Invitation for Bids
IFB-5046-22-KH

TYPE 6 BRUSH TRUCK

RESPONSES DUE:
April 13, 2022 prior to 2:00 P.M. Local Time

Accepting Electronic Responses Only
Responses Only Submitted Through the Rocky Mountain E-Purchasing System (BidNet)
www.bidnetdirect.com/colorado
(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor MUST contact RMEPS to resolve issue prior to the response deadline. 800-835-4603).

PURCHASING REPRESENTATIVE:
Kassy Hackett
Phone (970) 244-1546
kassyh@gjcity.org

NOTE: All City solicitation openings will continue to be held virtually.

This document has been developed specifically to solicit competitive responses for this solicitation and may not be the same as previous City of Grand Junction solicitations. All vendors are urged to thoroughly review this solicitation prior to responding. Submittal by **FAX, EMAIL OR HARD COPY IS NOT ACCEPTABLE** for this solicitation.

Table of Contents

SECTION I. INTRODUCTION

A. Purpose: The Owner is interested in purchasing **one (1) new commercial wild and extreme type 6 brush truck.** In comparing responses, consideration will not be confined to price only. The successful vendor will be one whose product is judged to best serve the interests of the City.

The City would like to remind all Contractors, Sub-Contractors, Vendors, Suppliers, Manufacturers, Service Providers, etc. that (with the exception of Pre-Bid or Site Visit Meetings) all questions, inquiries, comments, or communication pertaining to any formal solicitation (whether process, specifications, scope, etc.) must be directed (in writing) to the Purchasing Agent assigned to the project or Purchasing Division. Direct communication with the City assigned Project Managers/Engineers is not appropriate for public procurement prior to award and may result in disqualification.

B. The Owner: The Owner is the City of Grand Junction, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or his authorized representative. Procurement processes shall be governed by the most current version of the City of Grand Junction Purchasing Policy and Procedure Manual.

C. Procurement Process: Procurement processes shall be governed by the most current version of the City of Grand Junction Purchasing Policy and Procedure Manual.

D. Timeline:

- Invitation for Bids Available on or about — March 22, 2022
- Last Day for Questions, prior to 5:00 PM — April 5, 2022
- Addenda Issued (If required) — April 6, 2022
- Responses Due prior to 2:00 P.M. — April 13, 2022

SECTION II. INSTRUCTIONS TO BIDDER

A. Equipment Details and Literature Required: Each bid shall be submitted in electronic format only, and only through the BidNet Colorado website (www.bidnetdirect.com/colorado). **The uploaded response shall be a single PDF document with all required information included.** This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please plan accordingly.) Please view our "**Electronic Vendor Registration Guide"** at http://www.gjcity.org/501/Purchasing-Bids for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline. **800-835-4603**). All bids must be accompanied by specification sheets and/or descriptive brochures showing the detailed specifications of the equipment you propose to furnish for the bid price. All equipment will be furnished with all standard equipment as described by the literature presented with the bid proposal. References to items shown on the literature, which the bidder does not intend to supply, must be so noted in writing as an amendment to the literature. It is the bidder's responsibility to provide specific equipment details to permit proper evaluation of the bid; failure to do so may result in disqualification of the bid.

The body, finish, fittings and all components shall be the latest and most current model and shall not have been used as a demonstrator or any other service and shall be factory standard in all respects not in conflict with the attached Owner bid specifications. If the Owner is interested in a demonstrator, such information will be supplied in the bid specifications.

The design of the vehicle/equipment must be such that it does not hamper or restrict subsequent installation and use of emergency equipment, such as emergency lights and backup alarms.

When specifications for particular items are not defined, manufacturer's standards are satisfactory, provided the item is required for the proper performance of the equipment.

B. Emissions Standards: As applicable by law: Vehicles/Equipment must be supplied with manufacturer's standard equipment and all devices necessary to be in compliance with the most current State of Colorado code, and the Federal Motor Vehicle Safety Standards. Vehicle must comply with all Federal and Colorado motor vehicle pollution control requirements and be capable of passing State emissions tests. Delivery must include any EPA documentation. Vehicles and/or Equipment not meeting the aforementioned standards will not be accepted.

C. Error and Omissions: If the bidder discovers any errors, omissions, lack of clarity or desires further information about the specifications, the Purchasing Representative should be contacted immediately.

D. Guarantee: All equipment, units and components shall be guaranteed in accordance with the following clauses:

a. Guarantee that the equipment offered is free from defects in design and construction and that it will give continuous and efficient service under normal conditions for the duration of the warranty period.

b. Guarantee that the equipment or vehicle is the manufacturer's standard design in construction and that no changes or substitutes have been made, unless otherwise stated.

E. Warranty: All equipment bids must include the manufacturer's standard warranty, and this information shall be provided with the bid. Additional or extended warranties may be requested; if so, specific warranty information must be provided with the bid. The warranty period shall commence after the equipment/vehicle is received and accepted by the Owner, unless special provisions are made with the successful provider.

F. Operating/Maintenance Instruction: Where specifically requested in the specifications, the bidder/supplier will instruct a given number of Owner employees in the operation and maintenance of equipment. The instructions shall be of the scope and length to orient personnel in: operating techniques, safety precautions, frequent inspection and servicing requirements, mechanical adjustments and repairs unique to the equipment or vehicle. Instructions will be required at the Owner site specified and provided on a schedule arranged after delivery of the equipment. If available, manufacturer shall provide an operational safety video for specialty equipment (chippers, stump cutters, leaf machines, etc.) Instruction schedules will be agreed to prior to invoice payment.

G. Delivery Date: All bids must be submitted with a delivery date.

H. Pre-delivery: Prior to delivery, new equipment/vehicle must be completely serviced in accordance with standard new vehicle "Make Ready" and to the manufacturer's specifications.

I. Delivery: All costs for delivery of the new unit will be assumed by the Bidder and included in the net price. Unless stated elsewhere in this bid document, all deliveries will be made to the City of Grand Junction, Fleet Services, 333 West Avenue, Building C, Grand Junction, CO 81501.

J. Prices: Prices quoted shall exclude Federal Excise and State taxes. Prices quoted shall be F.O.B. City of Grand Junction, CO 81501.

K. Final Payment: Final payment for equipment and vehicles delivered under these specifications will not be made until all terms and conditions have been satisfied.

L. Bid Evaluation Criteria: The evaluation of this bid will be based on, but not limited to, the following: Compliance with specifications; proven performance; ease of operation, life-cycle cost, net cost, supplier performance history; delivery time; compatibility with existing equipment, parts or supplies; service/parts availability; and, advantageous superior design features.

M. Repair and Parts Manuals: An *Operator's and Service manual* will be supplied with each new unit, except when units are duplicate orders and then only one of each is required. Manuals must be received prior to payment. Whenever available, the Owner prefers the manual in a CD format.

N. Additional Information: For information concerning the bid process, please contact the Purchasing Department at (970) 244-1533 or check the City of Grand Junction web page at www.gjcity.org. Copies of this bid document can be obtained online electronically on Bidnet at www.bidnetdirect.com/colorado, from the Purchasing Division, **250 North 5th Street, Grand Junction, CO 81501** or on the City of Grand Junction website, http://www.gjcity.org/501/Purchasing-Bids.

O. Manufacturer's Statement of Origin: The new Unit shall be delivered with the Manufacturer's Statement of Origin (MSO). Failure to provide MSO shall be grounds to refuse to accept vehicle.

P. Title: The awarded supplier shall provide Title work for the new vehicle within 10 days after the receipt of payment from the City. **Mail or deliver the Title to**: Fleet Services, 333 West Avenue, Building C, Grand Junction, CO 81501. If a problem arises in obtaining the Title within the 10 day window contact Tim Barker in Fleet Services at (970)-244-1532, or via E-mail timba@gjcity.org. Name on title shall read "**City of Grand Junction**".

SECTION III. GENERAL TERMS AND CONDITIONS

A. Submission of Bids: Each bid shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (www.bidnetdirect.com/colorado). The uploaded response shall be a single PDF document with all required information included. This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.) Please view our "Electronic Vendor Registration Guide" at http://www.gjcity.org/501/Purchasing-Bids for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline**. 800-835-4603**).

No bids will be considered in which the specifications, provisions or conditions of the price proposal have been modified. Bids shall be received and acknowledged only so as to avoid disclosure of process. However, all bids shall be open for public inspection after the contract is awarded. Trade secrets and confidential information contained in the bid so identified by Bidder as such will be treated as confidential by the Owner to the extent allowable in the Open Records Act.

Solicitation Opening, Type 6 Brush Truck IFB-5046-22-KH
Wed, Apr 13, 2022 2:00 PM - 2:30 PM (MDT)

Please join my meeting from your computer, tablet or smartphone.

https://meet.goto.com/793763253

You can also dial in using your phone.
(For supported devices, tap a one-touch number below to join instantly.)

United States: +1 (408) 650-3123

- One-touch: tel:+14086503123,,793763253#

Access Code: 793-763-253

Join from a video-conferencing room or system.
Dial in or type: 67.217.95.2 or inroomlink.goto.com
Meeting ID: 793 763 253
Or dial directly: 793763253@67.217.95.2 or 67.217.95.2##793763253

Get the app now and be ready when your first meeting starts: https://meet.goto.com/install

B. Assignment/Contract not used as Collateral: Neither party shall assign or otherwise transfer any of the rights or delegate any of the duties set forth in this contract without prior written consent of the other party. The bidder shall not use this contract, or any portion thereof, for collateral for any financial obligation.

C. Audits/Access to Records: The Owner and any of its representatives shall have access to any books, documents, papers and records of the bidder which are pertinent to this solicitation and prospective contract.

D. Availability of Funds: Any Owner Contract resulting from a submission of a bid shall be deemed executor only to the extent of appropriations available to each Owner Department for purchases of such articles and services. The Owner's extended obligation on those contracts, which envision extended funding through successive fiscal periods shall be contingent upon actual appropriations for the following fiscal year.

E. Award and Purchase: The Owner reserves the right to reject any or all bids, to waive any informalities or technical defects in bids, and unless otherwise specified by the Owner or by the bidder, to accept any items or group of items in the bid, as may be in the best interest of the Owner. No verbal explanations, clarifications, additions or instructions will be binding to either the Owner or the bidders, except those confirmed in writing.

A signed purchase order/contract furnished to the successful bidder results in a binding contract without further action by either party.

F. Questions: Any questions concerning this project shall be directed to: Kassy Hackett at the City of Grand Junction, 250 North 5th Street, Grand Junction, Colorado 81501, (970)-244-1546, E-mail kassyh@gjcity.org between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday, excluding Holidays. ALL QUESTIONS MUST BE SUBMITTED IN WRITING.

G. Legal Compliance: The bidder shall keep informed of all Federal, State and local laws; ordinances, regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority which may affect those engaged or employed on the work or affect the conduct of the work. The bidder shall observe and comply with all such laws, ordinances, regulations, orders and decrees. The bidder shall protect and indemnify the Owner and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree whether by the supplier, subcontractor, supplier or the supplier's employees or any others engaged by the supplier. The laws of the State of Colorado will govern as to the interpretation, validity and effect for any contract that is entered into as a result of this solicitation. Venue for any lawsuit will be in Mesa County, Colorado.

H. Force Majeure: Neither party shall be liable for failure to perform under this contract if such failure to perform arises out of causes beyond the control and without the fault or negligence of the non-performing party. Such causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes and unusually severe weather. This provision shall become effective only if the party failing to perform immediately notifies

the other party of the extent and nature of the problem, limits delay in performance to that required by the event, and takes all reasonable steps to minimize delays. The provision shall not be effective unless the failure to perform is beyond the control and without the fault or negligence of the non-performing party.

I. Indemnification: The bidder shall release, indemnify and hold harmless the Owner, their officers, agents, employees, successors and assignees from any cause of action, or claims or demands arising out of the Bidder's performance under this contract.

J. Gratuities: The bidder certifies and agrees that no gratuities, kickbacks or contingency fees were paid in connection with this contract, nor were any fees, commissions, gifts or other considerations made contingent upon the award of this contract. If the bidder breaches or violates this warranty, the Owner may, at its discretion, terminate this contract without liability to the Owner.

K. Material Availability: Bidders must accept responsibility for verification of material availability, production schedules and other pertinent data prior to submission of bid and delivery time. It is the responsibility of the bidder to notify the Owner immediately if materials specified are discontinued, replaced or not available for an extended period of time.

L. OSHA Standards: All bidders agree and warrant that services performed in response to this invitation shall conform to the standards declared by the U.S. Department of Labor under the OCCUPATIONAL Safety and Health Act of 1970 (OSHA). In the event the services do not conform to OSHA Standards, the Owner may require the services to be redone at no additional expense to the Owner.

M. Non-collusion: Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person or fix the price or prices in the attached bid or of any other bidder, or to fix any overhead, profit or cost element of the bid price or the bid price of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement and advantage against the Owner, or any person interested in the proposed contract.

The price or prices quoted in this bid are fair and proper and are not tainted by a collusion, conspiracy, connivance, or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest.

N. Public Disclosure Record: If the bidder has knowledge of their employee(s) or sub-contractors having an immediate family relationship with an Owner employee or elected official, the bidder must provide the Purchasing Representative with the name(s) of these individuals. These individuals are required to file an acceptable "Public Disclosure Record", a statement of financial interest, before conducting business with the Owner.

O. Preparation of Bids: Bidders are expected to examine any drawings, specifications, schedules and instructions included in the bid package. Failure to do so will be at the bidder's risk.

In case of error in the extension of prices in the bid proposal, the unit price will govern. Unit price shown must be net.

P. Tax Exemption: Direct purchases of materials by the Owner are exempt from Colorado State sales or use tax. The bidder certifies that no Federal, State, County or Municipal tax will be added to the price shown on the Proposal Price sheet. An Owner Tax Exemption Certificate will be supplied to the successful bidder upon request.

Q. Bids Binding – 60 Days: Unless otherwise specified all formal bids submitted shall be binding for sixty calendar days following the bid opening date unless bidders, at the request of the Owner, agree to an extension.

R. Multiple Bids: Bidders must determine for themselves which product to offer. If said bidder chooses to submit more than one bid, THE ALTERNATE BID must be clearly marked **"Alternate Bid."** The Owner reserves the right to make award in the best interest of the Owner.

S. Brand Names or Equal: Whenever in this bid invitation any particular materials, process, mechanism, and/or equipment are indicated, described or specified by patent, proprietary, or brand name, or by name of manufacturer, such wording will be deemed to be used for the purpose of facilitating minimum acceptable requirements and will be deemed to be followed by the words, "or equal." At the Owner's discretion, after the bid opening proof satisfactory must be provided by Bidder to show that the alternative product/equipment/vehicle is in fact, equal to specification requirements.

The Owner reserves the right to determine products of equal value. Suppliers will not be allowed to make unauthorized substitutions after award is made.

T. Termination of Contract: If at any time during the performance of the contract awarded as a result of this bid, in the opinion of the Owner, the work is not progressing satisfactorily or within the terms of this contract, then at the discretion of the Owner and after written notice to the supplier, the Owner may terminate the contract or any part of it.

U. Modification or Withdrawal of Bids: A bid that is in the possession of the Purchasing Division may be altered by facsimile, telegram or letter bearing the signature of name of the legal agent for the bidder, provided it is received prior to the time and date of the opening. Alterations should not reveal the price but should indicate the addition, subtraction or other changes in the bid. A bid that is in the possession of the Purchasing Manager may be withdrawn by the bidder up to the time of the bid opening. Bids may not be withdrawn after the bid opening. Failure of the successful bidder to furnish the service awarded from this bid may eliminate the bidder from the active bidder's list.

V. Addenda and Interpretations: If it becomes necessary to revise any part of an Owner bid, a written addendum shall be posted to the BidNetDirect.com/Colorado website. The bidder shall be responsible for obtaining all solicitation documents. The Owner is not bound by any oral representations, clarifications, or changes made in the written specifications by Owner employees, unless such clarification or change is provided in written addendum from the Owner. Receipt of addenda shall be acknowledged by initialing the proposal price sheet in the designated place.

W. Cooperative Purchasing: Purchases as a result of this solicitation are primarily for the Owner. Other governmental entities may be extended the opportunity to utilize the resultant contract award with the agreement of the successful provider and the participating agencies. All participating entities will be required to abide by the specifications, terms, conditions and pricings established in this solicitation.

The quantities furnished in this bid document are for only the Owner. It does not include quantities for any other jurisdiction.

The Owner will be responsible only for the orders placed for our jurisdiction. Other participating entities will place their orders on their respective Purchase Orders through their Purchasing office or use their purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual entity. The Owner accepts no liability for payment of orders placed by other participating jurisdictions that choose to piggy-back on our solicitation.

Orders placed by participating jurisdictions under the terms of this solicitation will indicate their specific delivery and invoicing instructions.

X. Award: All bids will be awarded to the lowest responsive and responsible bidder. The Owner reserves the right to determine the lowest responsive and responsible bidder.

The Owner may involve all or some of the following factors: price; conformity to specifications; financial capacity to perform the services and/or provide commodities; previous performance and reputation; location of required and necessary facilities and/or equipment; availability and proximity of repair parts and/or warranty work; similar experience; delivery promise; terms of payments; compatibility as required in the bid documents; other associated and necessary costs; other objective and accountable factors which are reasonable.

Y. Inspections: Inspection and acceptance of materials or supplies will be made after delivery. Final inspection shall be conclusive except as regard to latent defects, fraud, or such gross mistakes as amount to fraud. Final inspection and acceptance or rejection of material or supplies shall be accomplished as promptly as practical, but failure to inspect and accept or reject material or supplies shall not impose liability on the Owner for such supplies as are not in accordance with the specifications. All delivered materials shall be accepted subject to inspection and physical count.

SECTION IV. SPECIFICATION/COMPLIANCE FORM

MINIMUM SPECIFICATION FOR: One (1) new commercial wild and extreme type 6 brush truck. Bids must be offered as a complete, turn-key unit. All specifications must be met or exceeded or may be considered non-responsive. Incomplete responses will not be considered. Bidder shall note any exceptions to the bid on the Comment section. Bidder shall list in a separate attachment detail concerning the exception. This sheet shall be labeled “Exception(s) to Bid Conditions and Specifications”.

All equipment furnished under this contract shall be new, unused, and the latest model offered by the manufacturer’s current production (unless otherwise stated). Accessories not specifically mentioned herein, but necessary to furnish a complete unit ready for use shall also be included. **Vendor shall list any variances on Bid Form below.**

DETERMINATION OF APPARATUS WEIGHT

Manufacture shall submit estimated "in-service" weight analysis required by applicable NFPA standards. This Excel computer weight analysis shall break down all major components of the apparatus and shall show the impact on percentage-of-load on the front and rear axles, total weight, and weight on each tire set.

The analysis shall evenly distribute the NFPA required minimum payload allowance or estimated equipment payload as provided by the purchaser into the specified compartments. The allowance for personnel, hose loads, water and foam fluids, and required NFPA equipment shall be outlined individually in the analysis and placed on the apparatus in its specific intended position.

CENTER-OF-GRAVITY ANALYSIS

Manufacture shall perform an estimated center of gravity calculation as required by the applicable section of NFPA standards. This calculation shall include tilt angles, the estimated right to left load distribution, and load on each axle, including all specified major components.

LOW VOLTAGE TEST REQUIRMENTS

The fire apparatus low voltage electrical system shall be tested as required by this section and the test results shall be certified by the apparatus manufacturer. The certification shall be delivered to the purchaser with the documentation for the completed apparatus. The tests shall be performed when the air temperature is between 0 degrees Fahrenheit and 110 degrees Fahrenheit.

TEST SEQUENCE

The three tests defined below shall be performed in the order in which they appear. Before each test, the chassis batteries shall be fully charged until the voltage stabilizes at the voltage regulator set point and the lowest charge current is maintained for 10 minutes. The failure of any of these tests shall require a repeat of the test sequence.

RESERVE CAPACITY TEST

The chassis engine shall be started and kept running until the chassis engine and engine compartment temperatures are stabilized at normal operating temperatures and the chassis battery system is fully charged. The chassis engine shall be shut off and the minimum continuous electrical load shall be applied for 10 minutes. All electrical loads shall be turned off prior to attempting to restart the chassis engine. The chassis battery system shall then be capable of restarting the chassis engine. The failure to restart the chassis engine shall be considered a failure of this test.

ALTERNATOR PERFORMANCE TEST AT IDLE

The minimum continuous electrical load shall be applied with the chassis engine running at idle speed. The chassis engine temperature shall be stabilized at normal operating temperature. The chassis battery system shall be tested to detect the presence of a chassis battery current discharge. The detection of chassis battery current discharge shall be considered a failure of this test.

ALTERNATOR PERFORMANCE TEST AT FULL LOAD

The total continuous electrical load shall be applied with the chassis engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two hours. The activation of the electrical system load management system shall be permitted during this test. The activation of an alarm due to excessive chassis battery discharge, as detected by the system required by NFPA (current edition), or an electrical system voltage of less than 11.8 volts direct current for a 12-volt direct current nominal system, for more than 120 seconds, shall be considered a failure of this test.

LOW VOLTAGE ALARM TEST

Following the completion of the tests described above, the chassis engine shall be turned off. With the chassis engine turned off, the total continuous electrical load shall be applied and shall continue to be applied until the excessive battery discharge alarm activates. The chassis battery voltage shall be measured at the battery terminals.

The test shall be considered a failure if the low voltage alarm has not yet sounded 140 seconds after the voltage drops to 11.70 volts direct current for a 12-volt direct current nominal system. The chassis battery system shall then be able to restart the chassis engine. The failure of the chassis battery system to restart the chassis engine shall be considered a failure of this test.

The completed fire apparatus shall undergo a complete 12-volt electrical load and performance testing per applicable sections of NFPA standards with inspection and test sheets included in delivery documentation.

DOCUMENTATION

The apparatus manufacturer shall provide the results of the low-voltage electrical system performance test, certified in writing, with the documentation provided to the purchaser at the time of delivery of the completed apparatus.

The test results shall consist of the following documents:

(1) Documentation of the electrical system performance tests.
(2) A written electrical load analysis, including the following:
- (a) The nameplate rating of the alternator.
- (b) The alternator rating under the conditions specified in NFPA 1906 (current edition).
- (c) Each of the component loads specified that make up the minimum continuous electrical load.
- (d) Additional electrical loads that, when added to the minimum continuous electrical load, determine the total continuous electrical load.
- (e) Each individual intermittent electrical load.
-

TEST RESULTS

Manufacture shall provide results of the apparatus testing and shall certify the following:

The weight of the completed apparatus, when loaded to its estimated in-service weight, does not exceed the GVWR and GAWR of the chassis.

The complete unit, when loaded to its estimated in-service weight, meets the weight distribution and vehicle stability requirements, as defined in the current NFPA guidelines.

The unit meets all required federal standards pertaining to the manufacturer and completion of the apparatus and a label tag has been affixed to the apparatus by the manufacturer stating same.

Manufacture shall provide all testing results, including engine, speed, acceleration, road ability, braking, and auxiliary braking to the Purchaser at the time of delivery.

DELIVERY REQUIREMENTS

The bidder shall not be responsible for delays in delivery due to strikes, acts of God, failure of suppliers to deliver, chassis shortage and other reasons beyond the reasonable control of the builder. Should manufacture be unable to comply with the proposed delivery date, they shall immediately contact the purchaser regarding delay information and actions to be taken by the company.

This vehicle shall be F.O.B. the manufacturing facility. Dealer shall be responsible for arrangement of delivery from factory.

GENERAL WARRANTY PROVISIONS

All materials and workmanship herein specified, including all equipment furnished, shall be guaranteed for a period of one (1) year after the acceptance date of the apparatus, unless otherwise noted, except for any normal maintenance services or adjustments which shall be required. Under this warranty, manufacture shall be responsible for the costs of repairs to the apparatus that have been caused by defective workmanship or materials during this period.

This warranty shall not apply to the following:

- Any component parts or trade accessories such as chassis, engines, tires, pumps, valves, signaling devices, batteries, electric lights, bulbs, alternators, and all other installed equipment and accessories, in as much as they are usually warranted separately by their respective manufacturers, or are subject to normal wear and tear.

- Failures resulting from the apparatus being operated in a manner or for a purpose not recommended by the apparatus manufacturer.

- Loss of time or use of the apparatus, inconvenience, or other incidental expenses.

- Any apparatus which has been repaired or altered outside of the apparatus manufacturer's factory in any way that affects its stability, or which has been subject to misuse, negligence, or accident.

- Delivery of the apparatus to repair site.

MATERIAL AND WORKMANSHIP

All equipment provided shall be guaranteed to be new and of current manufacture, and unless specified otherwise, shall meet all requirements of these specifications and prevailing NFPA documents and be in condition at time of delivery for use as specified for this type of apparatus.

All workmanship shall be of the highest quality and accomplished in a professional manner so as to insure a functional apparatus with a high-quality aesthetic appearance.

The construction shall be rugged and ample safety factors shall be provided to carry the loads specified to meet both on and off-road requirements.

The apparatus shall be designed, and the equipment mounted with due consideration to the distribution of load between the front and rear axles, so all specified equipment, with a full complement of personnel, can be carried without damage to the apparatus.

BODY AND STRUCTURAL WARRANTY

Manufacture shall warrant each new apparatus body, if used in a normal and reasonable manner, against structural defects caused by defects in material, design or workmanship for a period of no less than eight (8) years, covering parts & labor to the original purchaser which shall start on day of acceptance.

This warranty shall not apply to:

- Normal maintenance services or adjustments

- Commercial chassis and associated equipment furnished with chassis, signaling devices, generators, batteries, or other trade accessories as they are usually warranted separately by their respective manufacturers.

FIRE PUMP WARRANTY

A three (3) year warranty on the fire pump shall be provided. The provisions of this warranty shall be described in the completed apparatus documentation.

The polypropylene water tank that is specified to be supplied with this apparatus shall be warranted by the water tank manufacturer for a "lifetime" period from the date that the apparatus is put into service. The tank

manufacturer shall repair, at no cost to the purchaser, any problems caused by defective materials and/or workmanship. The warranty shall cover the reasonable costs of removing the water tank from the apparatus and reinstalling it after the completion of the covered warranty repairs.

PAINT WARRANTY

a seven (7) year paint warranty which shall cover peeling and/or
de-lamination of the top coat and other layers of paint, cracking or checking, loss of gloss caused by cracking, checking or chalking, and any paint failure caused by defective paint materials covered by the paint manufacturer’s material warranty.

CHASSIS WARRANTY

The specified chassis shall be provided with the chassis manufacturer's warranty. The exact provisions of this warranty shall be supplied with the completed apparatus documentation.

CHASSIS OPERATION MANUALS

one (1) printed commercial chassis manufacturer's operational manual(s).

APPARATUS OPERATION MANUAL(S)

(2) electronic apparatus operational manual(s) on a USB thumb drive.

STANDARD CHASSIS SPECIFICATIONS (See Modification section below)

EXTERIOR

- Monotone Exterior Colors: Flame Red Clear-Coat Exterior Paint
- Wheels: 19.5-Inch x 6.0-Inch Steel Wheels
- Tires: 225/70R19.5G Front All-Position, Rear Traction Tire
- Additional Exterior Features: Monotone Paint

INTERIOR

- Interior Colors: Black / Diesel Gray Interior Colors
- Six-Passenger Seating: Heavy-Duty Vinyl 40 / 20 / 40 Split Bench Seat
- Entertainment: Uconnect® 3.0 or equivalent
- Safety & Security Systems: Trailer Brake Controller
- Safety & Security Systems: Tire Pressure Information System
- Safety & Security Systems: ParkView® Rear Back-Up Camera
- Restraint Systems: Red Seat Belts
- Locks & Keys: Remote Keyless-Entry
- VSIM- Vehicle Systems Interface Module

PACKAGES

- Heavy-Duty Front Suspension Group
- Cold Weather Group
- Electrical Accessory Group
- Max Tow Package

POWERTRAIN

- Engine: Turbo Diesel Engine
- Transmissions: 6-Speed Automatic HD Transmission
- GVWR Packages: GVW Rating - 19500 Pounds
- Gear Ratios: 4.89 Rear Axle Ratio
- Alternators: 220-Amp Alternator
- Dual-Alternators Rated at 440 Amps
- Exhaust Systems: Manual DPF Regeneration
- Additional Mechanical Features: Engine Block Heater
- Additional Mechanical Features: Transfer Case Skid-Plate Shield
- Additional Mechanical Features: Voltage-Monitoring Auto-Idle-Up System

CAB SEATING AND WEIGHT ALLOWANCE

A warning label shall be installed in the cab to indicate seating positions for five (5) people. A weight allowance of 250 pounds shall be calculated for each person.

LABELS, STANDARD PACKAGE SET

A standard set of labels shall be provided and installed on the inside of chassis cab area. The labels shall contain the required information based on the applicable components for the apparatus.

DATA PLAQUE

A data plaque shall be provided and installed on the inside of the driver's door. The data plaque shall contain the required information based on the applicable components for the apparatus:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Drive axle lubricant
- Power steering fluid
- Pump, generator, or other component lubrications
- Other NFPA applicable fluid levels or data as required
- Paint manufacturer, type, and color number
- Tire Speed Ratings

Location shall be in the driver's compartment or on the driver's door.

MODIFICATIONS

CUSTOM FABRICATED REAR BUMPER

The rear bumper shall be made of steel. The bumper shall contain tow eye provisions, a rear access step, license plate, DOT lighting and be powder coated black with the top stepping surface to be coated in durabak.

EXHAUST MODIFICATION

The exhaust system shall be modified so that the tail pipe exits down towards the ground just aft of the rear axle.

CAB STEPS RUNNING BOARDS

A set of boards shall be installed under the front and rear driver side and passenger side cab doors.

CAB DOOR REFLECTIVE PANELS

The cab doors shall include white reflective trim installed inside each door. This trim shall be approximately 5” in height and as long as the door is wide.

AIR FILTER EMBER PROTECTION SCREEN AND WARNING LABEL

An ember protection screen for the chassis engine shall be supplied and installed in the air intake piping. The stock filter shall be removed and replaced with a K&N high performance filter.

AIR FILTER EMBER PROTECTION SCREEN WARNING LABEL

A warning label, stating: “THIS VEHICLE HAS AN AIR INTAKE EMBER SCREEN WHICH REQUIRES
PERIODIC INSPECTION & CLEANING” shall be provided and installed in the apparatus cab interior.

EMBER SEPARATOR -- FRESH AIR INTAKE TO CAB

The cabin air filter shall be protected by an ember guard with a maximum mesh opening of 0.039 inches.

FRESH AIR EMBER SEPARATOR WARNING LABEL

A warning label, stating: “THIS APPARATUS IS EQUIPPED WITH A CAB FRESH AIR INTAKE EMPBER
PROTECTION SCREEN. ROUTINE INSPECTION IS REQUIRED.” shall be provided and installed in the apparatus cab interior.

OEM TINTED CAB WINDOWS

The cab windows shall remain as tinted by the OEM chassis manufacturer for UV resistance only, no aftermarket tinting shall be done.

FUEL TANK PICKUP TUBE

The O.E.M fuel tank shall have an additional pickup installed to supply fuel to the axilliary pump engine. It shall be routed from the chassis fuel tank to the pump engine. Any chassis fuel system modifications shall be fully compliant CARB regulations, CVC and FMVSS.

All fuel lines shall be loomed, “grommeted”, and firmly clamped in position to prevent chafing or damage and all synflex fuel hoses shall be wrapped with fire wrap lagging capable of withstanding temperatures in excess of 250°C.

The fuel tanks and lines shall be protected as necessary from exhaust heat through the use of heat shields or baffles. Only metal fasteners, coated or insulated for maximum fuel line protection shall be used.

TIRE PRESSURE INDICATOR SYSTEM

There shall be a tire pressure indicator at each tire's valve stem on the vehicle that shall indicate if there is insufficient pressure in the specific tire.

SUPER SINGLE CONVERSION

The Buckstop OR EQUIVALENT Single Wheel Conversion is an engineered kit with each component integrated to achieve as close to OEM structure as possible while converting from dual rear wheels to four single tires. The purpose of the Conversion is for greater off-road traction and performance without compromising weight carrying capacity. At the core of the kit are 41" tires with 6700 pound capacity each. Clearance for the big tires can achieved with a small suspension lift and large cut-out fender flares to keep the center of gravity as low as possible. The wheels are to be reversible and interchangeable front to rear for proper tire rotation. Track width is roughly 92" at the outside and consistent front to rear. Fender Flares are must part of the kit providing complete tire coverage from road spray and also replacing and covering parts of the body that are cut away for tire clearance

SUSPENSION

Key components of the Buckstop OR EQUIVALENT Suspension Kit are replacement Radius Arms, Coils Springs, and Heavy-duty Track Bar Mount. These pieces maintain proper, original steering geometry. Performance is enhanced with A Heavy Duty track bar mount fabricated from 3/8” steel.

FENDER FLARES AND BODY MODIFICATION

In order to neatly fit the 41” tires under the body, the internal frame, fender, and body require cutting and trimming. uniquely designed 8” wide fender flares are designed to cover the cut-out portions of the body and also completely cover the tire from road spray. The flare shall be one-piece design including a return inner wheel liner that integrates with the OE liner. Fender Flares are shipped in un-

finished fiberglass. Final coating/paint is required. Behind the headlight, a major piece of the inner frame structure must be removed for tire clearance.

WHEELS AND TIRES
Tires: With a 19,500lb GVW, rear axle capacities approach 14,000lbs requiring a tire capacity up to 7,000lbs each. 335/80R20 “military” style radial tire with excellent handling characteristics under load. It has an off-road tread pattern and can be aired down to match different loads. Tire noise is acceptable at a level equivalent to a standard truck mud tire.

Wheels: The military tire has a higher shoulder than light-truck street tire. A typical street, light-truck wheel will not fit the tire properly and carry the weight. Buckstop manufactures wheels that are designed for the load and the military tire. They track in-line front to rear compensating for the difference in front and rear axle widths of dually trucks. The wheel is single piece construction without extra bolt flanges, spacers, and bolts. Weight capacity is acheived through a heavy-duty rim made from ¼” thick material. Tires can easily be rotated front to rear for even wear without dismounting the tire from the rim.

BUMPER
an extra-wide bumper compensating the increase in front track width. The bumper shall extend past the fender flares to fend off fence posts, trees, and other obstacles. Bumper shall include features found on standard off road bumpers including winch mount, tow hooks or mount points, trailer receiver, latching winch access door, built-in light mounts, and several options for built-in sirens, speakers, and monitor.

UNDERSIDE PROTECTION
Undercarriage protection shall include Radiator, Transfer Case, and Transmission Skid Pans designed to keep branches and debris from damaging the underside of the vehicle.

AUXILIARY OFF ROAD LIGHT

There shall be two off road LED driving lights installed in the front bumper located in the supplied cutouts.

PORTABLE PUMP

A Darley or equivalent 1-1/2AGE 24K portable pump shall be provided on the apparatus. The unit shall have a liquid cooled, 24 HP, diesel engine equipped with an electric start.

Pump Performance
20 gpm @ 310 psi
140 gpm @ 145 psi
180 gpm @ 80 psi

Diesel Engine
Kubota, D902 Diesel, water-cooled, 24 hp. Or equivalent

Fuel Supply
The engine shall be piped to the chassis fuel system with provisions to prevent fuel drain back to the tank when the engine is shutdown.

Fuel Prime
A fuel re-prime pump shall be provided to assist in fuel delivery to the diesel engine from the chassis tank.

Lubrication
Pressure feed with spin-on filter.

Starter
12-volt electric wired into the chassis battery system

Exhaust
A spark arrestor shall be provided on the engine exhaust system.

Air Intake
An air cleaner shall be provided with easy access to remove the element. An ember screen shall be provided on the inlet to the air cleaner.

DIGITAL PANEL

The auxiliary pump shall be controlled by a single digital panel set up. The panel shall be located on the pump panel.

PUMP PERFORMANCE TEST AND CERTIFICATION

Upon completion, the apparatus shall undergo a complete pumping test that conforms to the requirements of NFPA Standard 1906 (latest edition) for the size and type of pump provided. The test shall consist of a continuous one-half hour test pumping at rated capacity and rated net pump pressure, a vacuum test of the primer system and plumbing, a tank discharge flow test, and a pressure test of the apparatus piping.

The chassis engine and transmission, the pump and other components of the apparatus shall show no undue heating, leaks, or other defect. The results of the test shall be documented to establish the performance of the apparatus and to further ensure that the unit shall perform satisfactorily when placed into service. The test results shall be certified in writing, with the certification provided to the purchaser for their records at the time of delivery of the completed apparatus.

AUXILIARY PUMP PLUMBING

The auxiliary fire pump plumbing system shall utilize stainless steel piping incorporating hosing to allow for flex. The piping shall utilize TIG welding to provide a complete seal. Hard angles shall be avoided, when possible, to improve water flow characteristics. The piping shall utilize Victaulic couplers whenever possible to allow flex as the body module flexes.

Threaded sections of piping shall be avoided to reduce the leak potential of the system. Victaulic couplers shall be used in place of threading to reduce leak potential. Schedule 10 stainless steel piping shall be used for transport type piping. Schedule 40 stainless steel shall be used for areas requiring threading to provide a stable threading base. Brackets shall be installed to support threading locations thereby reducing the potential for leaks.

All hoses shall be connected directly to the tank due to the different flex ratios of the tank to body. Any front discharges, any rear discharges, and all cross lays shall use hose to reach the actual discharge. The use of hose shall be utilized due to the difference in flex or movement between the discharge location and the pump connection. Drain lines shall be provided at the lowest points in the plumbing system to allow for complete drainage. Bleeders shall be provided for all gauges to relieve pressure after use. Push/ pull handles shall be provided for all bleeders and the primer control.

All piping shall be hydrostatically tested to assure structural integrity in accordance with NFPA standards, with the test results submitted to purchaser upon delivery.

AUXILIARY PUMP EXHAUST SYSTEM

The auxiliary fire pump and engine assembly shall have a muffler and exhaust pipe. The exhaust pipe shall be directed out of the compartment and away from the pump operator. An additional guard shall be installed where the pipe is exposed to touch by an operator.

PRIMER ASSEMBLY

There shall be an electric primer assembly shall be installed for the auxiliary fire pump. The electric primer assembly shall be capable of taking suction and discharging water with a lift of 10 feet in not more than 30 seconds with the pump dry, through 20 feet of suction hose of appropriate size. A high capacity, electrically driven rotary vane priming pump shall be provided.

AUXILIARY FUEL SYSTEM

The fuel system for the auxiliary fire pump shall be plumbed to the chassis fuel system. There shall be a separate fuel pickup tube mounted in the chassis fuel tank specifically for a separate engine driven pump assembly. There shall be an electric fuel pump with regulator and fuel hose furnished between the chassis fuel tank and the auxiliary pump.

AUXILIARY FIRE PUMP ELECTRIC START WIRING TO CHASSIS

Properly sized 12 volt positive and negative cables shall be provided from the chassis battery to the auxiliary fire pump.

AUXILIARY PUMP WARNING AND INSTRUCTION LABELS

The auxiliary fire pump installation shall have operating instruction and warnings as required by applicable sections of NFPA standards on the pump panel or in the cab.

AUXILIARY PUMP OIL DRAIN EXTENSION

There shall be an oil drain extension installed on the auxiliary pump. This will allow for the engine oil to be drained without removing the auxiliary engine.

2-1/2” GATED INTAKE -- REAR LEFT

One (1) 2-1/2" gated suction intake shall be installed on rear left area of apparatus to supply the fire pump from an external water supply. The valve shall be a quarter-turn ball valve and shall have 2-1/2" NH female thread with removable screen. The plumbing to the intake shall be with full flow flexible hose or piping with Victaulic couplings. The color-coded label shall be installed near the control handle.
One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair, or replacement.
The specified valve shall have a direct actuated ‘local’ control Akron Model TSC valve handle.

One (1) chrome brass 2-1/2" NH rocker lug plug with a securing chain or cable shall be installed on the intake.

WATER TANK SUPPLY LINE TO FIRE PUMP

A 2.5" water tank to pump line shall be installed with a 2.5" full flow quarter turn ball valve and 2.5" piping. The line shall be equipped with a hump hose with stainless steel hose clamps.

PUMP TO TANK

One (1) 1.5" pump to tank line shall be installed with a 1.5" full flow quarter turn controlled ball valve and 1.5" piping.
One (1) Akron 8815 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair, or replacement.
The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

2" DISCHARGE -- REAR

One (1) 2" discharge shall be installed on the rear panel, controlled by a quarter turn ball valve on pump panel. The discharge shall have 2" NPT x 1-1/2" NH male hose threads and nameplate label adjacent the valve control handle.
One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair, or replacement.
The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome plated brass 1.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

The Class A foam system shall be piped to the specified 1-1/2" discharge.

HOSE REEL

One (1) Hannay aluminum hose reel shall be installed. The reel shall have leak proof ball bearing swing joint, adjustable friction brake, electric 12-volt rewind and manual crank rewind provisions. The reel shall be plumbed with wire reinforced; high-pressure hose coupled with brass fittings. The reel shall be designed to hold 125% of the specified hose capacity.

The reel shall be provided with a 12-volt electric motor of appropriate size for rewinding. The hose reel shall have provisions for being rewound manually. The pinion shaft for the manual rewind gear shall be equipped with an adjustable tension brake, controlled at the hose reel.

HOSE REEL MOUNTING

The hose reel shall be mounted over the pump enclosure.

HOSE REEL DISCHARGE

One (1) 1" discharge shall be piped from the fire pump to the hose reel with flexible high-pressure hose.

One (1) Akron 8810 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.
The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

PUMP PANEL MATERIAL

There shall be a rear mounted pump panel constructed of stainless steel, the pump controls and inlets/outlets shall be on the left side of the pump panel, while the right side features a vertically hinged acess door to the front of the Aux pump motor. The door shall have venting for the radiator and fasten with two thumb latches.

MASTER PRESSURE GAUGE

There shall be one (1) 2.5” diameter -30-0-600 PSI master pressure gauge internally lit, mounted on the stainless steel, hinged panel.

TEST TAPS

Test taps for pump intake and pump pressure with name plate labels shall be provided on the pump instrument panel.

WATER TANK GAUGE

One (1) Fire Research TankVision model WLA300-A00-S20 or equal tank gauge shall be installed on the pump panel. The water tank indicator kit shall include an electronic indicator module, a pressure sensor, and a 10' sensor cable. The indicator shall show the volume of water in the tank on nine (9) easy to see super bright LEDs.

NOMENCLATURE PLATES

The apparatus shall be equipped with color coded labels. The labels shall be furnished for discharges, intakes, and for other controls and indicators. All labels shall be in English format.

PUMP PANEL LIGHT SHIELD

There shall be (1) stainless steel light shield assembly provided and installed above the pump panel area. There shall be LED lights installed within the shield.

There shall be a switch at the pump operators panel to activate the lights.

DESIGN AND SCOPE OF MINI PUMPER BODY

The body shall be designed and constructed of commonly available structural components for ease of repair and maintenance. The body shall be of a modular design with the body structure independent of the chassis frame rails. The body module shall be mounted to the chassis frame rails utilizing a unique double spring mounting system for flexibility and durability over the lifetime of the apparatus. The fabrication of the body shall be of welded construction to withstand the rigors of fire service use.

The body shall be designed to incorporate and support the tank, compartments, and all other equipment intended to be stored in or mounted to the body module. The body skeleton and compartment framework shall be designed of tubular members for increased strength and stress resistance. There shall be no sheet metal or extrusions utilized in the foundation or structural components of the body module due to their critical role in assuring lifetime durability, functionality, and usability.

BODY FRAMEWORK

The entire body framework shall be fabricated of 6061-T6 aluminum architectural style tubing. The body framework shall be a completely welded unit, forming a connected, stable frame for strength, longevity and providing the skeleton of the body module. The internal upright members of the framework shall act as support for the top layer of the body module. The external upright members shall act as an exoskeleton providing form and support for compartments while acting as the external surfaces of the module. The framework shall define the compartment openings and provide a rigid mounting location for all compartments and doors.

The foundation cross-members shall be placed perpendicular to the chassis frame rails in the wheel well area extending the full width of the body and shall be constructed of 3-inch-high x 2-inch-wide x

.250-inch tubing. The foundation members parallel to the chassis frame rails shall be constructed of 3-inch square x .250-inch tubing and shall connect the foundation cross members and extend the full length of the body.

All tank support cross members shall be placed to support the water tank as per the tank manufacture's recommendation. These supports shall be constructed of 3-inch-high x 2-inch-wide x .250-inch aluminum tubing. The tank support angles shall be constructed of 4-inch x 4-inch x .250-inch-thick angles and shall be placed at the tank sides parallel to the chassis frame rails to provide lateral support for the tank and protection from debris from the wheels.

The internal upright supports for any ceiling and top component shall be placed to provide support for all components and shall be constructed of aluminum tubing measuring 2-inch square x .250 inch wall thickness. All front to rear connecting members shall be 3 inches high x 2 inches wide x .125-inch wall thickness and shall be placed in between the interior upright support members to provide rigidity, stability and support to all top layer components. All gussets shall be constructed of 2 inches high x 3 inches wide x .250-inch-thick plate which shall be placed on the top and bottom of the foundation cross members where they intersect with the exterior members.

BODY MOUNTING SYSTEM

The mounting assembly shall be designed to isolate and protect the body module from vibration and twisting stresses imparted by the flexing of the chassis frame rails. The body module shall employ spring loaded body mounting assemblies. Each two-piece mounting assembly shall be designed to positively position the body on the frame rails while preventing lateral and forward or aft movement. Mounting assemblies shall be placed forward and rearward of the rear axle as necessary to provide a strong and stable mounting of the body module.

Each mounting assembly shall consist of a "male" upper mounting bracket and a "female" lower mounting bracket. The upper mounting brackets shall be fabricated from .250-inch thickness steel plate, with .250 inch painted steel lower mounting brackets. The upper mounting brackets shall be welded directly to the foundation connecting members. The lower mounting brackets shall be bolted to the exterior side facing surface of the chassis frame rails.

The mounting brackets shall be aligned and connected by two (2) 5/8-inch diameter grade 8 bolts equipped with compression springs. The springs shall be of the appropriate tension rating for the weight requirements of the body module. The mounting assembly shall be designed to eliminate sheering forces on the mounting bolts.

The foundation connecting members shall be placed on top of the chassis frame rails for added strength and stability. The foundation members shall be isolated from the steel chassis frame rails by .25-inch thickness steel plates which have .5 inch thick 80 durometer rubber pads vulcanized to the bottom surface of each plate. The steel plates shall be welded to the bottom of the foundation, doubling as additional gussets at foundation cross member joints.

BODY MATERIAL

All materials utilized shall be of the correct type, alloy, and thickness to withstand the intended usage and provide protection against cracking, corrosion, or metal fatigue. The body compartments shall be fabricated using .125 inch 5052-H32 aluminum for most compartments unless otherwise stated. Any use of proprietary parts or materials in the construction of the body shall be unacceptable, due to potential delays or difficulties in an event of future repairs or when service becomes necessary.

All external upright supports for integral compartments shall incorporate a second set of upright supports constructed of 3-inch-wide x 2-inch-deep x .250-inch wall thickness and shall be located outboard of the internal upright supports to provide a rigid structure for the compartments to be mounted to. The compartment openings shall be constructed of 3-inch-high x 2-inch-wide x .125-inch

wall thickness cross members and shall be placed in between the external upright supports to define the openings of all enclosed body compartments again, providing a rigid mounting location for compartments.

COMPARTMENT FLOOR-SWEEP OUT STYLE

Each compartment shall feature a raised floor so the lip of the compartment shall clear the frame rail of the body module to allow debris to be removed easily from the compartment. A hat shaped support shall be placed under the floor to improve stability and prevent bowing of the floor with use and age.

COMPARTMENTATION

All compartments shall be constructed of smooth aluminum and welded for strength and shall be sealed from the elements. The compartments shall be attached to the aluminum superstructure only, to maintain a truly modular design. Each compartment shall include ventilation louvers which shall be provided on each side panel of the compartment to maximize moisture evacuation for the protection of the equipment and the compartment itself. Louvers shall be placed in the ventilation holes to prevent debris transfer to and from the inside of the body module. Each compartment shall feature a smooth edges and surfaces from the walls to each weld without sharp edges in the material.

COMPARTMENT D1

One full height compartment shall be provided on the driver's side of the apparatus body, forward of the rear wheels. Approximate compartment dimensions: 26" wide x 43.5" high x 20.75" deep.

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless-steel center bolt to lock the vent in either the open or closed position and be in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.
Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.
The specified compartment shall have compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT D2

One horizontal compartment shall be provided above the rear wheel well on the driver's side of the apparatus body. Approximate compartment dimensions: 44" wide x 26.5" high x 21" deep.

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless-steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.
Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.
The specified compartment shall have compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT D3

One compartment shall be provided on the driver's side of the apparatus body aft of the rear wheels. Approximate compartment dimensions:31.5" wide x 43.5" high x 20.75" deep.

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless-steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

The specified compartment shall have compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT P1

One full height compartment shall be provided on the passenger's side of the apparatus body forward of the rear wheels. Approximate compartment dimensions: 26" wide x 43.5" high x 20.75" deep.

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless-steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

The specified compartment shall have compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT P2

One horizontal compartment shall be provided above the rear wheel well quarter panel on the passenger's side of the apparatus body. Approximate compartment dimension: 44"wide x 26.5" high x 21" deep.

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless-steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

The specified compartment shall have compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT P3

One compartment shall be provided on the passenger's side of the apparatus body aft of the rear wheels. Approximate compartment dimensions: 31.5" wide x 43.5" high x 20.75" deep.

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless-steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.
Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.
The specified compartment shall have compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

OVER TANK TOP COMPARTMENT

There shall be one (1) storage basket and it shall be located on top of the water tank and side compartments. The compartment shall be split into three sections, with the main center section sized to fit the spare tire. Both sides shall have separate compartment doors that open upwards toward the center of the truck. All doors shall have gas assist struts and locking thumb latches. All walking surfaces shall be coated with duraback, the body of the compartment shall be powder coated black.

UPPER STORAGE-DRIVERS SIDE

There shall be a separated storage compartment on the driver’s side of the upper storage located above the body compartments and water tank. The approx. dimensions shall be 42.75" wide by 16.5" deep by 14" high.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

This compartment shall feature an embossed aluminum diamond plate lid. The lid shall be bare embossed aluminum diamond plate.

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

The specified compartment shall have no compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

UPPER STORAGE-CENTER

There shall be a separated storage compartment in the center of the upper storage located above the body compartments and water tank. The approx. dimensions shall be 45" wide by 42" deep by 14" high. The compartments' intended use is to store the spare tire and wheel.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

This compartment shall feature an embossed aluminum diamond plate lid. The lid shall be bare embossed aluminum diamond plate.
The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.
The specified compartment shall have no compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

UPPER STORAGE-PASSENGER SIDE

There shall be a separated storage compartment on the passenger side of the upper storage located above the body compartments and water tank. The approx. dimensions shall be 42.75" wide by 16.5" deep by 14" high.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

This compartment shall feature an embossed aluminum diamond plate lid. The lid shall be bare embossed aluminum diamond plate.

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

The specified compartment shall have no compartment lighting.

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

WHEEL WELL PANEL CONSTRUCTION

The outer wheel well panel shall be an integral part of the overall body design and constructed of aluminum. It shall be welded in to place. The exterior wheel well area shall be painted to match the body.

FUEL FILL ACCESS

An access opening designed to accommodate the OEM fuel fill assembly and angled insert shall be provided in the driver's side wheel well area.

FRONT OF BODY -- PROTECTIVE SURFACE

The front of the apparatus body shall include a protective surface, constructed of aluminum tread plate material, which shall cover the outboard portion of each side of the body.

REAR BODY PANELS

The entire rear of the apparatus body shall be painted apparatus color.

TOP OF BODY COMPARTMENTS -- PROTECTIVE SURFACES

The top of the side compartments shall have a protective surface installed. The surface shall be constructed of aluminum tread plate material.

ALUMININUM – COMPARTMENT DOOR, HINGED OVERLAP

Four (4) single, vertically hinged door shall be provided and fabricated from aluminum. The frame of the door shall be constructed of 1.75” x 1.75” x .125” aluminum tubing to prevent corrosion and provide structural support. The spacing created by the frame tubing shall filled with Styrofoam for added support, dent resistance, insulation, and noise reduction. The exterior surface shall be .125” aluminum for durability. The interior surface shall be .080” aluminum. There shall be no mechanical fasteners, such as bolt heads or rivets on the inside or outside of the doors.

The exterior of the door shall overlap the opening of the compartment. A .75” lip shall be constructed around the opening of the compartment and the exterior of the door. A rubber seal shall be installed on the .75” lip on both the compartment and the door to provide for a double seal against water and dust. A rain gutter shall be mounted above the door creating a third layer of water protection.

The door shall be designed utilizing a D-ring style latch system. A 6” stainless steel D-ring latch, large enough to accommodate a gloved hand, shall be mounted on the exterior of the door. A stainless-steel bezel shall be installed to house and protect the D-ring locking mechanism. The easily serviced bezel shall be mounted utilizing stainless steel screws. The D-ring locking mechanism shall be a double catch design. The first catch shall engage to secure the door in the event of improper closure. The second catch shall seal the door from water and other elements once the door has been properly closed.

The door shall be mounted using a stainless-steel piano style hinge and a .25” diameter hinge pin for stability. The vertical hinge shall be mounted to the body frame with threaded inserts and stainless-steel screws to preserve functionality and ease of maintenance in the event of damage.

Gas struts shall be utilized to hold the door in the open position and to prevent the door from slamming during closing. The gas struts shall be mounted directly to the door with a stainless-steel bracket assembly for stability and ease of maintenance. The gas struts shall be mounted to the interior of the compartment with a fully adjustable assembly.

A polished stainless steel scuff plate shall be installed on the bottom of the compartment opening to prevent damage and wear to the paint and finish of the body.

The exterior of the compartment doors and the door frames shall be painted to match the body in quality and tone. The interior surface shall not be painted, it shall be sanded utilizing a dual orbital technique.
The specified door(s) shall have a Polished stainless-steel D-ring door handle.

The specified door(s) D-ring handles shall be equipped with manual key door locks keyed to use the 1250 key.

COMPARTMENT DOOR EDGE STRIPING

The hinged compartment doors shall have 3M Diamond Grade reflective stripe applied on the edges. The stripe shall be a 1-1/2" minimum in width.

ALUMININUM – COMPARTMENT DOOR, LIFT UP HINGED OVERLAP

A single, horizontally hinged lift door shall be fabricated of aluminum. The door shall feature an exterior surface which overlaps the opening of the compartment. The exterior surface shall be .125” aluminum for durability and damage resistance. The interior surface shall be .080” aluminum for structural support and overall appealing appearance of the compartment. The frame of the door shall be constructed of 1.75” x 1.75” x .125” aluminum tubing to prevent corrosion and provide structural support. The spacing created by the frame tubing shall be filled with Styrofoam for added support and dent resistance, temperature insulation, and noise reduction.

A .75” lip shall be constructed around the opening of the compartment and the exterior of the door. A rubber seal shall be installed on the .75” lip of both the compartment and the door to provide for a double seal against water and dust. A rain gutter shall be mounted above the latch type door for an added third layer of water protection.

The door shall be designed utilizing a D-ring latch system. A large, to accommodate a gloved hand, 6-inch stainless steel D-ring latch shall be mounted on the exterior of the door to allow the door to seal and fasten in the closed position. A stainless-steel bezel shall be installed to house and protect the D-ring locking mechanism. The easily serviced bezel shall be mounted utilizing stainless steel screws for added stability of the mechanism and ease of maintenance in the event of damage. The D-ring locking mechanism shall be of a double catch design. The first catch shall engage to secure the door in the event of improper closure. The second catch will seal the door to water and other elements once the door has been properly closed.

The door shall be mounted with a stainless-steel hinge with .25” diameter hinge pin for stability. The horizontal hinge shall be mounted to the body frame with threaded inserts and stainless-steel screws to preserve functionality with use or age and ease of maintenance in the event of damage.

Gas struts shall be utilized to hold the door in the open position and to prevent the door from slamming during closing. The gas struts are mounted directly to the door with a stainless-steel bracket assembly for stability and ease of maintenance. The gas struts shall be mounted to the interior of the compartment with fully adjustable assembly for ease of adjustment and maintenance while increasing stability.

A polished stainless steel scuff guard shall be installed on the bottom of the compartment opening to prevent damage and wear to the paint and finish of the body module due to the removal and storage to equipment in the compartment.

The exterior of the compartment doors and the door jams shall be painted to match the body in quality and tone. The interior of the door shall not be painted due to lack of exposure and inherent resistance to corrosion. The interior of the door shall be sanded utilizing a dual orbital technique. The sanding shall provide for a smooth, regular, scratch free surface on the interior of the door. The exterior skin to door frame joining shall be painted to provide a moisture proof seal.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

The specified door(s) D-ring handles shall be equipped with manual key door locks keyed to use the 1250 key.

COMPARTMENT DOOR EDGE STRIPING

The hinged compartment doors shall have 3M Diamond Grade reflective stripe applied on the edges. The stripe shall be a 1-1/2" minimum in width.

FOLDING STEP -- LEFT FRONT

Three (3) 8" square folding step of die cast aluminum with stainless steel springs shall be provided. The step shall be installed on the front left side of the body.
The folding step shall have a chrome plated backing plate with built in LED light.

FOLDING STEP -- RIGHT FRONT

Three (3) 8" square folding step of die cast aluminum with stainless steel springs shall be provided. The step shall be installed on the front right side of the body.
The folding step shall have a chrome plated backing plate with built in LED light.

WATER TANK CAPACITY

The water tank shall be a poly water tank with a capacity of 300 gallons.

The water tank shall be constructed of polypropylene, nitrogen-welded and tested inside and out. The tank manufacturer shall define the floor, top, sides, ends, and baffles material thicknesses. The tank shall carry a lifetime warranty.

The transverse and longitudinal swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments. The cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the water tank.
The water tank manufacturer shall certify the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturer's record of construction and the certification shall be provided to the purchaser when the apparatus is delivered. Tank construction shall conform to applicable NFPA standards.

The water tank shall be configured in a rectangular style with consistent widths on the sides from top to bottom.

NFPA COMPLIANCE

The water tank construction shall conform to applicable NFPA standards.

TANK TO PUMP CONNECTION

A 3" PVC pipe shall be provided on the water tank for connection of the tank to the suction side of the pump with a flexible hump hose assembly. The tank suction valve and hump hose required to complete this connection shall be supplied by the final assembler.

PUMP TO TANK CONNECTION

A 2" connection shall be provided on the water tank for connection of the discharge side of the pump to the tank for filling purposes. The valves and hose required to complete this connection shall be supplied by the final assembler.

12 VOLT ELECTRICAL SPECIFICATIONS

The following describes the low voltage electrical system on the apparatus including all panels, electrical components, switches, and relays, wiring harnesses and other electrical components. The apparatus manufacturer shall conform to the latest Federal DOT standards, current automotive electrical system standards and the applicable requirements of NFPA.

Wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops shall not exceed 10 percent in all wiring from the power source to the using device. The wiring and wiring harness and insulation shall be in conformance with SAE and NFPA standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties. Exposed wiring shall be run in a loom with a 290-degree Fahrenheit rating. Wiring looms shall be properly supported and attached to body members. Electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

All wiring connections and terminations shall provide positive mechanical and electrical connections and be installed in accordance with the device manufacturer's instructions. When wiring passes through metal panels, electrical connections shall be with mechanical type fasteners and rubber/plastic grommets

Wiring between the cab and body shall be split using Deutsche type connectors or enclosed in a terminal junction panel allowing body removal with minimal impact on the apparatus electrical system. Connections shall be insulated with heat shrink tubing to resist moisture and foreign debris such as grease and road grime. Weather resistant connectors shall be provided throughout the system.

Electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. When required, automatic reset breakers and relays shall be housed in the main body junction panel.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless enclosed in an electrical junction box or covered with a removable electrical panel. Wiring shall be secured in place and protected against heat, liquid contaminants and damage and shall be uniquely identified at least every six inches (6") by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of applicable NFPA standards.

Low voltage protective devices shall be provided for the electrical circuits. The devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. Over current protection devices shall be automatic reset type suitable for electrical equipment and shall meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected. Electro-magnetic interference suppression shall be provided in the system as required in applicable SAE standards.

The electrical system shall include the following:

Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied.
All terminal plugs located outside of the cab or body shall be treated with a corrosion preventative compound.
All electrical wiring shall be placed in a protective loom or be harnessed. Exposed connections shall be protected by heat shrink and or a sealed connector.
Large fender washers shall be used when fastening equipment to the underside of the cab roof and all holes made in the roof shall utilize a weatherproof strain relief.
Electrical components installed in exposed areas shall be mounted in a manner that will not allow moisture to accumulate inside.
A service loop shall be provided behind all electrical appliances to allow them to be pulled away from their mounting area for inspection and service work

Upon completion of the vehicle and prior to delivery, the apparatus shall be electrically tested, and the electrical testing, certifications, and test results shall be submitted with delivery documentation per the requirements of NFPA.

ELECTRICAL WIRING HARNESS

The electrical system shall be divided into separate harnesses. The individual harnesses shall be connected with Deutsch type quick connectors.

CUSTOM FABRICATED CONSOLE

A custom fabricated electrical console and enclosure shall be located between the driver's and the officer's seating positions and shall include cab mounted electrical switching devices and equipment as required. The exact design and layout of this console shall be subject to the chassis design, available space, and cab seating provisions. Final design to be approved.

12 VOLT ACCESSORY CIRCUIT-CAB CONSOLE

One (1) dedicated circuit; 12-volt, 40 Amp, power and ground on 3/8 stud and fused at battery shall be provided in the cab console. The circuit shall be for future installation of radios or accessories.

12 VOLT POWER SOURCE

There shall be one (1) 12-volt plug-in utility power connection(s) rated at 20 amps provided and installed in the cab console.

USB CHARGING PORT

One (1) USB charging port(s) shall be installed in the cab of the truck for the fire departments accessory devices. The USB charging port shall have two (2) USB connections and shall have a 5 volt, 4.8A output with Intelligent Device Recognition capabilities.

BATTERY SWITCH - MASTER DISCONNECT

A battery disconnect switch controlling the 12-volt power supply from the battery system shall be located conveniently to the driver.

IDENTIFICATION LIGHTS

LED identification lights shall be installed on the vehicle as required by applicable highway regulations. All lights shall be 3/4" grommet mount type.

LICENSE PLATE BRACKET

A license plate bracket with a LED light shall be provided at the rear of the apparatus.

STOP/TAIL LIGHTS

Two (2) Truck-Lite Model or equivalent red rubber grommet mount LED stop/tail shall be provided and installed. They shall be placed in the outer position.

TURN/TAIL LIGHTS

Two (2) Truck-Lite Model or equivalent red grommet mount LED turn/tail shall be provided and installed. They shall be placed in the middle positions.

BACK UP / REVERSE LIGHTS

Two (2) Truck-Light or equivalent clear grommet mount LED lights shall be provided. The lights shall be located on the inner most light cutouts.

FRONT BUMPER -- GROUND LIGHTS

(2) LED ground light(s) shall be installed under the front bumper.

CAB GROUND LIGHTS

(4) LED ground lights shall be installed under the cab door(s)

GROUND LIGHTS - UNDER REAR STEP

(2) LED ground lights shall be installed under the rear step area.

SCENE LIGHTING

(2) FIRETECH Guardian scene lights shall be installed on the apparatus. Model number FT-GSM.

SCENE LIGHTING

(2) FIRETECH Mini Brow lights shall be installed on the apparatus. Model number FT-MB-12-TR-FT-B

COMPARTMENT LIGHTING

Two (2) LED lights shall be installed in each of the specified compartment(s).

COMPARTMENT LIGHT SWITCHES

Each interior compartment light shall be automatically controlled by a door activated "On-Off" switch.

DOOR OPEN WARNING LIGHT

A door open warning light shall be installed on cab dash. The light shall be a flashing LED light with a red lens. The light shall include a label, “Do Not Move Apparatus When Light is ON”.

"DOOR OPEN" AND EQUIPMENT OPERATION ALARM

A buzzer or alarm shall be installed in cab to indicate "doors open" or equipment operation on the apparatus. The buzzer shall operate when parking brake is released. The light shall include a label, “Do Not Move Apparatus When Light is ON”.

RADIO ANTENNA INSTALLATION

There shall be one (1) radio antenna installed on the apparatus and routed to the cab center console.

BACK UP ALARM

One (1) solid state back up alarm shall be provided at the rear of the apparatus. The backup alarm shall be wired to the reverse circuit of the transmission and shall provide an audible alarm to the rear of the apparatus when reverse gear is selected. The alarm shall have a volume of 87 to 112 db while in operation, and shall activate without delay

ELECTRONIC SIREN

Whelen CenCom Core C399 shall be installed. The following features shall be included

- Vehicle specific Install kit

WHELEN CORE CONTROL HEAD

There shall be a Whelen model CCTL7 control head supplied with the Cencom Core system. It features a 3 section control head with 21 push buttons, and a 4 position slide switch.

WHELEN CORE WECANX TRAFFIC ADVISOR MODULE

There shall be a Whelen model CTA Traffic Advisor module interfaced with the Cencom Core system.

SIREN SPEAKER

One (1) Whelen Model #SA315P siren speaker shall be provided. The 100 watt siren speaker shall be designed in a black nylon composite housing with 123 decibel rating.

ZONE A FRONT UPPER -- LIGHTBAR

One (1) Whelen Model # TP2RRRR Cenator series light bar shall be installed on the apparatus. The lightbar shall feature five (5) forward facing red lights, and two (2) forward facing white light heads. The light bar shall also feature two (2) forward facing take-down LED lights and two (2) LED alley lights.

ZONE A -- LOWER FRONT WARNING LIGHTS

Two (2) Whelen M-Series model# M4D warning lights shall be installed in the lower front area of the cab. The warning lights shall feature a split dual color red/white combo.
The specified Whelen M4 lights shall be equipped with chrome plastic flange type light bezel mountings.

ZONE B/D LOWER CAB INTERSECTION -- LIGHTS

Two (2) Whelen M4 Series Model # M4V2R combination 180° warning/perimeter light shall be provided.

The specified Whelen M4 lights shall be equipped with black plastic flange type light bezel mountings.

ZONE B/D LOWER MID BODY WARNING LIGHTS

Two (2) Whelen M4 Series Model # M4V2R combination 180° warning/perimeter light shall be provided.

The specified Whelen M4 lights shall be equipped with black plastic flange type light bezel mountings.

ZONE C -- UPPER REAR WARNING LIGHTS

Two (2) Whelen TLIR Series warning lights will be provided. The red warning lights will incorporate TIR Super-LED® and Smart LED® technology.

ZONE C -- LOWER REAR WARNING LIGHTS

Two (2) Whelen M-Series, model# M4RC warning lights shall be installed. The lights shall be red LED with a clear lens.
The specified Whelen M4 lights shall be equipped with black plastic flange type light bezel mountings.

TRAFFIC ADVISOR

A Whelen Traffic Advisor™ model # TAM65 shall be provided. The traffic advisor shall incorporate a rectangular extruded black powder coated aluminum chassis with six amber TIR6™ Super-LED® lights with waterproof connectors.

FRONT MOUNTED ELECTRIC WINCH
A Warn Winch Company 16,500-pound capacity, 12-volt electric winch system shall be installed on the front of the apparatus with a 4 way roller shall be installed to guide the cable. It shall have forward and reverse gears, a three-stage planetary gearing and a sliding ring gear clutch that will permit free-spooling for quick unwinding of cable.

The winch shall be controlled with a push button device attached to a twelve-foot (12') control cable and weatherproof receptacle.

The winch shall include 80' of Spydura pro synthetic rope.

BODY PAINTING SPECIFICATIONS

The body shall feature a single-color paint configuration which involves a two-step process thereby ensuring a durable, high gloss finish.

The metal of the body shall be acid washed with a phosphoric acid solution to remove impurities and etch the metal from a chemical level which shall improve adhesion. The body shall then be sanded and cleaned. Any imperfections or defects in the metal shall be smoothed with premium body filler and sanded smooth. All body and components shall then be primed, then thoroughly sanded with all surfaces meticulously inspected for any imperfections, which shall be properly corrected. An epoxy primer shall be utilized on all painted and coated surfaces and shall prepare the metal for the final paint. The primer shall be used to create a first level seal allowing interaction between the subsequent substrates. All surfaces shall then be painted with a base coat of premium paint following the guidelines as established by the paint manufacturer. The body shall be painted using a single color to match the cab primary color, and then shall be buffed to a high gloss finish.

INTERIOR COMPARTMENT FINISH

The interior wall, floor and ceiling surfaces of the body compartments shall be finished with PPG Brand, Amershield Polyurethane industrial coating.

TOUCH-UP PAINT

Touch-up paint and activator shall be furnished with the completed truck at final delivery.

CAB AND BODY STRIPING

The cab and body shall have a straight Scotchlite reflective stripe applied horizontally. The stripe shall be a 6" minimum in width and be applied horizontally around the cab and body in accordance with NFPA standards.

SUCTION HOSE

(2) 2.5” x 8-foot length of Kochek PVC flexible suction hose shall be provided and equipped with lightweight couplings.

SUCTION HOSE

(1) 2.5” x 7-foot lengths of Kochek PVC flexible suction hose shall be provided and equipped with lightweight couplings.

HARD SUCTION HOSE STORAGE

There shall be storage for two (2) 8' sections of 2.5" hard suction and one 7' sections of 2.5 hard suctions withbarrel strainer located above the pump operator’s panel. The compartment shall feature a drop-down door with a thumb latch.

Doors, Hinged, Alum Tread Plate, Drop Down

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

STRAINER

One (1) Northline Model FST-250-barrel strainer shall be provided on the apparatus. The strainer shall be equipped with a 2.5" female rocker lug coupling.

WHEEL CHOCKS

Two (2) Zico Model AC-1, aluminum wheel chocks shall be provided on the apparatus.

5# DRY CHEMICAL FIRE EXTINGUISHER

One (1) 5# ABC dry chemical fire extinguisher and mounting bracket shall be provided on the apparatus. The extinguisher shall have a pressure gauge and shall be filled with a dry chemical extinguishing agent.

HYDRAULIC JACK

One (1) Northern Hydraulics Model 1444 or equal hydraulic jack shall be provided. The jack shall be designed for lifting capacity of twenty (20) tons.

LUG WRENCH

There shall be one (1) lug wrench provided and shipped loose with the completed apparatus.

REFLECTOR

A set of three (3) triangular reflectors shall be provided.

End of Section

SECTION V. BID FORM

The Owner will receive electronic bids through the BidNet website, www.bidnetdirect.com/colorado prior to the date and time indicated on the front of this document at which time the bids will be publicly opened and read, for furnishing the materials, supplies, equipment and/or services, as shown below and/or attached hereto: **FOB DESTINATION** delivered at Grand Junction, Colorado. **TRANSPORTATION CHARGES INCLUDED IN BID PRICE.** All in accordance with the bid conditions, special provisions, and specifications attached or as indicated below.

Purchasing Representative: Kassy Hackett kassyh@gjcity.org 970-244-1546

Price for One (1) Unit: $_____

Price Written: _____ Dollars

Year/Manufacture/Model No.: _____

Delivery: State expected delivery time after receipt of order. _____ days ARO

WARRANTY: Specify Warranty. **Bidder must supply a copy of manufacturer's documentation**:

_____

_____

List any Variances in Specifications:

_____

_____

_____

_____

_____

_____

_____

_____

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: _____.

It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

NOTES: _____

DATE_____

- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt #98-903544.
- The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- Prompt payment discount of _____percent of the net dollar amount will be offered to the City if the invoice is paid within _____ days after the receipt of the invoice. The Owner reserves the right to consider any such discounts when determining the bid award that are no less than Net 10 days.
- The undersigned certifies and agrees that this bid is submitted in accordance with all applicable Federal, State, County, and City laws.
- Standard Payment terms are N30.

_____ (Company Name of Bidder – Typed or Printed)

_____ (Phone Number of Bidder)

_____ (Address of Bidder)

_____ (Authorized Agent or Contact Name – Printed)

_____ (City, State, and Zip Code)

_____ (Authorized Signature)

_____ (E-mail Address of Agent or Sales Contact)