartment assembly with a minimum door opening of 21" wide x 50" high x 21" deep shall be provided ahead of the rear wheels on the left side.

The compartment shall include the following:

- Unistrut Tracking
- Two (2) full depth adjustable shelf.
- LED tube or strip, waterproof lighting to illuminate the entire area. The lights shall run the entire height of the compartment on each side of the door opening.

L2

A roll-up door compartment assembly with a minimum door opening of 41" wide x 26" high x 21" deep shall be provided over the rear wheels on the left side.

The compartment shall include the following:

- Unistrut Tracking
- Polyboard tool mounting on back wall and swing out tool mounting board.
- LED tube or strip, waterproof lighting to illuminate the entire area. The lights shall run the entire height of the compartment on each side of the door opening.

L3

A roll-up door compartment assembly with a minimum door opening of 38" wide x 50" high x 21" deep shall be provided behind the rear wheels on the left side.

The compartment shall include the following:

- Unistrut Tracking
- One (1) full depth adjustable shelf.
- Provisions for mounting Res-q-jack apex short strut 4-point kit.
- LED tube or strip, waterproof lighting to illuminate the entire area. The lights shall run the entire height of the compartment on each side of the door opening.

Vendor Complies	
YES	NO

RIGHT SIDE:**R1**

A roll-up door compartment assembly with a minimum door opening of 21" wide x 50" high x 21" deep shall be provided ahead of the rear wheels on the right side.

The compartment shall include the following:

- Unistrut Tracking
- Two (2) full depth adjustable shelf.
- LED tube or strip, waterproof lighting to illuminate the entire area. The lights shall run the entire height of the compartment on each side of the door opening.

R2

A roll-up door compartment assembly with a minimum door opening of 41" wide x 26" high x 21" deep shall be provided over the rear wheels on the right side.

The compartment shall include the following:

- Unistrut Tracking
- One (1) full depth adjustable shelf.
- LED tube or strip, waterproof lighting to illuminate the entire area. The lights shall run the entire height of the compartment on each side of the door opening.

R3

A roll-up door compartment assembly with a minimum door opening of 38" wide x 50" high x 21" deep shall be provided behind the rear wheels on the right side.

The compartment shall include the following:

Unistrut Tracking

- Two (2) full depth adjustable shelves.
- One (1) 500lb slide out tray.
- LED tube or strip, waterproof lighting to illuminate the entire area. The lights shall run the entire height of the compartment on each side of the door opening.

120 VOLT OUTLETS

Provisions shall be made for 2 compartments to be wired for 120v outlets to facilitate charging of equipment when attached to shore power.

REAR COMPARTMENT:

A roll-up door compartment assembly with a minimum door opening of 34" wide x 20" high x 41" deep shall be located at the rear of the apparatus.

The compartment shall include LED tube or strip, waterproof lighting to illuminate the entire area. The lights shall run the entire height of the compartment on each side of the door opening.

One (1) 500lb slide tray.

RUB RAILS:

Bolt on aluminum rub rails shall be installed, below the compartment doors. Said rub rails will be fabricated of a polished "C" channel aluminum, mounted to the body surface utilizing ¼" plastic spacers

PROTECTION TILE ON FLOOR:

The floor of each main body compartment shall be covered with black tile. Tiles shall have a ramp style edge on the door side to ease loading and unloading equipment.

BREATHING AIR CYLINDER STORAGE:

A total of 4 spaces shall be provided for SCBA cylinder storage in the area of the wheel wells.

TANK:**BOOSTER TANK:**

The tank shall have a capacity of 300 US gallons complete with a lifetime warranty. The tank manufacturer shall mark the tank and furnish notice that indicates proof of warranty. The purpose of the markings and notice is to inform department personnel who store, stock, or use the tank that the unit is under warranty. Markings may be brief but should include a short statement that a warranty exists, the substance of the warranty, its duration, and who to notify if the tank is found to be defective.

The tank shall be constructed of ½" thick PT2E polypropylene sheet stock. This material shall be non- corrosive stress relieved thermo-plastic and U.V. stabilized for maximum protection.

The booster tank shall be of a specific configuration and so designed to be completely independent of the body and compartments. All joints and seams shall be nitrogen welded and tested for maximum strength and integrity. The top of the booster tank is removable. The transverse swash partitions shall be manufactured of 3/8" PT2E polypropylene (natural in color) and extend from approximately 4" off the floor to just under the cover. The longitudinal swash partitions shall be constructed of 3/8" PT2E polypropylene (natural in color) and extend from the floor of the tank through the cover to allow for positive welding and maximum integrity. All partitions shall be equipped with vent and air holes to permit movement of air and water between compartments. The partitions shall be designed to provide maximum water flow. All swash partitions interlock with one another and are welded to each other as well as to the walls of the tank.

Vendor Complies	
YES	NO

FILL TOWER AND COVER

The tank will have a combination vent and manual fill tower. The fill tower will be constructed of ½" PT2E polypropylene and shall be a minimum dimension of 8" x 8" outer perimeter. The tower will be located in the left front corner of the tank. The tower will have a ¼" thick removable polypropylene screen and a PT2E polypropylene hinged type cover. Inside the fill tower, approximately 4" down from the top, shall be fastened a combination vent overflow pipe. The vent overflow shall be a minimum of schedule 40 polypropylene pipe with a minimum I.D. of 4" that is designed to run through the tank and shall be piped behind the rear wheels.

The tank cover is constructed of ½" thick PT2E polypropylene and UV stabilized, to incorporate a multi three-piece design which allows for individual removal and inspection if necessary. The tank cover will be recessed 3/8" from the top of the tank and shall be welded to both sides and longitudinal partitions for maximum integrity. Each one of the three covers will have hold-downs consisting of 2" polypropylene dowels spaced a maximum of 30" apart. These dowels will extend through the covers and be welded to the transverse partitions. This will assist in keeping the cover rigid under fast filling conditions. A minimum of two (2) lifting dowels shall be drilled and tapped ½" x 13" to accommodate the lifting eyes.

SUMP

There will be one (1) sump standard per tank. The sump shall be constructed of ½" PT2E polypropylene and be located in the left front quarter of the tank. The sump will have a minimum 3" NPT threaded outlet on the bottom for a drain plug. This shall be used as a combination cleanout and drain. All tanks shall have an anti-swirl plate located approximately 2" above the sump.

OUTLETS

There will be two (2) standard tank outlets: one for the tank to pump suction line which will be a minimum of a 3" NPT coupling and one for a tank fill line which will be a minimum of a 2" NPT coupling. All tank fill couplings will be backed with flow deflectors to break up the stream of water entering the tank and be capable of withstanding sustained fill rates of up to 1000 GPM. All auxiliary outlets and inlets must meet all NFPA guidelines in effect at the time of manufacture.

MOUNTING

The poly tank shall rest on the body cross members with an unsupported area not to exceed 530 sq. inches on tanks up to 40" in height. On tanks over 40" in height, an unsupported area of not more than 400 sq. inches must be maintained. All tanks shall be isolated from the cross members through the use of hard rubber strips with, a minimum thickness and width dimension of .250 x 2" and a minimum Rockwell hardness of 60 durometer. Additionally, the tank must be supported around the entire bottom outside perimeter and captured both front and rear as well as side to side to prevent the tank from shifting during vehicle operation. A picture frame type cradle mount shall be utilized with a minimum of 2" x 2" x .250 structural material.

Vendor Complies	
YES	NO

Although the tank is designed on the free-floating suspension principle, it shall be required that the tank have hold down restraints halfway between the front and the rear of the tank. These restraints shall be made of 3" x 3" x 1/4" angle approximately 6" long. The restraints shall be mounted to the side walls of the hose bed and extend down so that they rest approximately 1/2" above the top of the tank. The tank shall be completely removable without disturbing or dismantling the apparatus structure.

Upon final apparatus delivery, proper evidence and certifications shall be presented indicating the tank has the capacity of flow to the pump 80% of its rated capacity at a flow rate of 300 GPM.

12 VOLT ELECTRICAL:

12 VOLT ELECTRICAL SYSTEM:

The electrical system shall be engineered to provide many years of dependable, trouble free service.

The 12-volt apparatus wiring shall be completely independent of the chassis electrical system. The system shall incorporate a state-of-the-art electrical distribution center

FLOOR MOUNTED CONSOLE FOR EMERGENCY SWITCHES:

One (1) 12-volt floor mounted console shall be installed in the apparatus. The console shall be manufactured of 14 gauge 304 #4 finish stainless steel or extruded aluminum material and shall incorporate a #4 finish smooth stainless-steel top. The top of the console shall be hinged for access to the internal electrical components.

The console shall contain a blank radio opening, siren, lighting switches, cup holders and storage compartment.

The console shall take the place of the center front seat section and be as large as possible to fit in the usable space provided.

ROCKER SWITCH PANEL:

There shall be a custom designed rocker switch panel provided and installed on the cab center console.

The panel shall be designed specifically to control operation of this exact truck.

The switch covers shall be color coded and shall illuminate when activated.

A universal switch panel shall not be used.

Vendor Complies	
YES	NO

CAB CHARGING PORTS

There shall be the following charging ports located in the cab of the apparatus:

- 12 VDC Charging Outlet(s) - Chassis Supplied
- Dual USB Charging Ports - Console Mounted

RADIO:

One (1) mobile radio (Motorola APX 8500) shall be installed by the manufacturer along with the proper antenna supplied by the department.

BATTERY CHARGER/AIR COMPRESSOR:

One (1) on board battery charger shall be installed on the vehicle. The unit shall be located at the discretion of the builder.

The 40-amp Converter/Charger shall be capable of charging up to three separate banks of batteries at the same time. It shall incorporate a microprocessor that constantly monitors battery voltage, then automatically selects one of four operating modes to ensure safe, rapid recharging cycles. The storage mode and the equalize mode of operation shall ensure minimum battery gassing and water loss while preventing battery stratification and sulfation. A digital meter displays current, voltage, operation mode, blown fuse indication, and battery type.

One (1) on board air compressor shall be installed on the vehicle. The air compressor shall be a fully automatic system which shall be powered from the chassis battery bank through the charger system.

The compressor shall supply air to facilitate the air pump shift. The compressor shall be plumbed to one (1) manufacturer supplied auxiliary air tank.

AUTO EJECT SHORELINE CONNECTION - 120V:

One (1) auto eject shoreline with a standard yellow weather cover shall be installed on the apparatus. The auto eject shall be a completely sealed automatic power line disconnect. One (1) 120-Volt shoreline shall be supplied between the fire station power and the apparatus.

The shoreline connection shall be placed at a location convenient to the driver of the apparatus.

MASTER SWITCH:

A 12 Volt switch shall be installed. When in the OFF position, the master switch system shall isolate all electrical power from the apparatus. It shall not interrupt any primary battery/starter wiring originally furnished by the chassis manufacturer.

Vendor Complies	
YES	NO

TIRE PRESSURE MONITORING DEVICE:

One (1) set of tire pressure indicators shall be shipped loose with the completed apparatus.

CHASSIS HIGH IDLE:

The chassis shall incorporate a high idle system. The high idle system shall utilize the chassis PCM to increase the engine RPM and shall be controlled by a single switch in the chassis cab. The high idle system shall be interlocked to the park brake, service brake, or park (automatic transmissions).

OPTICAL WARNING SYSTEM:

The optical warning system on the fire apparatus shall be capable of two separate signaling modes during emergency operations. One mode shall signal to drivers and pedestrians that the apparatus is responding to an emergency and is calling for the right-of-way. The other mode shall signal that the apparatus is stopped and is blocking the right-of-way. Switching between the two visual warning system modes shall require no action by the operator other than setting the chassis parking brake.

The optical warning system shall have the ability to place the emergency lights in a low-power mode.

EMERGENCY WARNING LIGHTS:

For the purpose of defining and measuring the required optical performance, the apparatus shall be divided into four warning zones. The four zones shall be determined by drawing lines through the geometric center of the apparatus at 45 degree to a line lengthwise of the apparatus through the geometric center. The four zones shall be designated A, B, C, and D in a clockwise direction with zone A to the front of the apparatus. Each zone shall have an upper and lower warning level.

Effective coverage of all four zones, both upper and lower, as required by the latest NFPA Edition shall be provided.

Vendor Complies	
YES	NO

WARNING LIGHT LENS COVERS - COLOR

The warning lights on the apparatus shall all have colored lenses except for the cab lightbar which shall remain clear with internally colored lights.

LED LIGHTBAR:

One (1) 55" LED lightbar shall be mounted on the front of the pump module sitting across the roof of the chassis. The lightbar shall be switched from the in-cab switch panel. This lightbar fills the requirements of Zone A Upper, Zone B Upper, and Zone D Upper.

WARNING LIGHTS (FRONT):

Two (2) Red Linear LED lights shall be mounted on the front cab face, one (1) on each side. These lights shall be switched from the in-cab switch panel. These lights fill the requirements of Zone A Lower.

WARNING LIGHTS (SIDE):

One (1) Red LED light shall be mounted on the right (officer's) side of the vehicle. The light shall be placed inside chrome flange. The light shall be switched from the in-cab switch panel. The light fills the requirements of Zone B Lower.

One (1) Red LED light shall be mounted on the left (driver's) side of the vehicle. The light shall be placed inside chrome flange. The light shall be switched from the in-cab switch panel. The light fills the requirements of Zone D Lower.

The rub rails on each side of the body shall incorporate integral outward facing Red LED strip lights. In addition to the Red LED strip light, the rub rail on each side ahead of the rear wheels shall incorporate one (1) Red LED light. These lights shall be switched from the in-cab switch panel.

WARNING LIGHTS (SIDE):

One (1) Red Linear LED Light shall be mounted on the right (officer's) side of the vehicle in the upper area. The light shall be switched from the in-cab switch panel.

One (1) Red Linear LED Light shall be mounted on the left (driver's) side of the vehicle in the upper area. The light shall be switched from the in-cab switch panel.

These lights fill the requirements of Zones B & D Upper.

Vendor Complies	
YES	NO

WARNING LIGHTS (REAR UPPER):

Two (2) Red Linear LED lights shall be mounted on the upper rear area of the vehicle. These lights shall be placed inside chrome flanges. These lights shall be switched from the in-cab switch panel. The lights fill the requirements of Zone C Upper.

WARNING LIGHTS (REAR):

Two (2) Red Linear LED lights shall be mounted on the lower rear area of the vehicle. These lights shall be switched from the in-cab switch panel. These lights fill the requirements of Zone C Lower.

REAR DRIVING SIGNALS:

The rear driving signals shall consist of two (2) 4"x6" LED lights, one (1) each side of the apparatus at the rear. The LED lights shall incorporate red brake/tail, amber turn, and white backup in a single light head. The mounting shall include a chrome bezels.

ELECTRONIC SIREN:

One (1) electronic siren shall be installed in the apparatus. The siren shall be mounted in the cab and shall include a noise-canceling microphone.

SIREN SPEAKER:

One (1) 100-watt siren speaker shall be installed in a location specified by the vendor to project in a forward direction.

MECHANICAL SIREN:

Mechanical coaster siren shall be mounted in a location specified by the vendor to project in a forward direction. Actuated by momentary switch in the center console.

AIR HORN:

Dual air powered horns shall be mounted in a location specified by the vendor to project in a forward direction.

BACKUP ALARM:

One (1) 12-volt electronic backup alarm shall be incorporated on the apparatus. The backup alarm shall be a minimum of 97db and switched with the backup light circuitry.

ICC LIGHTING:

LED Clearance lights shall be installed on the apparatus. They shall be hermetically sealed cartridge lights for ease of service and durability.

Vendor Complies	
YES	NO

LED REAR LICENSE PLATE BRACKET:

There shall be a LED license plate bracket provided at the rear of the apparatus.

HAZARD LIGHT:

A red, LED flashing light located in the driving compartment shall be illuminated automatically whenever the apparatus parking brake is not fully engaged and any passenger or equipment compartment door is open, any ladder or equipment rack is not in the stowed position, a stabilizer system is deployed, a powered light tower is extended, or any other device is opened, extended, or deployed that creates a hazard or is likely to cause damage to the apparatus if the apparatus is moved. The light shall be marked "Do Not Move Apparatus When Light Is On".

LED COURTESY LIGHTS (UNDER CARRIAGE LIGHTING):

A 5" 12-volt T41 Series LED light shall be located under each cab door. All ground area lighting shall be controlled by the master switch and shall be switched with the parking brake.

FOLDING STEP(S):

Large folding step(s) shall be furnished on the apparatus. The steps shall be mounted on the front of the body to access the dunnage and top areas of the body.

HOSE BED ACCESS STEPS - INTEGRATED LED

There shall be six (6) folding steps provided at the rear of the apparatus body to access the top portion of the apparatus hose bed.

The steps will have adequate hand holds to ensure the safety of all persons while ascending and descending the apparatus.

Each step shall have an integrated LED light and be NFPA compliant with respect to stepping surfaces and shall have a minimum static load rating of 500-lb.

SCENE LIGHTING:

Four (4) LED scene lights shall be mounted, two on each side of the body front and rear with a minimum output of 5000 lumens.

Two (2) LED telescoping pole mount scene lights shall be mounted, with a minimum output of 14,000 lumens. Location of mounting shall be determined at pre-build conference.

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

SUCTION HOSE STORAGE:

The suction hose shall be stored in a compartment located on the apparatus lined with a material to prevent binding. The compartment shall be accessible from the rear of the apparatus through a drop-down door. The door shall incorporate a stainless-steel continuous hinge at the bottom of the door opening and one (1) D-Ring single point latch.

LADDER STORAGE:

The ladders shall be stored in a compartment lined with a material to prevent binding. The compartment shall be accessible from the rear of the apparatus through a drop-down door. The door shall incorporate a stainless-steel continuous hinge at the bottom of the door opening and one (1) D-Ring single point latch.

The ladders shall be stored flat.

COMPARTMENT INTERIOR FINISH:

The interior of the compartments shall be natural finish stainless steel or 3/16" extruded aluminum.

APPARATUS COLOR:

The color of the apparatus shall be as follows: Red with top of box silver to match department specs.

COLOR: Red with silver box top

Current department scheme attached at bottom of document.

CAB LETTERING: To match fire depts specs on existing lettering.

Current department scheme attached at bottom of document.

REFLECTIVE STRIPING:

The finished apparatus shall be striped with 4" black reflective striping with top and bottom silver leaf edges to match existing apparatus.

Current department scheme attached at bottom of document.

'Z' STRIPE:

There shall be a 'Z' design within the reflective stripe on each side of the apparatus.
Current department scheme attached at bottom of document.

REFLECTIVE STRIPING IN THE CAB:

Two-inch red and yellow striped retro-reflective material shall be placed on the inside of each opening cab door. The material will be at least 96 square inches, meeting current NFPA standards.

DIAMOND GRADE CHEVRON STRIPING:

The rear of the apparatus shall be striped with diamond grade retro-reflective striping. The striping shall be applied in a chevron pattern sloping downward and away from the centerline of the apparatus at a 45° angle. The striping shall be single color alternating between red and fluorescent yellow-green.

The chevron striping shall be applied in the following locations: vertical surfaces of the body at the rear, outboard of the rear compartment door.

Current department scheme attached at bottom of document.

EQUIPMENT:

- One (1) 14' 2 Section ground ladder(s)
- One (1) 9' Roof ladder with hooks
- One (1) 9' Folding attic ladder
- Two (2) 10' Length(s) of 6" diameter hard suction hose. (Not rated for hydrants)
- One (1) 6" Low level strainer with jet siphon
- One (1) 6" barrel strainer
- Four (4) 6" NST male to 5" Storz adapters
- One (1) 2.5-gallon pressurized water can
- One (1) 20lb dry chemical extinguisher

NFPA EQUIPMENT CLARIFICATION:

Any equipment specified in the "Minor Equipment" section (e.g. hose, nozzles, adapters, AED, traffic cones, traffic safety vests, etc.) of NFPA 1901 for each apparatus classification (see below) which is not specified in this proposal shall be considered to be customer supplied and installed.

Apparatus Type	NFPA Section
Pumper	5.8
Initial Attack	6.7
Mobile Water Supply	7.7
Special Service	10.5
Mobile Foam	11.9

Vendor Complies	
YES	NO

Vendor Complies	
YES	NO

EXCEPTIONS

In the column on the original specification mark “yes” or “no” to each bolded category, to signify compliance. If any category is marked “no” an exception page shall be supplied, by the vendor, with the following information:

- 1.The reference category from the original specification from the Greenville Fire Department.
- 2.The reference category from the vendor proposal of the non-compliance.
- 3.Category in non-compliance.
- 4.Please provide a detailed description of your alternative options for each exception.

Current Graphics Design and Layout of the Greenville Fire Department



<p>AGI associated graphics</p>	<p>888-411-4AGI 614-873-1273 614.873.6728 fax www.agionline.com</p>	<p>Client: Greenville, TN Date: 5-31-18 Scale: 1/8" Prepared By: BJM Notes: x</p>	<p>HS #: 6265 Revision #: 2 FL: S> Greenville, TN/HS-6265</p>	<p>Approved <input type="checkbox"/> INS Days: 3.5</p>	<p>THE ATTACHED DRAWING IS PROVIDED FOR YOUR APPROVAL. AGI CANNOT PROCEED WITH YOUR PROJECT UNTIL THE PROOF IS SIGNED & RETURNED. Please note that this proof has no reflection on the quality of the finished product. A quality control sample can be sent upon request. Please confirm proper vehicle make and model, along with any marked measurements, to ensure 100% accuracy. Placement of the graphics shown may alter slightly during installation. AGI assumes no liability for placement alterations due to improper measurements/schematics and/or a three-dimensional surface installation.</p>
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Greenville, TN HS#6265

LH - Letter Height
OH - Overall Height

x3 (Front of Cab and Rear Body Doors)

LH 6"

x1 (Above Windshield)

LH 2.6"
OH 3"

x2 (Crew Door)

16" x 16"

Please note: Maltese will need to be produced as 2 pieces overlapped at this size. Dotted line to approximate overlap.

x1 (Rear Door)

22" x 22"

x2 (Front Door)

LH 5.1"
OH 5.8"

x2 (Top of Body)

OH 6.7"
OH 9.6"

x4 (Interior Door Stripes - White Ref.)

6" (Rear Chevrons)

Scotch-lite
Lemon Yellow (160-41) / Red (1172)
Orafol Reflexite V98
Fluorescent Yellow (L1) / Red (031)

Protec StR Kit

Description of Lettering

Lettering on Top of Body and Above Windshield will be Ruby Red Reflective with printed black outline and shadow. "E-1" located within the stripe will be Die Cut Ruby Red Reflective. Lettering on front door will be SignSilver with printed black outline. Maltese will be SignSilver with printed text and graphics.

Description of Striping

Truck will have .75" SignSilver stripes overlaid onto a 8" Black Ref. stripe. SignSilver will be placed .25" from top and bottom of Black Ref. stripe.

Paintbreak is .5" SignSilver w/ printed Black edges.

<p>AGI associated graphics</p>	<p>888-411-4AGI 614-873-1273 614.873.6728 fax www.agionline.com</p>	<p>Client: Greenville, TN Date: 5-31-18 Scale: 1/8" Prepared By: BJM Notes: x</p>	<p>HS #: 6265 Revision #: 2 FL: S> Greenville, TN/HS-6265</p>	<p>Approved <input type="checkbox"/> INS Days: 3.5</p>	<p>THE ATTACHED DRAWING IS PROVIDED FOR YOUR APPROVAL. AGI CANNOT PROCEED WITH YOUR PROJECT UNTIL THE PROOF IS SIGNED & RETURNED. Please note that this proof has no reflection on the quality of the finished product. A quality control sample can be sent upon request. Please confirm proper vehicle make and model, along with any marked measurements, to ensure 100% accuracy. Placement of the graphics shown may alter slightly during installation. AGI assumes no liability for placement alterations due to improper measurements/schematics and/or a three-dimensional surface installation.</p>
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CERTIFICATION OF BIDDER REGARDING THE IRAN DIVESTMENT ACT

In compliance with the Iran Divestment Act (State of Tennessee 2016, Public Chapter No. 817), which became effective on July 1, 2016, certification is required of all bidders on contracts over \$1,000.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party hereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

I affirm, under the penalties of perjury, this statement to be true and correct.

Date	Signature of Bidder
	Company

A bid shall not be considered for award nor shall award be made where the foregoing certification has not been complied with; provided, however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. The **Town of Greeneville, Tennessee** may award a bid to a bidder who cannot make the certification, on case-by-case basis, if:

1. The investment activities in Iran were made before July 1, 2016, the investment activities in Iran have not been expanded or reviewed on or after July 1, 2016, and the person has adopted, publicized, and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
2. The **Town of Greeneville, Tennessee** makes a determination that the goods or services are necessary for the **Town of Greeneville, Tennessee** to perform its functions and that, absent such an exemption, the political subdivision will be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.



July 15, 2016

NOTICE

Tenn. Code Ann. § 12-12-106 requires the chief procurement officer to publish, using credible information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105.

For these purposes, the State intends to use the attached list of “Entities Ineligible to Contract with the State of South Carolina or any Political Subdivision of the State per the Iran Divestment Act of 2014, S.C. Code Ann. §§ 11-57-10, et. seq.”

While inclusion on this list would make a person ineligible to contract with the state of Tennessee, if a person ceases its engagement in investment activities in Iran, it may be removed from the list.

If you feel as though you have been erroneously included on this list please contact the Central Procurement Office at CPO.Website@tn.gov.

List Date: July 7, 2017

1. Abadan Petrochemical Co.
2. Aban Offshore Ltd.
3. Anton Oilfield Services Group
4. Arak Petrochemical
5. Arvandan Oil & Gas
6. Behran Oil Co.
7. Bharat Petroleum Corporation Ltd.
8. China International United Petroleum & Chemical So., Ltd. (Unipecc)
9. China National Offshore Oil Corp
10. China National Petroleum Corp (CNPC)
11. China National United Oil Corp.
12. China Petroleum & Chemical Corp.
13. Cosmo Energy Holdings Co. Limited
14. Daelim Industrial
15. Daewoo Engineering & Construction
16. Enel Spa
17. Eni Spa
18. Esfahan Oil Refining Co.
19. Essar Oil Ltd.
20. Fanavaran Petrochemical Co.
21. Farabi Petrochemical Co.
22. Formosa Petrochemical Corp.
23. Gazprom OAO
24. Gubre Fabrikalari T.A.S.
25. Hellenic Petroleum S.A.
26. Hindustan Petroleum Corp Ltd.
27. Hyundai Heavy Industries.
28. Idemitsu Kosan Co. Ltd.
29. Indian Oil Corporation Ltd.
30. Inpex Corporation
31. Japan Drilling Co., Ltd.
32. Japan Petroleum Exploration Co., Ltd.
33. JXTG Holdings, Inc.
34. Khark Petrochemical.
35. Koc Holding A.S.
36. Korea Gas Corp.
37. Linde AG.
38. Maire Tecnimont S.p.A.
39. Mangalore Refinery & Petrochemicals Ltd.
40. Marubeni Corporation
41. Mitsubishi Materials Corp.
42. Mitsui & Co. Ltd.
43. Naftiran Intratrade Company
44. National Iranian Oil Co.
45. National Iranian South Oil Co.
46. National Iranian Tanker Co.
47. National Shipping Co. of Saudi Arabia
48. North Drilling

49. Oil & Natural Gas Corporation Ltd.
50. Oil India Ltd.
51. Oil Industry Investment Co.
52. ONGC Videsh Ltd. (OVL)
53. Pardis Petrochemical Co.
54. Pars Oil Co.
55. Parsian Oil and Gas Development Co.
56. Petrochemical Industries Investment Co.
57. Petrochemical Transport Co.
58. PetroChina Co. Ltd.
59. PJSC Lukoil
60. Polskie Gornictwo Naftowe i Gazownictwo SA
61. Royal Dutch Shell Plc.
62. Sadid Pipe & Equipments Co.
63. Saras Raffinerie Sarde SPA
64. Sepehr Energy
65. Shiraz Petrochemical Co.
66. Showa Shell Sekiyu K K
67. Sinopec Group.
68. Sk Holdings Co. Ltd.
69. SK Innovation
70. Tabriz Oil Refining Company
71. Total S.A.
72. Toyo Engineering Corporation
73. Turkiye Petrol Rafinerileri AS
74. Zhuh
75. Ai Zhenrong Company

**CERTIFICATION OF BIDDER REGARDING
DEBARMENT, SUSPENSION, INELIGIBILITY AND
VOLUNTARY EXCLUSION**

This certification is required pursuant to 2 CFR Section 2424, and it shall be completed, signed, and submitted as part of the bid proposal.

1. By signing and submitting this proposal, the prospective lower-tier participant certifies that neither it, its principals nor affiliates, is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Further, the Participant provides the certification set out below:
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that an erroneous certification was rendered, in addition to other remedies available to the Federal Government, the Department or agency with which this transaction originated may pursue available remedies.
3. Further, the Participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the Participant learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. By submitting this proposal, it is agreed that should the proposed covered transaction be entered into, the Participant will not knowingly enter into any lower-tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the agency with which this transaction originated.
5. It is further agreed that by submitting this proposal, the Participant will include this Certification, without modification, in all lower-tier covered transactions and in all solicitations for lower-tier covered transactions.

Contractor Name: _____ Title: _____
 Signature: _____ Date: _____
 Address: _____
 City: _____ State _____ Zip _____

NON-CERTIFICATION

As the prospective lower-tier participant, I am unable to certify to statements in this Certification as explained in the attachment to this proposal.

Contractor Name: _____ Title: _____
 Signature: _____ Date: _____
 Address: _____
 City: _____ State _____ Zip _____

The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.