



Sullivan County Purchasing
3411 Hwy 126, Suite 201
Blountville, TN 37617
423-323-6400

Kristinia Davis, Purchasing Agent
kris.davis@sullivancountytn.gov

**RESCUE APPARATUS
FOR
KINGSPORT LIFE SAVING
CREW
RFP # KLSC2020(KD)**

**DATE TO OPEN BIDS:
OCTOBER 29, 2020
2:00 PM**

OFFICE OF THE SULLIVAN COUNTY PURCHASING AGENT
3411 HIGHWAY 126 – SUITE 201
BLOUNTVILLE, TN 37617-0569

KRISTINIA DAVIS, CPPB
PURCHASING AGENT

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REQUEST FOR PROPOSAL

RFP Name / Number Rescue Apparatus/ #KLSC2020(KD)
Department Kingsport Life Saving Crew
Due Date / Time **Thursday, October 29, 2020 / 2:00 p.m.**
Bid Location / Mail Address Sullivan County Purchasing Department
Kristinia Davis, Purchasing Agent
3411 Hwy 126, Suite 201
Blountville, TN 37617
Bid Contact / Telephone Kristinia Davis (423) 323-6400; kris.davis@sullivancountytn.gov

The Sullivan County Purchasing Department is soliciting this Complimentary Request for Proposal (RFP) on behalf of **KINGSPORT LIFE SAVING CREW** regarding the purchase of a **RESCUE APPARATUS**. Sealed proposals are desired from reputable manufacturers of Automotive Fire/Rescue Apparatus in accordance with the attached specifications.

All RFPs and required enclosures shall be presented, signed, and delivered to the Sullivan County Purchasing Department (address denoted above) no later than **THURSDAY, OCTOBER 29, 2020 @ 2:00 P.M. LATE RESPONSES WILL NOT BE CONSIDERED!** Sullivan County is not responsible for delays in mail deliveries or courier services.

RFP must be presented in a **sealed** envelope, **clearly identifying RFP #KLSC2020(KD) on the outside.** Telephone, fax, or e-mail responses are not acceptable!

All responses to this RFP must be submitted in duplicate. Any exception to this requirement may disqualify responding vendor from award consideration.

All RFPs offered must be in strict conformance to the language, specifications, requirements, terms, and conditions as stated herein. This RFP must be completed in totality and signed by an authorized agent of the responding company. Any erasures, strike overs and/or changes to prices written in numerals should be initialed by the responding vendor. Any exception to this requirement will disqualify responding vendor from award consideration.

It is the responsibility of each responding vendor to ascertain that all requirements are satisfied. It will be assumed that the vendor has made investigations to be fully informed as to the extent and character of the requirements. Failure to submit an RFP which conforms to the specified content and format requirements will be sufficient cause to disqualify vendor. Additionally, material deficient or incomplete response to the RFP requirements will be cause to disqualify vendor.

If a responding vendor represents more than one rescue apparatus company, vendor shall offer only the superior unit that meets and/or exceeds specifications herein. Each responding vendor shall only submit one proposal. Multiple offers from the same vendor will not be acceptable.

During the evaluation period, bidders may be asked to further clarify their proposals or answer questions that may arise during the evaluation of bid. It is the responsibility of the vendor to make clarifications, in writing, on apparatus' manufacturer's letterhead and signed by the President and/or General Manager of the manufacturing company. These written clarifications must be received within seventy-two (72) hours of when they were requested by the Sullivan County Purchasing Agent. Failure to respond within the allowed time-period could deem the bid proposal unresponsive and cause for rejection.

The Sullivan County Purchasing Agent has the right to accept or reject any/all proposals and to waive any informalities or irregularities and/or to reject a bid from any responding vendor who, in the judgment of the purchasing

agent, is not in a position to perform the contract, and/or to reject a bid based on unacceptable provisions of a responding vendor's contract. Kingsport Life Saving Crew (Buyer) does not obligate itself to accept the lowest and/or any bid. If all responses should be deemed unacceptable, the purchasing agent shall prepare a written determination outlining the nature of such rejection. Should another RFP be prepared, all rejected responses shall remain closed to public inspection until the evaluation of new RFP responses is completed.

Sullivan County, its officers, agents and employees shall be held harmless from liability from any claims, damages and actions of any nature rising from the use of any materials furnished by the responding firm, provided that such liability is not attributable to negligence on the part of the using agency or failure of the using agency to use the materials in the manner outlined.

Any remedies in the vendor's response, including agreement, license agreement, terms, conditions, literature, etc. that may be considered an agreement to waive the legal rights of the citizens of Sullivan County shall be considered cause for rejection.

By submission of this RFP, the vendor certifies total compliance with Title VI and Title VII of the Civil Rights Act of 1964, as amended, and all regulations promulgated thereof.

Failure of Sullivan County to enumerate any federal, state or county regulation in its entirety within this RFP is not cause for the vendor to exclude same.

RFP responses received by the purchasing agent will be tabulated and submitted to the Kingsport Life Saving Crew to evaluate for final selection and award.

CONTACT FOR QUESTIONS REGARDING THE BID PROCESS:

KRISTINIA DAVIS @ 423-323-6400

Kris.davis@sullivancountytn.gov

OR

alan.mahaffey@sullivancountytn.gov

COLOR-CODED TABLE OF CONTENTS

**ALL RFP'S MUST BE SUBMITTED IN COLOR-CODED FORMAT OR TABS MAY BE USED TO
CLEARLY IDENTIFY THE FOLLOWING:**

(Note: Vendor's duplicate copy may be printed on white paper.)

REQUEST FOR PROPOSAL	YELLOW
COST ANALYSIS	LIME
SPECIFICATIONS / COMPLIANCE	WHITE
EXHIBITS SECTION	BLUE

COST SHEET

RFP # KLSC2020(KD)

RESCUE APPARATUS

KINGSPORT LIFE SAVING CREW

NEW 2021 RESCUE APPARATUS TO MEET OR EXCEED SPECIFICATIONS AS REQUESTED

PURCHASE PRICE = \$ _____

DELIVERY DATE (in calendar days): _____

** PRICE MUST BE GUARANTEED FOR 90 DAYS FROM BID OPENING DATE**

PAYMENT TERMS

THE TERMS FOR PAYMENT SHALL BE "PAYMENT IN FULL ON DELIVERY AND ACCEPTANCE" FOR THE RESCUE APPARATUS.

The undersigned is an authorized representative of the vendor submitting bid and offers the following price (guaranteed for 90 days) for the Rescue Apparatus as specified in the RFP documentation and in compliance with all requirements.

COMPANY NAME _____

AUTHORIZED REPRESENTATIVE NAME (PRINTED) _____

REPRESENTATIVE'S SIGNATURE _____ DATE _____

PHONE _____ FAX _____ EMAIL _____

SPECIFICATIONS

For

Kingsport Life Saving Crew

Rescue Apparatus

INTRODUCTION
PROPOSAL REQUIREMENTS

GENERAL INFORMATION

It shall be the intent of these specifications to cover the furnishing of all necessary labor, equipment, and material for the delivery of a complete rescue apparatus. These detailed specifications cover the requirements as to the type of construction, finish, equipment, and tests to which the apparatus shall conform. Minor details of construction and materials, which are not otherwise specified, are left to the discretion of the contractor.

Images and illustrative material in this specification are as accurate as known at the time of publication but are subject to change without notice. Images and illustrative material are for reference only and may include optional equipment and accessories and may not include all standard equipment.

Apparatus and equipment must meet the specific requirements and intent of the requirements as specified herein. All items of these specifications shall conform to the character of the proposed apparatus and the purpose for which it is intended. Criteria as specified by the National Fire Protection Association Pamphlet No. 1901, latest edition, entitled "Suggested Specifications for Motor Fire Apparatus", as approved by the American Insurance Association and International Association of Fire Chiefs, are hereby adopted and made a part of these specifications the same as if they were written out in full, insofar as they apply and are not specifically modified in the following detailed specifications. Each bidder shall provide only that equipment as required in the following specifications.

The rescue apparatus and equipment to be furnished in meeting these specifications must be the products of an established, reputable rescue apparatus and/or equipment manufacturer. Each bidder shall furnish satisfactory evidence of the manufacturer's ability to construct, supply service parts and technical assistance for the apparatus specified. Each bidder must state the location of the factory and location for post delivery service.

INSTRUCTIONS TO BIDDERS

The purchaser's standards for bidding automotive rescue apparatus must be strictly adhered to, and all bid forms and questions must be complete and submitted with the bid. **Omissions and variations may result in immediate rejection of the bid.**

Bids shall only be considered from companies that have an established reputation in the field of rescue apparatus construction and have been in business for a minimum of 20 years. Furthermore, in order to insure fair, ethical, and legal competition, neither the original equipment manufacturer (O.E.M.) nor parent company of the O.E.M. shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international rescue apparatus market (no exception).

If a bidder represents more than one rescue apparatus company or brands of apparatus, they must only bid the top of the line that meets specification.

Each bidder shall furnish satisfactory evidence of their ability to construct the apparatus specified. Any apparatus manufacturer or their parent company who has had a performance bond called in the last 10 years, shall not be eligible to bid. Any bids from these manufactures shall be immediately rejected (no exception).

Each bid shall be accompanied by a set of manufacturer's specifications consisting of a detailed description of the apparatus, construction methods, and equipment proposed to which the apparatus furnished under contract shall conform. These specifications shall indicate size, type, model and make of all components, parts, and equipment, providing proof of compliance with each and every item in the departments advertised specifications. A letter only, even though written on company letterhead, shall not be sufficient. **An exception to this requirement shall not be acceptable.**

In accordance with the current edition of NFPA 1901 standards, the proposal shall specify whether the rescue department or apparatus dealership shall provide required loose equipment.

The purchaser will utilize this advertised specification to compare all submitted bid proposals. To facilitate comparison, all bid proposal specifications shall be submitted in the same sequence as the advertised specification. Any bidder who fails to submit a set of bid proposal specifications, or who photocopies and submits these specifications as their own construction details will be considered nonresponsive. This shall render such proposal ineligible for award.

The purchaser's specification shall, in all cases, govern the construction of the apparatus, unless a properly documented exception or deviation was approved. Any bid indicating that the manufacturer's proposal shall supersede the purchaser's specification will be considered a complete substitute and immediately rejected.

THE PURCHASER HAS THE RIGHT TO REJECT ANY BIDS WHICH DOES NOT MEET THESE SPECIFICATIONS AND IS THE SOLE DECIDER TO DEEM WHICH BID IS IN THE BEST INTEREST OF THE PURCHASER.

The bid price shall be F.O.B. Destination, on a delivered and accepted basis at the Kingsport Life Saving Department.

Total price on bidder's proposal sheet must include all items listed in these specifications. Listing any items contained in the specification as an extra cost item, unless specifically requested to do so in these specifications, shall automatically be cause for rejection.

Bidder shall compute pricing less federal and state taxes. Kingsport Life Saving Crew is tax-exempt and will provide tax exemption to successful bidder.

ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the specifications or other contract documents shall be made to any Bidder verbally. Every request for such interpretation shall be in writing and emailed to the Purchasing Agent, Kristinia Davis @ kris.davis@sullivancountytn.gov and must be received at least five (5) days prior to the date fixed for the opening of the bids to be given consideration. Any and all such interpretations and any supplemental instructions shall be in the form of written addenda to the specifications which, if issued, shall be posted on www.sullivancountytn.gov under Purchasing (Solicitations) and shall be e-mailed to all prospective Bidders no later than forty-eight (48) hours prior to the date fixed for the opening of bids. Failure of any Bidder to receive any such addendum or interpretation shall not relieve any Bidder from any obligation under his bid as submitted. All addenda so issued become a part of the contract documents.

EXCEPTIONS

These specifications are based upon design and performance criteria which have been developed by the lifesaving crew as a result of extensive research and careful analysis. Subsequently these specifications reflect the only type of apparatus that is acceptable at this time and all specifications herein contained are considered as minimum. Therefore, exceptions to the specifications may not be accepted.

Bidders shall indicate in the **"yes/no" column** if their bid complies on each item (paragraph) specified.

If a product brand name is specified and is commercially available to all bidders, an exception to such items is not acceptable and such bid may be rejected.

Exceptions shall be allowed if they are equal to or superior to that specified and provided, they are listed and fully explained on a separate page. All deviations, no matter how slight, shall be clearly explained on a separate sheet, titled "Exceptions", in the bid sequence, citing the page and paragraph number(s) of the specifications, how the proposal deviation is different, how the deviation meets or exceeds the specifications and why it is necessary and entitled "EXCEPTIONS TO SPECIFICATIONS". The purchaser reserves the right to require a bidder to provide proof in each case that a substituted item is equal to that specified. The purchaser shall be the sole judge in determination of acceptable substitutes.

Proposals that are found to have deviations without listing them or bids taking total exceptions to these advertised specifications will be rejected (no exception).

Bids not including all exceptions is a material breach and shall result in the bid being immediately rejected (no exception).

CONTRACT AWARD

The Sullivan County Purchasing Agent on behalf of the lifesaving crew reserves the right to accept, reject, recommend award or cancel any or all bids and to waive any informalities, irregularities and technicalities, if same is deemed in the best interest of Sullivan County and Kingsport Life Saving Crew. Sullivan County and Kingsport Life Saving Crew does not obligate itself to accept the lowest and/or any bid offered.

Sullivan County reserves the right on behalf of the lifesaving crew, before awarding the contract, to require a bidder to submit evidence of his qualifications as may be deemed necessary. Documentation, which may be required, is financial soundness, technical competency, and other pertinent qualifications of a bidder, including past performance (experience) with Sullivan County or Kingsport Life Saving Crew.

Upon award of contract, the sales contract shall be between Kingsport Life Saving Crew and the manufacturer of the apparatus. Contracts between the Purchaser and a sales representative, dealer, distributor, or agent of the apparatus manufacturer shall not be acceptable. **(NO EXCEPTION.)**

	Bidder Complies	
	Yes	No
<p><u>GENERAL CONSTRUCTION</u></p> <p>The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association</p> <p><u>QUALITY AND WORKMANSHIP</u></p> <p>The design of the apparatus shall embody the latest approved automotive engineering practices. The workmanship shall be of the highest quality in its respective field. Special consideration shall be given to the following points: Accessibility of the various units which require periodic maintenance; ease of operation (including both pumping and driving); and symmetrical proportions. Construction shall be rugged and ample safety factors shall be provided to carry the loads specified and to meet both on and off-road requirements and speed conditions as set forth under Performance Tests and Requirements. Welding shall not be employed in the assembly of the apparatus in a manner that shall prevent the ready removal of any component part for service or repair. All steel welding shall follow American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding shall follow American Welding Society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding shall follow American Welding Society B2.1-2000 requirements for structural welding of sheet metal. Flux core arc welding to use alloy rods, type 7000, American Welding Society standards A5.20-E70T1. Employees classified as welders are tested and certified to meet American Welding Society codes upon hire and every three (3) years thereafter. The manufacturer shall be required to have an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.</p> <p><u>ISO 9001 CERTIFICATION</u></p> <p>The manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that shall be established by the manufacturer for design, manufacture, installation, and service. A copy of the certificate of compliance shall be included with the bid. (NO EXCEPTION)</p> <p>To demonstrate the quality of the product and service, each bidder shall provide a list of at least five (5) lifesaving departments/municipalities in the region that have bought a second time from the representing dealer. An exception to this requirement shall not be acceptable.</p> <p><u>DELIVERY</u></p> <p>Apparatus, to ensure proper break in of all components while still under warranty, shall be delivered under its own power - rail or truck freight shall not be acceptable. A qualified delivery representative shall deliver the apparatus and remain for a sufficient length of time</p>		

	Bidder Complies	
	Yes	No
to instruct personnel in proper operation, care and maintenance of the equipment delivered.		
<p><u>MANUALS AND SERVICE INFORMATION</u></p> <p>The manufacturer shall supply at time of delivery, complete operation and maintenance manuals covering the complete apparatus as delivered. A permanent plate shall be mounted in the driver's compartment which specifies the quantity and type of fluid required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.</p> <p><u>SAFETY VIDEO</u></p> <p>Since video is much more effective than written documentation and can be replayed for new personnel and as a refresher for existing personnel, an apparatus safety video, in DVD format shall be provided at time of delivery. This video shall address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus. Safety procedures for the following shall be included on the video: vehicle pre trip inspection, chassis operation, pump operation and maintenance.</p> <p><u>PERFORMANCE TESTS AND REQUIREMENTS</u></p> <p>A road test shall be conducted with the apparatus fully loaded and a continuous run of ten (10) miles or more shall be made under all driving conditions, during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts, and rear axle shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus. Vehicle shall adhere to the following parameters:</p> <p>A) The apparatus, when fully equipped and loaded, shall have not less than 25 percent nor more than 50 percent of the weight on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle.</p> <p>B) The apparatus shall be capable of accelerating to 35 mph from a standing start within 25 seconds on a level concrete highway without exceeding the maximum governed rpm of the engine.</p> <p>C) The service brakes shall be capable of stopping a fully loaded vehicle in 35 feet at 20 mph on a level concrete highway. The air brake system shall conform to Federal Motor vehicle Safety Standards (FMVSS) 121.</p> <p>D) The apparatus, fully loaded, shall be capable of obtaining a speed of 50 mph on a level concrete highway with the engine not exceeding the governed rpm (full load).</p> <p><u>FAILURE TO MEET TEST</u></p> <p>In the event the apparatus fails to meet the test requirements of these specifications on the</p>		

	Bidder Complies	
	Yes	No
<p>first trial, second trials may be made at the option of the bidder within 30 days of the date of the first trial. Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for rejection. Failure to comply with changes to conform to any clause of the specifications, within 30 days after notice is given to the bidder of such changes, shall also be cause for rejection of the apparatus. Permission to keep or store the apparatus in any building owned or occupied by the purchaser or its use by the purchaser during the above-specified period with the permission of the bidder shall not constitute acceptance.</p> <p><u>SERVICE AND WARRANTY SUPPORT (DEALERSHIP)</u> TO ENSURE FULL SERVICE AFTER DELIVERY, THE SELLING BIDDER/DEALERSHIP MUST BE CAPABLE OF PROVIDING SERVICE WHEN REQUIRED.</p> <p>The bidder/dealership shall show that the company is in position to render prompt service and to furnish replacement parts.</p> <p>Each bidder/dealership must be able to display that they are actively in the rescue apparatus service business by operating in conjunction with a factory authorized service center and parts repository capable of satisfying the warranty service requirements and parts requirements of the vehicle(s) being purchased.</p> <p><u>SERVICE CENTER</u></p> <p>The bidder/dealership must state the location of this authorized service center. This service center must have a staff of factory-trained mechanics, well versed in all aspects of service for all major components of the apparatus. The service center must be within one hundred (100) miles of the Kingsport Life Saving Crew. (NO EXCEPTIONS)</p> <p><u>SERVICE AND WARRANTY SUPPORT (MANUFACTURER)</u></p> <p>To provide an additional layer of service support, the successful manufacturer must also own a least two separate service facilities, one located in the northern portion of the US to service both Canada and the northern US states and one in the south to service the southern states.</p> <p>The manufacturer shall stock parts dedicated to service and replacement parts to ensure quick response and minimize down time. Furthermore, the manufacturer shall house the inventory in a dedicated facility, with a dedicated shipping area that ensures service parts are given priority. The bidder shall provide detailed documentation of service and replacement part resources.</p> <p>Parts identification shall be provided to both the dealer and the Lifesaving Crew through an online web-based application for the specific truck reflected in this specification. Access will be granted using the specific VIN number of the vehicle. The online web application</p>		

	Bidder Complies	
	Yes	No
<p>will provide the ability to view complete bills of materials, digital photographs, parts drawings, assembly drawings, and access to all current operation, maintenance, and service publications.</p> <p>The manufacturer must also maintain a 24 hour/ 7 day a week, toll free emergency hot line.</p> <p>The manufacturer shall employ a staff of adequate size specifically dedicated to providing customer support and parts for the fielded fleet of vehicles it has produced.</p> <p>The manufacturer must be capable of providing both in-house and on-site service for the apparatus.</p> <p>The manufacturer shall offer regional factory hands-on repair and maintenance training classes.</p> <p>The manufacturer shall employ a minimum of four certified EVT technicians on staff, not only providing technical expertise in the repair of rescue apparatus, but also demonstrating the commitment to service after the sale.</p> <p><u>LIABILITY</u></p> <p>The successful bidder shall defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.</p> <p><u>INSURANCE PROVIDED BY BIDDER</u></p> <p><u>COMMERCIAL GENERAL LIABILITY INSURANCE</u></p> <p>The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:</p> <p style="padding-left: 40px;">Each Occurrence \$1,000,000</p> <p style="padding-left: 40px;">Products/Completed Operations Aggregate \$1,000,000</p> <p style="padding-left: 40px;">Personal and Advertising Injury \$1,000,000</p> <p style="padding-left: 40px;">General Aggregate \$2,000,000</p> <p>Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form and shall include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy shall include purchaser as an additional insured when required by written contract.</p>		

	Bidder Complies	
	Yes	No
<p><u>COMMERCIAL AUTOMOBILE LIABILITY INSURANCE</u></p> <p>The successful bidder shall, during the performance of the contract keep in force at least the following minimum limits of commercial automobile liability insurance and coverage shall be written on a Commercial Automobile liability form:</p> <p style="padding-left: 40px;">Each Accident Combined Single Limit: \$1,000,000</p> <p><u>UMBRELLA/EXCESS LIABILITY INSURANCE</u></p> <p>The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:</p> <p style="padding-left: 40px;">Aggregate: \$3,000,000</p> <p style="padding-left: 40px;">Each Occurrence: \$3,000,000</p> <p>The umbrella policy shall be written on an occurrence basis and at a minimum provide excess to the Bidder's General Liability and Automobile Liability policies.</p> <p>The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.</p> <p>Coverage shall be provided by a carrier(s) rated A- or better by A.M. Bests.</p> <p>All policies shall provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance shall provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice shall be delivered in accordance with the policy provisions. Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with its bid. The certificate shall show the purchaser as certificate holder.</p> <p><u>INSURANCE PROVIDED BY MANUFACTURER</u></p> <p><u>PRODUCT LIABILITY INSURANCE</u></p> <p>The manufacturer shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:</p> <p style="padding-left: 40px;">Each Occurrence \$1,000,000</p> <p style="padding-left: 40px;">Products/Completed Operations Aggregate \$1,000,000</p> <p>Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form. The manufacturer's policy shall include the owner as additional insured when required by written contract between the Owner and authorized dealer.</p>		

	Bidder Complies	
	Yes	No
<p><u>UMBRELLA/EXCESS LIABILITY INSURANCE</u></p> <p>The manufacturer shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:</p> <p style="padding-left: 40px;">Each Occurrence: \$25,000,000</p> <p style="padding-left: 40px;">Aggregate: \$25,000,000</p> <p>The umbrella policy shall be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies.</p> <p>The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.</p> <p>Coverage shall be provided by a carrier(s) rated A- or better by A.M. Best.</p> <p>All policies shall provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance shall provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice shall be delivered in accordance with the policy provisions.</p> <p>Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate shall show the purchaser as the certificate holder.</p> <p>The bidder shall state the location of the factory where the apparatus is to be built.</p> <p><u>NFPA 2016 STANDARDS</u></p> <p>This apparatus specification includes a commercial chassis that has not been certified to meet the requirements of NFPA 1901 by the chassis manufacturer. Although this chassis may comply with certain aspects of the standard, has not received certification from this chassis manufacturer that all criteria have been met. The body as built by the manufacturer must comply with the NFPA standards effective January of 2016.</p> <p>Certification of slip resistance of all stepping, standing, and walking surfaces must be supplied with delivery of the apparatus.</p> <p>All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points shall be identified on the customer approval print and are shown as approximate. Actual location(s) shall be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be</p>		

	Bidder Complies	
	Yes	No
<p>required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.</p> <p>A plate that is highly visible to the driver while seated shall be provided. This plate shall show the overall height, length, and gross vehicle weight rating.</p> <p>The manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications.</p> <p>An official of the company shall designate, in writing, who is qualified to witness and certify test results.</p> <p><u>NFPA COMPLIANCY</u> Apparatus proposed by the bidder shall meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Lifesaving crew’s specifications that differ from NFPA specifications shall be indicated in the proposal as "non-NFPA".</p> <p><u>GENERATOR TEST</u> If the unit has a generator, the generator shall be tested, approved, and certified by an ISO certified independent third-party testing agency at the manufacturer's expense. The test results shall be provided to the Life Saving Crew at the time of delivery.</p> <p><u>WEEKLY CONSTRUCTION PHOTO REPORTS - NO EXCEPTIONS</u> Digital photo reports shall be e-mailed to the Chief once a week starting when the custom chassis and/or body begins production. These reports shall show all 4 sides of the vehicle, the interior of the cab from each door, and the interior of each compartment. Interactive websites shall not be acceptable because they typically do not show enough detail.</p> <p><u>INSPECTION TRIPS(S)</u> The bidder shall provide two (2) factory inspection trip(s) for 2 customer representative(s). The inspection trip(s) shall be scheduled at times mutually agreed upon between the manufacturer's representative and the customer. All costs such as travel, lodging and meals shall be the responsibility of the bidder.</p> <p><u>BID BOND</u> All bidders shall provide a bid bond as security for the bid in the form of a 5% bid bond to accompany their bid. This bid bond shall be issued by a Surety Company who is listed on the U.S. Treasury Department list of acceptable sureties as published in Department Circular 570. The bid bond shall be issued by an authorized representative of the Surety Company and shall be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond shall include language, which assures that the bidder/principal shall give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic</p>		

	Bidder Complies	
	Yes	No
<p>One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract. Failure to provide an original, acceptable, valid bid bond with the proposal shall result in the immediate rejection of the bidder's proposal.</p> <p>Proposals received from bidders who do not manufacture the chassis shall provide a warranty that shall be issued jointly and severally by, and signed by, both the bidder and the chassis manufacturer.</p> <p>If the successful bidder does not manufacture the chassis, the bidder shall supply a warranty bond, in addition to their performance bond, along with their signed contract. This warranty bond shall guarantee all terms and conditions of the Basic One (1) Year Limited Warranty and names both the bidder and chassis manufacturer as co-principals. This warranty bond shall be issued for the contract amount and shall remain in force for a term which is consistent with the term of the Basic One (1) Year Limited Warranty.</p> <p>Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle shall apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle shall not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision shall prevail.</p> <p><u>PERFORMANCE & PAYMENT BOND</u></p> <p>A performance and payment bond shall not be included. If requested at a later date, one shall be provided to the purchaser for an additional cost and the following shall apply:</p> <p>The successful bidder shall furnish a Performance and Payment bond (Bond) equal to 100% of the total contract amount within 30 days of the notice of award. Such Bond shall be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A and Size Category, a minimum Financial Strength rating of A+ is required.</p> <p>Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Bumper to Bumper warranty period included within this proposal. Owner agrees that the penal amount of this bond shall be simultaneously amended to 25 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type shall not exceed three (3) years from the date of such satisfactory acceptance and delivery, or the actual Bumper to Bumper warranty period, whichever is shorter.</p>		

	Bidder Complies	
	Yes	No
<p><u>FAIR, ETHICAL AND LEGAL COMPETITION</u></p> <p>In order to ensure fair, ethical, and legal competition, neither original equipment manufacturer (OEM) nor parent company of the OEM shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international rescue apparatus market.</p> <p><u>NON-COLLUSIVE BIDDING CERTIFICATION</u></p> <p>By submission of this bid, each bidder and each person signing on behalf of any bidder, certifies, and in the case of a joint bid, each party thereof certifies as to its own organization, under penalty of perjury, that to the best of their knowledge and belief:</p> <ul style="list-style-type: none"> • The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for purpose of restricting competition, as to any matter relating to sale price with any other bidder or any competitor. • Unless otherwise required by law, the prices that have been quoted in this bid have not been knowingly disclosed by the bidder and shall not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor. • No attempt has been made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition. • That all requirements of the law including amendatory provisions as to non-collusive bidding have been complied with. <p><u>APPROVAL DRAWING</u></p> <p>A drawing of the proposed apparatus shall be provided for approval before construction begins. The sales representative shall also have a copy of the same drawing. The finalized and approved drawing shall become part of the contract documents. This drawing shall indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.</p> <p>A "revised" approval drawing of the apparatus shall be prepared and submitted by the manufacturer to the purchaser showing any changes made to the approval drawing.</p> <p><u>ELECTRICAL WIRING DIAGRAMS</u></p> <p>Two (2) electrical wiring diagrams, prepared for the model of chassis and body, shall be provided.</p> <p><u>CHASSIS</u></p> <p>The chassis shall be a Freightliner, Model M2, 106MD Conventional Chassis, supplied with the following equipment:</p> <p><u>WHEELBASE</u></p> <p>The wheelbase of the vehicle shall be no greater than 199.13.</p>		

	Bidder Complies	
	Yes	No
<p><u>GVW RATING</u> The gross vehicle weight rating shall be a minimum of 35,000.</p> <p><u>FRAME</u> The frame rails shall be formed from 120,000 psi yield, heat treated alloy steel. The frame rails shall be E-coated prior to painting.</p> <p><u>FRONT AXLE</u> Front axle shall be an I beam type, made of forged steel. It shall have a ground rating capacity of 12,000 lb.</p> <p><u>FRONT SUSPENSION</u> Spring mounted: Taper-leaf Capacity at Ground: 12,000 lb. Shock absorbers shall be provided on the front axle.</p> <p><u>FRONT BRAKES</u> The front brakes shall be S-Cam, 16.50" x 5.00". The front brakes shall be provided with automatic slack adjusters.</p> <p><u>TIRE BRAND</u> The default brand of tire for the commercial chassis manufacturer for this apparatus is Michelin.</p> <p>However, it is understood that the commercial chassis manufacturer reserves the right to substitute brands and models of tire as may be available at the factory on the date of manufacture. They shall provide the proper tread style and weight rating for the position in which the tire is installed.</p> <p><u>TIRES, FRONT</u> Front tires shall be 11R22.50, radial tires with a tread pattern suitable for the steering axle position. The capacity of the tires shall meet or exceed the rating of the axle and/or suspension.</p> <p><u>WHEELS, FRONT</u> Wheels for the front axle shall be 22.50" x 8.25" aluminum disc.</p> <p><u>REAR AXLE</u> The single reduction rear axle shall be a Meritor™, Model RS-23-160, with a ground rating capacity of 23,000 lb.</p> <p>The brake chambers shall be forward mounted.</p> <p><u>PARKING BRAKE</u> The parking brake shall be spring set and located on the rear axle service brake.</p>		

	Bidder Complies	
	Yes	No
<p>Rear axle brakes shall be 16.50" x 7.00", S-Cam drum type brakes. Automatic slack adjusters shall be provided.</p> <p><u>REAR AXLE RATIO</u> A rear axle ratio shall be furnished to allow the vehicle to reach a top speed of 60 MPH.</p> <p><u>REAR SUSPENSION</u> The rear suspension shall be spring mounted multi-leaf with a capacity at ground level of 23,000 lbs.</p> <p><u>TIRES, REAR</u> Rear tires shall be 11R22.50 radial tires with a traction tread pattern suitable for the drive axle position. The tires shall meet or exceed the weight rating of the axle and/or suspension.</p> <p><u>WHEELS, REAR</u> The rear wheels shall be 22.50" x 8.25" disc. The outer wheel shall be polished aluminum and the inner wheel shall be steel.</p> <p><u>TIRE PRESSURE MANAGEMENT</u> There shall be a RealWheels LED AirSecure™ tire alert pressure management system provided, that shall monitor each tire's pressure. A sensor shall be provided on the valve stem of each tire for a total of six (6) tires.</p> <p>The sensor shall calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor shall activate an integral battery-operated LED when the pressure of that tire drops 5 to 8 psi.</p> <p>Removing the cap from the sensor shall indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED shall immediately start to flash.</p> <p><u>FRONT HUB COVERS</u> Stainless steel hub covers shall be provided on the front axle. An oil level viewing window shall be provided.</p> <p><u>REAR HUB COVERS</u> A pair of stainless-steel high-hat hub covers shall be provided on rear axle hubs.</p> <p><u>CHROME LUG NUT COVERS</u> Chrome lug nut covers shall be supplied on front and rear wheels.</p> <p><u>MUD FLAPS</u> Mud flaps shall be installed behind the front and rear wheels.</p> <p><u>WHEEL CHOCKS</u> There shall be one (1) pair of Worden Safety Products, Model HWGY-SB, wheel chocks</p>		

	Bidder Complies	
	Yes	No
<p>provided.</p> <p>Heavy Duty, large molded aluminum wheel chock with solid bottom, yellow powder coat finish.</p> <p><u>WHEEL CHOCK BRACKETS</u> There shall be one (1) pair of Worden Safety model U815T mounting wheel chock brackets provided. The brackets shall be mounted one in front and one behind the DS rear wheel.</p> <p><u>ANTI-LOCK BRAKE SYSTEM</u> The vehicle shall be equipped with an anti-lock braking system. The ABS shall provide anti-lock braking control on both the front and rear wheels. It shall be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel shall be monitored by the system. When any particular wheel begins to lockup, a signal shall be sent to the control unit. This control unit then shall reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system shall eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.</p> <p><u>AIR COMPRESSOR, BRAKE SYSTEM</u> The air compressor shall have an output of 18.7 cubic feet per minute.</p> <p><u>AIR DRYER</u> An air dryer with a heater shall be provided. Other features of this air dryer include: - Desiccant style filter - In-line filtration system - Automatic purge valve</p> <p><u>AIR INLET</u> A single air inlet with male coupling shall be provided. It shall allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet shall be located in the driver's side cab step area. A check valve shall be provided to prevent reverse flow of air. The inlet shall discharge into the "wet" tank of the brake system. A mating female coupling shall also be provided with the loose equipment.</p> <p><u>AIR OUTLET</u> Two air outlet connections will be installed with a female coupling one in each rear fender area. This system will tie into the "wet" tank of the brake system, include an 85 psi pressure protection valve in the outlet line to prevent the brake system from losing all air, and include a quarter turn shut off valve mounted at the tank. The valve and hoses will be mounted to the tank as high as possible to ensure maximum clearance and protect the lines from being damaged by brush and rocks during off-road operations.</p> <p><u>AIR TANK, AIR HORNS AND TOOLS</u> An additional air tank with 1454 cubic inch displacement shall be provided. The tank shall be used for chassis air horns and powering air tools.</p>		

	Bidder Complies	
	Yes	No
<p>An air tool outlet with a metering valve, located at the driver's side pump panel, shall be provided.</p> <p>The air tank shall be primed and painted to meet a minimum 750-hour salt spray test. To reduce the effects of corrosion, the air tank shall be mounted with stainless steel brackets (no exception).</p> <p>The output flow of the engine air compressor varies with engine RPM. Full compressor output is only achieved at governed engine speed. Engine speed may be limited by generators, pumps, and other PTO driven options.</p> <p><u>ENGINE</u></p> <ul style="list-style-type: none"> • Model: Electronic Cummins L9 • Number of Cylinders: Six (6) • Bore and Stroke: 4.49" x 5.69" • Displacement: 543 cubic inches (8.9 Liter) • Rated Brake Horsepower: 350 at 2000 rpm • Peak Torque: 1000 at 1400 rpm • Governed rpm: 2200 • Turbocharger • Charge Air Cooled • Fuel System: Hydraulically Actuated, Electronically Controlled Unit Injectors (HEUI) <p><u>ENGINE ACCESSORIES</u></p> <ul style="list-style-type: none"> • Air Cleaner: Dry type, with restriction indicator in cab • Fuel Filters: Dual, with check valve • Governor: Limiting speed type • Lube Oil Cooler • Lube Oil Filter: Full flow • Starting Motor: 12-volt 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • Oil Fill and Level Gauge <p><u>RADIATOR</u></p> <ul style="list-style-type: none"> • Pressurized System, Tube and Fin • Deaeration Tank and Sight Glass • Anti-Freeze Protection -30 Degrees Fahrenheit <p><u>HIGH IDLE</u></p> <p>A high idle switch shall be provided on the instrument panel inside the cab. Activating the switch shall cause the vehicle to automatically maintain a preset engine rpm.</p> <p>The high idle switch shall be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light shall be provided adjacent to the switch. The light shall be labeled "OK to Engage High Idle."</p> <p><u>ENGINE BRAKE</u></p> <p>A Cummins C-Brake engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver. The driver shall be able to turn the brake system "On" or "Off" and have at least a "High & Low" setting.</p> <p><u>FUEL/WATER SEPARATOR</u></p> <p>A Detroit fuel/water separator shall be provided on the chassis. It shall include a "water in fuel" sensor, hand primer and a 12-volt pre-heater.</p> <p><u>AIR INTAKE, w/EMBER SEPARATOR</u></p> <p>The air inlet shall be equipped with a stainless-steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.</p> <p>This shall comply with NFPA 1901 and 1906 standards.</p> <p><u>EXHAUST SYSTEM</u></p> <p>The exhaust system shall include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF and SCR shall be mounted horizontally outside of the frame rails in the right-side front step area.</p> <p><u>EXHAUST MODIFICATIONS</u></p> <p>The exhaust shall terminate with a horizontal tailpipe and diffuser ahead of the right-side rear wheels.</p> <p>A heat deflector shield shall be provided where the tail pipe is routed under any side compartmentation.</p> <p>All modifications shall be approved by the chassis engine manufacturer and/or the chassis OEM. Exhaust treatment devices shall not be altered.</p>		

	Bidder Complies	
	Yes	No
<p><u>COOLANT LINES</u> Gates Blue Stripe rubber hose shall be used for all engine coolant lines installed by the chassis manufacturer.</p> <p>Hose clamps shall be of a design commonly called constant torque type to prevent coolant leakage. They shall react to temperature changes in the cooling system and expand or contract accordingly while maintaining a constant clamping pressure on the hose.</p> <p><u>FUEL TANK</u> A 50-gallon fuel tank shall be provided and mounted at the left-hand cab step. The tank shall be constructed of aluminum.</p> <p><u>DIESEL EXHAUST FLUID TANK</u> A diesel exhaust fluid (DEF) tank shall be provided and mounted on the left side, below the cab.</p> <p>The tank shall be sized by the chassis manufacturer based on the engine provided. It shall include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.</p> <p><u>FUEL PRIMER PUMP</u> A fuel primer pump shall be included with the heated fuel water separator.</p> <p><u>TRANSMISSION</u> An Allison, model 3000 EVS, electronic torque converting automatic transmission shall be provided. To qualify for the EVS rating, the transmission shall be filled with synthetic transmission fluid.</p> <p>Two (2) PTO openings shall be located on left and right side of the converter housing (positions 8 o'clock and 4 o'clock).</p> <p>A transmission temperature gauge or warning light shall be installed on cab instrument panel.</p> <p><u>TRANSMISSION SHIFT CONTROL</u> A push button shift module shall be mounted to right of driver. Shift position indicator shall be indirectly lit for after dark operation.</p> <p>The transmission shall be a five (5)-speed.</p> <p><u>TRANSMISSION COOLER</u> A transmission oil cooler shall be provided in a tank of the radiator.</p> <p><u>DOWNSHIFT MODE (w/engine brake)</u> The transmission shall be provided with an aggressive downshift mode.</p> <p>This shall provide earlier transmission downshifts to 2nd gear, resulting in improved engine</p>		

	Bidder Complies	
	Yes	No
<p>braking performance.</p> <p><u>DRIVELINE</u> Drivelines shall be a heavy-duty metal tube equipped with universal joints properly sized for the application. A splined slip joint shall be provided in each driveshaft.</p> <p><u>STEERING</u> The steering system shall be hydraulically driven. The steering column shall have an adjustable tilt and telescope feature.</p> <p><u>WINCH</u> A Warn, multi-mount, 9,000 lb. portable 12V electric winch shall be provided.</p> <p>The winch shall mount to the vehicle receiver hitch and be held in place with a locking hardened pin.</p> <p>The winch shall be provided with 125 feet of .313" galvanized cable with a replaceable clevis hook.</p> <p>A minimum of a 30' remote control shall be provided.</p> <p>A label shall be placed on or near the receiver that states the maximum winch load rating and the maximum rope load rating that the receiver can support.</p> <p><u>FRONT WINCH</u> A Warn Series 12, 12,000 lb. electric winch shall nest below the top aluminum treadplate surface of the front bumper. A 28.00" x 10.00" door for maintenance and access to the winch direction control lever and remote-control plug shall be provided. The cover shall be provided with a mechanical stay arm hold-open device.</p> <p>Winch shall be mounted on a surface that shall not flex when the winch is in use, since it could bind working parts of the winch.</p> <p>Winch shall be braced by a three (3) point mount, as recommended by the winch manufacturer.</p> <p>Winch shall have 125 feet of .375" galvanized wire rope with hook, pre spooled on drum (14,400-pound rating).</p> <p>Winch shall have planetary gearing. Electric motor shall have a thermal overload protection switch.</p> <p>Wire cables to battery shall be two (2) gauge or larger. Speed and amperage draw of winch shall be variable depending on winch load.</p> <p>An accessory remote-control cable, a minimum of 25' or longer, shall be supplied.</p>		

	Bidder Complies	
	Yes	No
<p>A chrome four (4) way roller fairlead shall be supplied of sufficient strength to accommodate the winch capacity.</p> <p>A label shall be placed on or near the mount that states the maximum winch load rating and the maximum rope load rating that the mount can support.</p> <p><u>BUMPER</u> A one (1)-piece, 10.00" high, stainless steel bumper shall be attached to the front of the frame.</p> <p>A 9.00" channel shall be mounted directly behind the bumper for additional strength.</p> <p>The bumper shall be extended 19.00" from the front face of the cab.</p> <p><u>GRAVEL PAN</u> A gravel pan, constructed of bright aluminum treadplate, shall be furnished between the bumper and cab face. The gravel pan shall be properly supported from the underside to prevent flexing and vibration of the aluminum treadplate.</p> <p><u>CENTER HOSE TRAY</u> A hose tray, constructed of aluminum, shall be placed in the center of the bumper extension.</p> <p>The tray shall have a capacity of 125' of 1.75" double jacket cotton-polyester hose.</p> <p>Black rubber grating shall be provided at the bottom of the tray. Drain holes are also provided.</p> <p><u>CENTER HOSE TRAY RESTRAINT</u> There shall be one (1) pair of hose tray restraint straps located over the center mounted tray.</p> <p>The restraints shall be a pair of 2.00" wide black nylon straps with Velcro® fasteners provided. The strap(s) shall be used to secure the hose in the tray.</p> <p><u>RIGHT SIDE TOOLBOX</u> The front bumper extension shall have an aluminum tool/chain box installed on the right side. The box shall be raised 1.50" above the gravel pan.</p> <p><u>Toolbox Cover</u> A bright aluminum treadplate cover shall be provided.</p> <p>The cover shall be attached with a stainless-steel hinge.</p> <p>A single D-ring latch shall secure the cover in the closed position and a mechanical stay arm shall hold the cover in the open position.</p>		

	Bidder Complies	
	Yes	No
<p><u>TOW HOOKS</u> Two (2) chromed steel tow hooks shall be installed under the bumper and attached to the front frame members. The tow hooks shall be designed and positioned to allow up to a 6,000 lb. straight horizontal pull in line with the centerline of the vehicle. The tow hooks shall not be used for lifting of the apparatus.</p> <p><u>CAB</u> A 4-door, high-roof cab shall be provided. The cab and doors shall be of an aluminum construction.</p> <p><u>Exterior Styling</u> Aerodynamic hood and windshield</p> <p>Tinted Glass in all Windows</p> <p>Fiberglass hood with mounted plastic grille.</p> <p>Single 63"x14" rear window (unless deleted by the customer - option elsewhere in specification)</p> <p><u>Interior</u> Air bag rear cab suspension Gray vinyl mats Forward roof mounted console Two (2) dash-mounted cup holders, right-hand and left-hand Gray Vinyl Upholstery Dual Sun visors Fresh Air Heater and Defroster</p> <p><u>CAB INTERIOR w/CONVENIENCE PACKAGE</u> The cab upholstery shall be gray vinyl.</p> <p>The cab interior shall include wood grain driver and center instrument panels, molded plastic door panels with vinyl inserts and brushed aluminum lower door kick plates.</p> <p><u>CAB GRILLE - CHROMED</u> The cab grille shall be a chromed high impact plastic with a horizontal rib design. The headlight bezels and air intake grilles shall also have a chromed finish. The grille shall tilt with the hood.</p> <p><u>MIRRORS</u> West Coast style heated; remote operated mirrors constructed from a molded composite material with a bright finish shall be provided. A heated 8.00" convex mirror shall be included below the primary mirrors. An auxiliary down view mirror shall be included on the passenger side.</p>		

	Bidder Complies	
	Yes	No
<p><u>CAB ACCESS STEPS</u></p> <p>The cab access steps shall be provided by the apparatus manufacturer. The steps shall be a two (2) step design fabricated from bright aluminum treadplate. The step assembly shall enclose the area under the cab and be continuous from front to rear. The fuel and DEF tank fill caps shall be exposed for refueling if located under the cab. Access shall be provided to inspect the chassis batteries when located under the cab.</p> <p><u>COMPARTMENT, STORAGE</u></p> <p>A storage compartment shall be provided under the crew cab in the left-side step area. An aluminum treadplate drop-down door with a rubber seal shall be provided on the compartment. The door shall have a single pan construction.</p> <p><u>COMPARTMENT, STORAGE</u></p> <p>A storage compartment shall be provided under the crew cab in the right-side step area. An aluminum treadplate drop-down door with a rubber seal shall be provided on the compartment. The door shall have a single pan construction.</p> <p><u>STEP LIGHTS</u></p> <p>There shall be four (4) white LED step lights provided. There shall be one (1) light installed at each cab door, one (1) light per doorstep.</p> <p>In order to ensure exceptional illumination, each light shall provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.</p> <p>The lights shall be activated when the adjacent door is opened.</p> <p><u>DAYTIME RUNNING LIGHTS</u></p> <p>The chassis shall be provided with daytime running lights.</p> <p><u>AIR CONDITIONING</u></p> <p>An air conditioner shall be provided that is integral with heater and defroster system.</p> <p><u>AIR CONDITIONING EMBER FILTER</u></p> <p>An ember filter shall be provided by the apparatus manufacturer to keep embers out of the HVAC filter element.</p> <p>The air inlet shall be equipped with a stainless-steel mesh to separate water and burning embers from the HVAC air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.</p> <p>This shall comply with NFPA 1901 and 1906 standards.</p> <p><u>ENGINE COMPARTMENT LIGHTS</u></p> <p>Two (2) engine compartment lights shall be installed under the engine hood, of which the</p>		

	Bidder Complies	
	Yes	No
<p>switches are an integral part.</p> <p><u>STORAGE CONSOLE</u> There shall be a console located between the front seats with room for map storage, the siren head, and a radio. There shall be four (4) sections for map storage to the rear of the console. Each map storage section shall be approximately 4.00" wide x 13.00" long x 12.25" deep. The console shall be constructed of smooth aluminum and painted black.</p> <p><u>SEATING CAPACITY</u> The seating capacity in the cab shall be four (4).</p> <p><u>SEATING</u> Seating inside the cab shall consist of an air-ride driver seat and a fixed companion seat.</p> <p><u>SEATING (crew cab)</u> Two (2) individual Seats Inc. #911 non-SCBA style high back non-suspension seats shall be provided inside the crew cab in the outboard positions.</p> <p>An under-seat storage area is included. These seats shall be NFPA compliant.</p> <p><u>EMS COMPARTMENT</u> An EMS compartment measuring approximately 44.00" high x 18.00" wide x 24.00" deep will be provided. The compartment will be installed between the outboard crew cab seats against the back wall of the cab, with the door facing forward. The interior of the cabinet will have a flat bottom, mounted to a riser to follow the contour of the cab floor. The type of door installed will be a white Amdor roll up door. The door opening will be as large as practical based on the compartment size.</p> <p>The compartment will be constructed of smooth aluminum and painted to match the cab interior.</p> <p>One adjustable shelf shall be provided.</p> <p><u>COMPARTMENT LIGHT</u> Lighting inside the compartment will consist of 2 Amdor Red strip lights will be provided. Lighting will be controlled by an automatic door switch.</p> <p>This storage compartment will be compliant per NFPA Standard for Automotive Fire Apparatus.</p> <p><u>SEAT BELT WEB LENGTH</u> NFPA 14.1.3.2 and 14.1.3.3 requires effective seat belt web length for a Type 1 lap belt for pelvic restraint to be a minimum of 60 in., and a Type 2 pelvic and upper torso restraint-style seat belt assembly to be a minimum of 110 in.</p> <p>Per Lifesaving Crew specification of a commercial chassis, this apparatus shall have seat belts of the required length. These belts shall provide sufficient length for large rescue fighters in bunker gear. This apparatus shall be compliant to NFPA standards effective at</p>		

	Bidder Complies	
	Yes	No
<p>time of contract execution.</p> <p><u>SEAT BELTS</u> All seating positions in the cab and crew cab shall have highly visible (orange) seat belts.</p> <p><u>HELMET STORAGE PROVIDED BY DEPARTMENT</u> NFPA 1901, 2016 edition, section 14.1.7.4.1 requires a location for helmet storage be provided.</p> <p>There is no helmet storage on the apparatus as manufactured. The lifesaving crew shall provide a location for storage of helmets.</p> <p><u>HANDHELD LIGHT</u> There will be four (4) Streamlight, Fire Vulcan, Model #44451, hand lights provided with a vehicle mount with 12VDC direct wire charging rack and quick release buckle strap mounted to be determined at preconstruction meeting.</p> <p>Each light housing will be orange in color and be provided with a C4, LED and two (2) "ultra-bright blue tail-light LEDs". The tail-light LEDs will have a dual mode of blinking or steady.</p> <p><u>CAB INSTRUMENTS</u></p> <ul style="list-style-type: none"> - Engine Temperature Gauge and Warning Buzzer - Engine Oil Pressure Gauge and Warning Buzzer - Speedometer with Odometer - Engine Tachometer - Engine Hourmeter - Fuel Level Gauge - DEF Level Gauge and Warning Lamp - Voltmeter: Low voltage red warning light and audible alarm - Air Brake Pressure Gauge - Air Restriction Indicator - Circuit Breakers: For overload protection of electric circuits - Ignition Switch: Keyless type <p><u>EMERGENCY SWITCH PANEL</u> An emergency switch panel shall be provided in the cab. The switch panel shall be located overhead and on the cab instrument panel.</p> <p><u>"DO NOT MOVE APPARATUS" INDICATOR</u> A flashing red indicator light (located in the driving compartment) shall be illuminated automatically per the current edition of NFPA. The light shall be labeled "Do Not Move Apparatus If Light Is On".</p> <p>The same circuit that activates the Do Not Move Apparatus indicator shall not activate any alarm when the parking brake is released.</p>		

	Bidder Complies	
	Yes	No
<p><u>OPEN DOOR INDICATOR LIGHT</u> A red "open door" indicator light shall be provided inside the cab, in clear view of the driver, to warn of an open compartment door.</p> <p><u>WIPER CONTROL</u> Wiper control shall include an intermittent feature and windshield washer controls.</p> <p><u>CUSTOMER SUPPLIED RADIO WIRING</u> There shall be two (2) 12-volt combination wiring leads of which each shall include one (1) battery switched, one (1) ignition and one (1) negative for use with radio equipment.</p> <p>Each lead shall be 18.00" long and be provided in the center console with antennae leads. The leads shall be clearly marked in a coil and terminate with butt splices.</p> <p>A breaker rated for 30 amps shall be provided for circuit protection of the battery switched lead with a minimum of 10-gauge wire.</p> <p>A breaker rated for 7.5 amps shall be provided for circuit protection of the ignition lead.</p> <p>The wires shall be colored coded as follows:</p> <ul style="list-style-type: none"> • red for battery switched • yellow for ignition • black for ground <p><u>SPARE CIRCUIT</u> There shall be one (1) pair of wires, including a positive and a negative, installed on the apparatus.</p> <p>The above wires shall have the following features:</p> <ul style="list-style-type: none"> • The positive wire shall be connected directly to the battery power • The negative wire shall be connected to ground • Wires shall be protected to 6-amps at 12-volts DC • Power and ground shall terminate in the switch panel Center Console area. • Termination shall be a Kussmaul part number 091-219-5, switch panel dual USB charger socket. • Wires shall be sized to 125% of the protection <p>This circuit(s) may be load managed when the parking brake is applied.</p>		

	Bidder Complies	
	Yes	No
<p><u>SPARE CIRCUIT</u></p> <p>There shall be two (2) pair of wires, including a positive and a negative, installed on the apparatus.</p> <p>The above wires shall have the following features:</p> <ul style="list-style-type: none"> • The positive wire shall be connected directly to the battery power • The negative wire shall be connected to ground • Wires shall be protected to 15-amps at 12-volts DC • Power and ground shall terminate in the center console area • Termination shall be with 15-amp, power point plug with rubber cover • Wires shall be sized to 125% of the protection <p>The circuit(s) may be load managed when the parking brake is set.</p> <p><u>VEHICLE DATA RECORDER</u></p> <p>There shall be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.</p> <p>The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR shall be available to download on-line.</p> <p>The vehicle data recorder shall be capable of recording the following data via hardwired and/or CAN inputs:</p> <ul style="list-style-type: none"> • Vehicle Speed - MPH • Acceleration - MPH/sec • Deceleration - MPH/sec • Engine Speed - RPM • Engine Throttle Position - % of Full Throttle • ABS Event - On/Off • Seat Occupied Status - Yes/No by Position • Seat Belt Buckled Status - Yes/No by Position 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • Master Optical Warning Device Switch - On/Off • Time - 24 Hour Time • Date - Year/Month/Day <p>The system shall also be capable of no additional functionality required.</p> <p>An additional input shall be included with this system. When the VDR is active, this input shall not be required.</p> <p><u>Seat Belt Monitoring System</u></p> <p>A seat belt monitoring system (SBMS) shall be provided. The SBMS shall be capable of monitoring up to six (6) seating positions indicating the status of each seat position per the following:</p> <ul style="list-style-type: none"> • Seat Occupied & Buckled = Green LED indicator illuminated • Seat Occupied & Unbuckled = Red LED indicator with audible alarm • No Occupant & Buckled = Red LED indicator with audible alarm • No Occupant & Unbuckled = No indicator and no alarm <p>The SBMS shall include an audible alarm that shall warn that an unbuckled occupant condition exists, and the parking brake is released, or the transmission is not in park.</p> <p><u>RADIO ANTENNA MOUNT</u></p> <p>There shall be two (2) standard 1.125", 18 thread antenna-mounting base(s) installed on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the center console. A weatherproof cap shall be installed on the mount.</p> <p><u>VEHICLE CAMERA SYSTEM</u></p> <p>There shall be a color vehicle camera system provided with the following:</p> <ul style="list-style-type: none"> • One (1) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse. • One camera for each side outfitted for passenger and drivers side view. <p>The camera image shall be displayed on a 7.00" LCD display located centered overhead between the sun visors. The display shall include manual camera activation capability and audio from the active camera.</p> <p>The following components will be included:</p> <ul style="list-style-type: none"> • One (1) MO700136DC, display 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • Three (3) SV-CW134639CAI, cameras • All necessary cables <p><u>ELECTRICAL</u></p> <p>All 12-volt electrical equipment installed by the apparatus manufacturer shall conform to modern automotive practices. All wiring shall be high temperature crosslink type. Wiring shall be run in loom or conduit where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers shall be provided which conform to SAE Standards. Wiring shall be color, function, and number coded. Function and number codes shall be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors shall be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture, and automotive fluids. Electrical wiring and equipment shall be installed utilizing the following guidelines:</p> <p>(1) All holes made in the roof shall be caulked with silicon. Rope caulk is not acceptable. Large fender washers, liberally caulked, shall be used when fastening equipment to the underside of the cab roof.</p> <p>(2) Any electrical component that is installed in an exposed area shall be mounted in a manner that shall not allow moisture to accumulate in it. Exposed area shall be defined as any location outside of the cab or body.</p> <p>(3) Electrical components designed to be removed for maintenance shall not be fastened with nuts and bolts. Metal screws shall be used in mounting these devices. Also, a coil of wire shall be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.</p> <p>(4) Corrosion preventative compound shall be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections shall require this compound in the plug to prevent corrosion and for easy separation (of the plug).</p> <p>(5) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.</p> <p>(6) All electrical terminals in exposed areas shall have silicon (1890) applied completely over the metal portion of the terminal. All emergency light switches shall be mounted on a separate panel installed in the cab. A master warning light switch and individual switches to be provided to allow pre-selection of emergency lights. The light switches shall be "rocker" type with an internal indicator light to show when switch is energized. All switches shall be properly identified and mounted in a removable panel for ease in servicing. Identification of the switches shall be done by either printing or etching on the switch panel. The switches and identification shall be illuminated.</p> <p>All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, shall be furnished. Rear identification lights shall be recessed mounted for protection.</p>		

	Bidder Complies	
	Yes	No
<p>Lights and wiring mounted in the rear bulkheads shall be protected from damage by installing a false bulkhead inside the rear compartments.</p> <p>An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.</p> <p>The results of the tests shall be recorded and provided to the purchaser at time of delivery.</p> <p><u>BATTERY SYSTEM</u></p> <p>A single starting battery system shall be provided consisting of two (2) 12-volt, maintenance-free batteries. The battery system shall have a total of 2000 CCA.</p> <p><u>Jump Start Connections</u></p> <p>Positive and negative posts for jump starting shall be provided by the chassis manufacturer. They shall be frame mounted and located under the hood.</p> <p><u>BATTERY SYSTEM MODIFICATION</u></p> <p>Due to specific apparatus configuration requirements, the batteries shall be relocated to the driver's side crew cab step by the apparatus manufacturer. An enclosure with an access panel shall protect the batteries.</p> <p><u>MASTER BATTERY SWITCH</u></p> <p>A master battery switch, to activate the battery system, shall be provided inside the cab within easy reach of the driver.</p> <p>The master battery disconnect switch shall be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.</p> <p>A green "battery on" indicator light, visible from the driver's position, shall be provided.</p> <p><u>BATTERY CHARGER</u></p> <p>There shall be a Kussmaul, Model 091-216-20/20, 40-amp battery charger with internal battery saver provided. Separate ammeters shall be provided on the charger to indicate charge and saver output.</p> <p>The battery saver circuit shall be capable of supplying up to 20 amps for external loads such as hand lights or auxiliary radio batteries.</p> <p>The battery charger shall be wired to the AC shoreline inlet through an AC inlet on the front of the battery charger.</p> <p>The battery charger shall be located in the left body compartment mounted on the left wall as high as possible.</p> <p><u>KUSSMAUL AUTO EJECT FOR SHORELINE</u></p> <p>There shall be one (1) Kussmaul Model 091-55-15-120, 15-amp 120-volt AC shoreline inlet(s) provided to operate the dedicated 120-volt AC circuits on the apparatus without the</p>		

	Bidder Complies	
	Yes	No
<p>use of the generator.</p> <p>The shoreline inlet(s) shall include red weatherproof flip up cover(s). There shall be a release solenoid wired to the vehicle's starter to eject the AC connector when the engine is starting.</p> <p>The shoreline(s) shall be connected to battery charger.</p> <p>There shall be a mating connector body supplied with the loose equipment.</p> <p>There shall be a label installed near the inlet(s) that state the following:</p> <ul style="list-style-type: none"> • Line Voltage • Current Rating (amps) • Phase • Frequency <p>The shoreline receptacle shall be located on the driver's side cab step area.</p> <p><u>ELECTRIC POWER FOR WINCH</u> Electric power provisions shall be furnished for the portable winch from the chassis battery system.</p> <p>The receiver plug shall be located Both sides and rear.</p> <p>A total quantity of three (3) receptacles shall be provided.</p> <p><u>ALTERNATOR</u> The alternator shall be a Delco with a capacity of 12-volt 300 amp.</p> <p><u>ELECTRONIC LOAD MANAGEMENT</u> A Kussmaul Load Manager 2 shall be provided on the apparatus. The device is an electronic load management (ELM) system that monitors the vehicles 12-volt electrical system, and automatically reduces the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.</p> <p>The ELM shall monitor the vehicle's voltage while at the scene (parking brake applied). It shall sequentially shut down individual electrical loads when the system voltage drops below a preset value. Two (2) separate electrical loads shall be controlled by the load manager. The ELM shall sequentially re-energize electrical loads as the system voltage recovers.</p> <p><u>EXTERIOR LIGHTING</u> Exterior lighting shall meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at</p>		

	Bidder Complies	
	Yes	No
<p>time of proposal.</p> <p>Five (5) LED clearance and marker lights shall be installed across the leading edge of the cab.</p> <p><u>INTERMEDIATE LIGHT</u> There shall be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light shall double as a turn signal and marker light.</p> <p><u>REAR CLEARANCE/MARKER/ID LIGHTING</u> There shall be a three (3) LED light bar used as identification lights located at the rear of the apparatus per the following:</p> <ul style="list-style-type: none"> • As close as practical to the vertical centerline • Centers spaced not less than 6.00" or more than 12.00" apart • Red in color • All at the same height <p>There shall be two (2) LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:</p> <ul style="list-style-type: none"> • To indicate the overall width of the vehicle • One (1) each side of the vertical centerline • As near the top as practical • Red in color • To be visible from the rear • All at the same height <p>There shall be two (2) LED lights installed on the side of the apparatus used as marker lights as close to the rear as practical per the following:</p> <ul style="list-style-type: none"> • To indicate the overall length of the vehicle • One (1) each side of the vertical centerline • As near the top as practical 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • Red in color • To be visible from the side • All at the same height <p>There shall be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.</p> <p>There shall be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.</p> <p>Per FMVSS 108 and CMVSS 108 requirements.</p> <p><u>REAR FMVSS LIGHTING</u></p> <p>There shall be the following stop/tail and directional lighting provided at the rear of the truck:</p> <ul style="list-style-type: none"> • Two (2) Whelen®, Model 60BTT*, red LED stop/taillights with clear lenses • Two (2) Whelen, Model 60A00TAR, amber LED directional lights <p>The lights shall be mounted with a Whelen, Model 6EFLANGE, chrome flange.</p> <p>Two (2) Whelen Model 60C00VCR, LED backup lights with 6E or 64 flange kit shall be provided.</p> <p><u>LICENSE PLATE BRACKET</u></p> <p>There shall be one (1) license plate bracket mounted on the rear of the body.</p> <p>A white LED light shall illuminate the license plate. A stainless-steel light shield shall be provided over the light that shall direct illumination downward, preventing white light to the rear.</p> <p><u>BACK-UP ALARM</u></p> <p>A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse shall be provided. The device shall sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.</p> <p><u>CAB PERIMETER SCENE LIGHTS</u></p> <p>There shall be four (4) Truck-Lite, Model 6060C, white LED lights with grommets provided, one (1) for each cab and crew cab door.</p> <p>These lights shall be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.</p>		

	Bidder Complies	
	Yes	No
<p><u>BODY PERIMETER SCENE LIGHTS</u></p> <p>There shall be two (2) Truck-Lite, Model 6060C, white LED lights with grommets provided under at the rear step area of the body, one (1) each side shining to the rear. The perimeter scene lights shall be activated when the parking brake is applied.</p> <p><u>ADDITIONAL PERIMETER LIGHTS</u></p> <p>There shall be two (2) lights in addition to the normal body perimeter lights installed Under Compt LS1, 1lt and Under Compt RS1, 1lt.</p> <p>These additional lights shall be Truck-Lite, Model 6060C, 6.00" oval white LED light(s) with rubber grommet(s).</p> <p><u>SIDE SCENE LIGHTS</u></p> <p>There shall be two (2) HiViz, Model FT-GSM, 10,000 equivalent lumens 8.65" high x 10.61" wide x 2.75" deep light(s) with white LEDs installed on the side of the apparatus, one (1) high and forward on passenger's side body and one (1) high and rearward on passenger's side body.</p> <p>The light(s) shall be activated by a switch at the driver's side switch panel.</p> <p>The light(s) may be load managed when the parking brake is applied.</p> <p><u>SIDE SCENE LIGHTS</u></p> <p>There shall be two (2) HiViz, Model FT-GSM, 10,000 equivalent lumens 8.65" high x 10.61" wide x 2.75" deep light(s) with white LEDs installed on the side of the apparatus, one (1) high and forward on driver's side body and one (1) high and rearward on driver's side body.</p> <p>The light(s) shall be activated by a switch at the driver's side switch panel.</p> <p>The light(s) may be load managed when the parking brake is applied.</p> <p><u>12 VOLT LIGHTING</u></p> <p>There shall be one (1) Whelen®, Model P*H2*, 17,750 lumens light(s) with white LEDs and a combination of flood and spot optics, mounted on a special bracket painted exterior cab roof color, provided on the front of the cab roof, centered.</p> <p>The painted parts of this light assembly to be white.</p> <p>The scene light(s) shall be activated by a switch at the driver's side switch panel.</p> <p>The light(s) may be load managed when the parking brake is applied.</p> <p><u>REAR SCENE LIGHT(S)</u></p> <p>There shall be two (2) HiViz Model FT-GSM, 8.50" high x 10.51" long x 2.75" deep 6,500 measured lumens scene lights with white LEDs and trim installed at the rear of the</p>		

	Bidder Complies	
	Yes	No
<p>apparatus.</p> <p>The lights shall be controlled by a switch at the driver's side switch panel and when the emergency master switch is activated, and the transmission is shifted into reverse.</p> <p><u>RESCUE BODY CONSTRUCTION</u></p> <p>The rescue body shall consist of individual compartment modules, that are welded together to form the body. Welders that are certified to the standards of AWS shall perform all welding on the modules and body assembly.</p> <p><u>Module Fabrication</u></p> <p>Compartment modules shall be built in a fixture that shall ensure correct tolerances. The design of the module shall allow all welding to be performed in areas that are not visible after the body is assembled. All compartments shall be supported on the top, sides, and bottom. All modules shall be designed to provide maximum storage space. Each module shall have side walls that are not common with any other compartment. The compartment floors shall be a sweep out design, with the floor higher than the compartment door frame.</p> <p><u>Body Assembly</u></p> <p>The modules shall be coupled in a fixture and welded together to form the body. The body shall be built as a separate component prior to being mounted onto the substructure. All primary, load bearing structures shall be welded. All secondary, non-load bearing body panels shall be fastened to the primary structure with the use of an elastic adhesive.</p> <p><u>Body Panel Installation</u></p> <p>Body panels that are non-load bearing shall be bonded with an elastic adhesive. The use of an adhesive shall reduce the possibility of corrosion, provide sound deadening, and increase the torsional strength of the assembly over conventional methods of fastening. All surfaces that require bonding shall be sanded or painted. A cleaner shall be applied to all mating surfaces. An industrial adhesive shall be applied, and the panels shall be installed on to the body framework. Documented installation procedures, approved by the adhesive manufacturer, shall be followed to ensure a good bond.</p> <p><u>RESCUE BODY CONSTRUCTION and SUPPORT STRUCTURE</u></p> <p>The rescue body shall be of all aluminum construction. The body shall use .12" (3 mm) and .18" (5 mm) 5052 aluminum alloy with a tensile strength of 38,000 psi and yield strength of 31,000 psi. The structural support framing used shall be 1.00" (25 mm) x 2.00" (51 mm), .12" (3 mm) wall thickness aluminum alloy tubing and 2.00" (51 mm) square, .12" (3 mm) wall thickness 6061 aluminum alloy tubing. The body shall be properly welded into a unitized construction. Proper reinforcing and supports shall be utilized throughout all construction to ensure strength and rigidity.</p> <p><u>Side Compartment Support</u></p> <p>The substructure for the body shall not be integral with the body but be a separate assembly.</p> <p>An underslung steel angle grid shall support the bottom of each lower compartment floor.</p>		

	Bidder Complies	
	Yes	No
<p>The underslung support shall be constructed of a minimum .50" (13 mm) x 2.50" (64 mm) x 2.50" (64 mm) steel angle vertical support. The horizontal members shall be a minimum .38" (10 mm) x 2.00" (51 mm) x 3.00" (76 mm) and .38" (10 mm) x 2.50" (64 mm) x 3.50" (89 mm) steel angle. The compartment floors shall be bolted to the underslung substructure. The support shall transfer major stress to the chassis frame and not through the body.</p> <p>The complete substructure shall be washed, primed and finish painted before being bolted to the chassis frame. The substructure shall be bolted to the chassis frame rails with grade eight (8) bolts.</p> <p>A .75" x 3.00" rubber pad shall be fastened to the substructure in all areas that contact the body. The rubber shall serve as an isolator between the substructure and body. The rubber shall also allow body flex without damage.</p> <p>The body shall be secured to the sub structure in a minimum of six (6) locations with .38" (10 mm) diameter bolts.</p> <p><u>Rear Side Compartment Support</u></p> <p>The chassis frame rails shall be cut short behind the rear axle. An underslung steel compartment support shall be assembled and bolted to the rear frame rails. The compartment support shall be constructed as follows:</p> <p>The lower frame member, on each side, shall be a minimum of 3.00" (76 mm) x 6.00" (152 mm) x .38" (10 mm) steel tube. The length of the tube shall be determined by the width of the rear compartment. The remainder of the compartment support assembly shall consist of structural steel channel, tubing, and angles welded to the lower frame members.</p> <p>The complete substructure shall be washed, primed and finish painted before being attached to the chassis frame.</p> <p>A .75" x 3.00" rubber pad shall be fastened to the substructure in all areas that contact the body. The rubber shall serve as an isolator between the substructure and body. The rubber shall also allow body flex without damage.</p> <p>The body shall be secured to the sub structure in a minimum of four (4) locations with .38" (10 mm) diameter bolts.</p> <p><u>Compartment Loading</u></p> <p>The 42.00" (1067 mm) compartment module, ahead of the rear wheels, shall be capable of holding 1,000 pounds (454 kg) on each side of the truck (2,000 pounds 908 kg total). The 74.00" (1,880 mm) compartment module, over the rear wheels, shall be capable of holding 1,000 pounds (454 kg) on each side of the truck (2,000 pounds 908 kg total). The 42.00" (1067 mm) compartment module, behind the rear wheels, shall be capable of holding 1,000 pounds (454 kg) on each side of the truck (2,000 pounds 908 kg total). Strain gauge test certification of the compartment loading capacities shall be provided upon request.</p>		

	Bidder Complies	
	Yes	No
<p><u>Roof Construction</u></p> <p>The roof shall be .12" (3 mm) 3003 bright aluminum alloy treadplate. The roof shall be supported with 1.00" (25 mm) x 2.00" (51 mm) aluminum alloy tubing, .12" (3 mm) wall thickness and 2.00" (51 mm) square, .12" (3 mm) wall thickness 6061 aluminum alloy tubing welded in place approximately 16.00" (406 mm) on center. The roof perimeter shall be covered with a 2.00" treadplate trim panel to provide a protective edge.</p> <p><u>Body Size</u></p> <p>The overall length of the body shall be 168.00" (4,267 mm). The height of the body shall be 92.00" (2,337 mm). The total storage space available in the body shall be 544 cubic feet (15.4 cubic meters).</p> <p><u>ROLLUP DOOR, SIDE COMPARTMENTS</u></p> <p>There shall be six (6) compartment doors installed on the side compartments, double faced, aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by Gortite®.</p> <p>Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.</p> <p>Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from 180 to -40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene.</p> <p>All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from 300 to -40 degrees Fahrenheit. Hardened plastic shall not be acceptable.</p> <p>A polished stainless-steel lift bar to be provided for each roll-up door. The lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door.</p> <p>Door(s) shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surfaces shall be concave to provide strength and prevent loose equipment from jamming the door from inside.</p> <p>To conserve space in the compartment(s), the spring roller assembly shall not exceed 3.00" in diameter. A rollup door that retracts below the compartment ceiling (garage door style) shall not acceptable.</p> <p>The header for the rollup door assembly shall not exceed 4.00".</p> <p>A heavy-duty magnetic switch shall be used for control of open compartment door warning lights.</p>		

	Bidder Complies	
	Yes	No
<p><u>LEFT FORWARD COMPARTMENT</u> Located behind the cab shall be the first compartment. The compartment dimensions shall be 42.00" wide x 85.75" high x 26.00" deep at the floor level. The area over the frame rails shall be 42.00" wide x 63.75" high and shall extend through to the right side of the body. The compartment clear door opening shall be 39.50" wide x 69.00" high.</p> <p><u>MOUNTING TRACKS</u> Installed in all of the compartments on the vehicle shall be mounting tracks for accessories such as trays and shelves.</p> <p><u>LEFT OVER WHEEL COMPARTMENT</u> Located above the rear wheels shall be a compartment. The compartment dimensions shall be 74.00" (1,880 mm) wide x 53.00" (1,346 mm) high. The depth shall extend through to the right side of the body. The compartment clear door opening shall be 71.50" (1,816 mm) wide x 36.25" (921 mm) high.</p> <p>The compartment shall have support structure to provide 1,500 lb. (680 kg) per side for a total compartment load rating of 3,000 lb. (1,361 kg).</p> <p><u>Wheel Well Area</u> The rear fender shall be an integral part of the body and compartment modules. The inside of the fender shall be fitted with a full circular inner fender liner constructed of aluminum.</p> <p><u>LEFT REAR COMPARTMENT</u> Located behind the rear wheels shall be a compartment. The compartment dimensions shall be 42.00" (1,067 mm) wide x 85.75" (2,178 mm) high x 26.00" (660 mm) deep at the floor level. The depth shall extend through to the right side of the body. The compartment clear door opening shall be 39.50" (1,003 mm) wide x 69.00" (1,753 mm) high.</p> <p><u>RIGHT FORWARD COMPARTMENT</u> Located behind the cab shall be the first compartment. The compartment dimensions shall be 42.00" wide x 85.75" high x 26.00" deep at the floor level. The area over the frame rails shall be 42.00" wide x 63.75" high and shall extend through to the left side of the body. The compartment clear door opening shall be 39.50" wide x 69.00" high.</p> <p><u>RIGHT OVER WHEEL COMPARTMENT</u> Located above the rear wheels shall be a compartment. The compartment dimensions shall be 74.00" (1,880 mm) wide x 53.00" (1,346 mm) high. The depth shall extend through to the left side of the body. The compartment clear door opening shall be 71.50" (1,816 mm) wide x 36.25" (921 mm) high.</p> <p><u>Wheel Well Area</u> The rear fender shall be an integral part of the body and compartment modules. The inside of the fender shall be fitted with a full circular inner fender liner constructed of aluminum.</p>		

	Bidder Complies	
	Yes	No
<p><u>RIGHT REAR COMPARTMENT</u></p> <p>Located behind the rear wheels shall be a compartment. The compartment dimensions shall be 42.00" (1,067 mm) wide x 85.75" (2,178 mm) high x 26.00" (660 mm) deep at the floor level. The depth shall extend through to the left side of the body. The compartment clear door opening shall be 39.50" (1,003 mm) wide x 69.00" (1,753 mm) high.</p> <p><u>REAR COMPARTMENT</u></p> <p>A rear compartment shall be provided. The rear compartment door shall be a roll-up style door that is the same brand and has the same finish as the side body doors. The compartment dimensions shall be 40.00" wide x 85.75" high. The depth of this compartment shall be determined by the width of the rear side compartments. The compartment door frame opening shall be 40.00" wide x 79.00" high. The compartment clear door opening shall be 37.50" wide x 74.00" high.</p> <p>A 27.00" long, 1.25" diameter handrail shall be provided on each side of the rear compartment.</p> <p>The handrails shall be an anodized aluminum extrusion with a ribbed design to provide a positive gripping surface.</p> <p>Chrome plated end stanchions shall support the handrails. A drain hole shall be provided in the bottom stanchion. Plastic gaskets shall be used between end stanchions and the painted surface.</p> <p>The addition of this rear compartment shall change the depths of the rear side compartments. Instead of being fully transverse, the compartment on each side of the body behind the rear wheels shall be 26.00" deep.</p> <p><u>9' ROOF COMPARTMENT</u></p> <p>A compartment constructed of 0.12" bright aluminum treadplate shall be bolted onto the roof of the body. The compartment shall be of single wall design, with a floor, and shall have a 1.00" flange around the top to provide a weather resistant seal.</p> <p>The compartment door shall be constructed of 0.12" bright aluminum treadplate. The door shall have a 1.00" flange formed down to provide an additional seal. The door shall hinge on the outboard side with a full-length stainless-steel hinge. A chrome plated grab handle shall be installed on the doors for opening. Two (2) gas cylinder struts shall assist and hold the door in the open position. A socket and plunger assembly shall be provided to hold the door closed. A weather strip seal shall be provided on the inside of the door around the edges.</p> <p>A 4.00" diameter compartment light shall be mounted to the underside of the door. An automatic door switch shall turn the light on when the door is opened. The switch shall also provide indication to the "open door" indicator light inside the cab.</p> <p>The compartment shall be 108.00" long x 26.00" wide x 15.00" deep.</p>		

	Bidder Complies	
	Yes	No
<p>A total of two (2) shall be provided one each side.</p> <p><u>SLIDE-OUT ADJUSTABLE HEIGHT DRAWER, 33" x 22"</u> A sliding drawer shall be provided. The construction shall consist of .188" thick aluminum formed to provide a 6.00" high wall around the perimeter. The corners shall be welded to form a rigid unit.</p> <p>The capacity rating shall be 500 pounds minimum in the extended position. The slide mechanisms shall have ball bearings for ease of operation and years of dependable service. The slide assembly shall be manufactured by Johnathon Slides.</p> <p>An automatic lock shall be provided for both the in and out drawer positions. The lock trip mechanism shall be located at the front of the drawer and shall be easily operated with a gloved hand.</p> <p>Each drawer shall be adjustable up and down within the compartment.</p> <p>The drawer shall have an inside dimension of 32.93" wide x 21.62" long.</p> <p>There shall be a total of two (2) provided under LS1-RS1.</p> <p><u>FLOOR EXTENSION</u> The compartment floor shall be extended from the transversed area over the frame to the compartment door with a 1.50" vertical front face, and a return bend. The floor extension shall be made of .19" thick 5052-H32 smooth aluminum.</p> <p>A total of two (2) shall be provided and located LS1-RS1.</p> <p><u>PAINTED ROOF FAIRING</u> A three (3) sided fairing that is painted to match the body shall be provided on the roof. The fairing shall be flush with the front and sides of the body, spanning the full width at the front and the full length of the body on each side. If there are hatch compartments on the roof, the fairing shall match the height of the hatch compartments. If there are no hatch compartments on the roof, the fairing shall be approximately 18.44" high.</p> <p><u>HITCH RECEIVER</u> There shall be three (3) hitch receivers provided on the apparatus. One (1) receiver shall be installed at the rear, with the remaining two (2) located at the sides of the apparatus in front of the rear wheels through the body fender panel. The hitch receivers shall be constructed of heavy steel tubing and reinforced to the apparatus framework.</p> <p><u>Rear Receiver</u> A Class III hitch receiver shall be installed at the rear of the apparatus. The class III rating is 5,000 lb. towing and 500 lb. tongue weight.</p> <p>The hitch shall be constructed of heavy steel tubing and reinforced to the truck framework,</p>		

	Bidder Complies	
	Yes	No
<p>for the receiving portion, including a heavy-duty slide-in tube with a ball. The tube shall be held in place with a single retaining pin accessible from below the rear tailboard.</p> <p>There shall be two (2) safety chain points provided near the hitch capable of holding the maximum trailer GVWR specified for the receiver.</p> <p>A label shall be provided stating the maximum GVWR and tongue weight of the trailer being connected to the receiver.</p> <p>The trailer electrical connection shall be a seven (7)-way flat blade recreational vehicle connector for trailer wiring compatible with electric brake systems, and a second connector with inverted ground meeting SAE J560 standards providing an auxiliary connection for warning devices.</p> <p><u>Side Receivers</u></p> <p>The side hitch receivers shall be capable of retaining a 9,000 lb. portable winch.</p> <p>Stainless steel doors shall be provided on the exterior of the body in the fender area to cover the ends of receivers. Each door shall be a hinged, spring loaded door with a flush latch to prevent it from opening while not in use. A stainless-steel trim ring shall be provided around the opening to prevent damage to the surrounding exterior finish.</p> <p><u>Receiver Access</u></p> <p>Access to the side receiver pins shall be provided through the compartment ahead of the receiver and through the fender liner. The liner access shall have a small hinged door provided to prevent debris from entering the area of the retaining pin. The access inside the forward compartment shall be provided with a rubber cover to prevent road dust from entering the compartment.</p> <p><u>ROOF ACCESS LADDER</u></p> <p>A ladder shall be provided at the rear of the body for access to the top of the body.</p> <p>Ladder rungs shall be 15.25" wide and the overall width shall be 17.75".</p> <p>Ladder shall extend above the roof line to provide easier and safer maneuverability both on and off the ladder.</p> <p>The ladder rails and rungs shall be constructed of 1.25" diameter non-slip extruded aluminum handrail material.</p> <p>The ladder rungs shall be bolted to the ladder rails with a center mounted solid rod inside the extruded aluminum non-slip rung material.</p> <p>The ladder shall be secured to the body with stainless steel end stanchions. passenger side.</p>		

	Bidder Complies	
	Yes	No
<p><u>ROPE ANCHORS</u></p> <p>A total of four (4) chrome plated steel eyebolts will be installed on the sides of the body to serve as rope anchor points. There will be one (1) rope anchor mounted on each side above the side body compartments at the front of the body and one (1) rope anchor mounted on each side above the side body compartments at the rear of the body.</p> <p>Each anchor will have an inside diameter of 2.00" (51 mm) and will be supported to provide a maximum of 1,500 lb. (680 kg) no-yield condition with a straight-line pull. Stainless steel scuff plates will be provided behind the eyebolts</p> <p>The bulkheads will be reinforced with welded plates between the vertical support tubes for fastening the eye bolts.</p> <p>NFPA 1901, 2016 edition, section 15.12.2 requires that receivers or anchors installed at any location on the apparatus for use with rope operations will be designed and affixed to the apparatus to provide at least 9,000 lb. (4,082 kg) no-yield condition with a straight line pull. These anchors are not rated for 9,000 lb. (4,082 kg) no yield condition with a straight-line pull. Per the customer's specifications and request of these anchors, this apparatus will be non-compliant to NFPA 1901 standards effective at time of contract execution.</p> <p><u>AIR BOTTLE STORAGE</u></p> <p>An air bottle compartment will be provided. The compartment dimensions will be 7.75" wide x 7.75" high x 26.00" deep and will accommodate one (1) air bottle. Flooring will be rubber lined and be furnished with a drain hole. A stainless-steel door with a chrome plated latch will be provided between the door and the hinge. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal. A total of 4 will be provided 2 in each fender well.</p> <p><u>LADDER AND EQUIPMENT STORAGE COMPARTMENT</u></p> <p>Provided at the rear of the body will be a compartment designed specifically for the storage of ladders and other equipment. An aluminum treadplate door will hold the items in place. The door will be provided with a chrome plated latch.</p> <p>The rack will be designed to hold all the items in a secure manner and still allow easy removal.</p> <p>Storage provisions for 1 extension ladder, 1 folding multipurpose ladder, 2 long spine boards, 1 stokes basket, 1 scoop stretcher, 1 short spine board will be furnished.</p> <p>The size of the ladders and additional items will be determined at preconstruction.</p> <p><u>SHELF, 38" x 40"</u></p> <p>A shelf shall be provided in a compartment. The shelf shall be constructed of .18" thick aluminum, formed to provide a 2.00" high wall around the perimeter. The corners shall be welded, to provide a rigid unit.</p> <p>The shelf shall be secured within the compartment by means of adjustable threaded fasteners. The fasteners shall slide in an extruded aluminum track to provide height</p>		

	Bidder Complies	
	Yes	No
<p>adjustment.</p> <p>The shelf interior dimension shall be 37.87" wide x 39.62" long.</p> <p>A total of one (1) shall be provided B1.</p> <p><u>SHELF, 40" x 42"</u></p> <p>A shelf shall be provided in a compartment. The shelf shall be constructed of .18" thick aluminum, formed to provide a 2.00" high wall around the perimeter. The corners shall be welded, to provide a rigid unit.</p> <p>The shelf shall be secured within the compartment by means of adjustable threaded fasteners. The fasteners shall slide in an extruded aluminum track to provide height adjustment.</p> <p>The shelf interior dimension shall be 39.87" wide x 41.62" long.</p> <p>A total of two (2) shall be provided LS1-RS1.</p> <p><u>SLIDE-OUT TOOLBOARD, 42" x 42"</u></p> <p>A slide-out aluminum tool board shall be provided. The tool board shall be a minimum of .18" thick with .20" diameter holes in a pegboard pattern, on 1.00" centers.</p> <p>The board dimensions shall be 42.00" high x 42.00" deep.</p> <p>A 1" x 1" aluminum square tubing shall be welded around the perimeter of the board for strength.</p> <p>The board shall be mounted on a small sliding tray. The construction of the tray shall consist of 6061-T6 aluminum extrusions for the sides with a .18" thick aluminum floor. The corners shall be welded to form a rigid unit.</p> <p>The capacity rating shall be 500 pounds minimum in the extended position. The slide assemblies shall be manufactured with 6061-T6 aluminum extrusions. The tray shall be supported by a minimum of four (4) roller bearings each rated for a 500 lb. load.</p> <p>The board shall slide-out of the compartment two thirds of its length. Positive locks for the stowed and extended position shall be provided.</p> <p>The board shall be mounted to an aluminum track to allow sideways adjustment of the tool board.</p> <p>There shall be a total of two (2) provided LS3-RS3.</p> <p><u>SLIDE-OUT, TILT DOWN ADJUSTABLE HEIGHT TRAY, 31" x 38"</u></p> <p>A slide-out, tilt down tray shall be provided. The construction shall consist of 6061-T6</p>		

	Bidder Complies	
	Yes	No
<p>aluminum extrusions for the sides with a .18" thick aluminum floor. The corners shall be welded to form a rigid unit.</p> <p>The capacity rating shall be 200 pounds minimum in the extended position. The slide assemblies shall be manufactured with 6061-T6 aluminum extrusions. The tray shall be supported by a minimum of four (4) roller bearings each rated for a 500 lb. load.</p> <p>Approximately two thirds of the tray shall slide-out from its stored position and shall tip 30 degrees down from horizontal. Each tray shall be adjustable up and down within the compartment.</p> <p>An automatic lock shall be provided for the in position. The lock trip mechanism shall be located at the front of the tray and shall be easily operated with a gloved hand. Rubber padded stops shall be provided for both the in out tray position.</p> <p>The tray shall have an inside dimension of 30.38" wide x 37.62" long.</p> <p>There shall be a total of one (1) provided B1-Upper portion.</p> <p><u>SLIDE-OUT, TILT DOWN ADJUSTABLE HEIGHT TRAY, 53" x 42"</u></p> <p>A slide-out, tilt down tray shall be provided. The construction shall consist of 6061-T6 aluminum extrusions for the sides with a .18" thick aluminum floor. The corners shall be welded to form a rigid unit.</p> <p>The capacity rating shall be 200 pounds minimum in the extended position. The slide assemblies shall be manufactured with 6061-T6 aluminum extrusions. The tray shall be supported by a minimum of four (4) roller bearings each rated for a 500 lb. load.</p> <p>Approximately two thirds of the tray shall slide-out from its stored position and shall tip 30 degrees down from horizontal. Each tray shall be adjustable up and down within the compartment.</p> <p>An automatic lock shall be provided for the in position. The lock trip mechanism shall be located at the front of the tray and shall be easily operated with a gloved hand. Rubber padded stops shall be provided for both the in out tray position.</p> <p>The tray shall have an inside dimension of 52.38" wide x 41.62" long.</p> <p>There shall be a total of two (2) provided LS2-RS2.</p> <p><u>REAR BUMPER</u></p> <p>A bumper shall be provided at the rear of the body. The rear bumper shall be constructed as an integral part of the rear body substructure with an aluminum treadplate deck mounted to the frame to provide a stepping surface. A 3.00" high kick plate constructed of aluminum treadplate shall be provided on the bulkhead surfaces above the bumper.</p>		

	Bidder Complies	
	Yes	No
<p>The bumper shall be approximately 13.00" deep and as wide as possible.</p> <p><u>SMOOTH ALUMINUM REAR WALL</u> The rear wall shall be smooth aluminum.</p> <p><u>TOW HOOKS</u> Two (2) painted steel tow hooks shall be installed under the tailboard of the truck.</p> <p>When force is applied to the tow hooks, it shall be transmitted to the frame rail.</p> <p>The tow hook assembly shall be designed and positioned to allow up to a 30 degree upward angled pull of 17,000 lb., or a 20,000 lb. straight horizontal pull in line with the centerline of the vehicle.</p> <p>The tow hook design shall have been fully tested and evaluated using strain gauge testing techniques.</p> <p><u>DOOR GUARD</u> Seven (7) compartment doors shall include an L-shaped guard designed to protect the bottom and interior side of the roll-up door from damage when in the retracted position and contain any water spray while the door is being opened. The guard shall be fabricated from stainless steel and installed each compartment door.</p> <p><u>DOOR PULL STRAPS</u> Seven (7) compartment doors shall be provided with 32.00" elastic pull straps secured to the mid length of the side compartment with footman loop and the rear of the roll-up door each compartment door.</p> <p><u>COMPARTMENT LIGHTING</u> There shall be seven (7) compartments with Amdor, Model AY-9270, blue 12-volt DC LED compartment light strips. There shall be two (2) strip lights installed vertically in each compartment opening. The lights shall be mounted with mechanical fasteners and located in compartments each compartment.</p> <p>The lights shall be activated when the battery switch is on and the respective compartment door is opened.</p> <p>NFPA 1901 2016 Edition 13.10.5.3 Each enclosed tool and equipment compartment greater than 4 cubic feet in volume and having an opening greater than 144 square inches shall have sufficient compartment lighting to provide a minimum of 2 fc at any location on the floor of the compartment without any shelves dividers or equipment in the compartment.</p> <p>The lights tested in this configuration did not meet this requirement. Per the lifesaving crew's specification request the apparatus shall not be compliant to NFPA 1901 standards at time of contract execution.</p>		

	Bidder Complies	
	Yes	No
<p><u>COMPARTMENT LIGHTING</u> Metal clamps shall be used to retain the strip lighting in all body compartments.</p> <p><u>CARGO/DUNNAGE AREA LIGHTING</u> There will be two (2), 12-volt DC strips lights with white LEDs and stainless-steel protective cover, provided to illuminate the cargo area.</p> <p>One (1) light strip will be installed the entire length of the left side of the cargo area.</p> <p>One (1) light strip will be installed the entire length of the right side of the cargo area.</p> <p>The light(s) will be activated when compartment door opens.</p> <p><u>SLIDE-OUT FLOOR MOUNTED TRAY</u> There shall be three (3) floor mounted slide-out tray(s) with 3.00" 6061-T6 aluminum extrusion sides provided LS1-RS1-B1. Each tray shall be rated for up to 500lb in the extended position. The tray(s) shall be constructed of .19" aluminum with welded corners and a natural aluminum finish.</p> <p>The inside dimensions of the tray shall be 41.62" deep x the width of the floor area where the tray is installed.</p> <p>The capacity rating shall be 500 pounds minimum in the extended position. The slide assemblies shall be manufactured with 6061-T6 aluminum extrusions. The tray shall be supported by a minimum of four (4) roller bearings each rated for a 500 lb., load.</p> <p>Automatic locks shall be provided for both the "in" and "out" positions. The trip mechanism for the locks shall be located at the front of the tray for ease of use with a gloved hand.</p> <p><u>RUB RAIL</u> Bottom edge of the side compartments shall be trimmed with a bright aluminum extruded rub rail.</p> <p>Trim shall be 2.12" high with 1.38" flanges turned outward for rigidity.</p> <p>The rub rails shall not be an integral part of the body construction, which allows replacement in the event of damage.</p> <p><u>BODY FENDER CROWNS</u> Stainless steel fender crowns shall be provided around the rear wheel openings.</p> <p>A rubber welting shall be provided between the body and the crown to seal the seam and restrict moisture from entering.</p> <p>A dielectric barrier shall be provided between the fender crown fasteners (screws) and the</p>		

	Bidder Complies	
	Yes	No
<p>fender sheet metal to prevent corrosion.</p> <p><u>AIR HORN SYSTEM</u> There shall be two (2) Grover air horns recessed in the front bumper. The horn system shall be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve shall be installed in-line to prevent loss of air in the air brake system.</p> <p><u>Air Horn Location</u> The air horns shall be located on each side of the bumper, towards the outside.</p> <p><u>AIR HORN CONTROL</u> The air horns shall be actuated by the horn button in the steering wheel. The driver shall have the option to control the air horns or the chassis horns from the horn button by means of a selector switch located on the instrument panel.</p> <p><u>ELECTRONIC SIREN</u> A Federal, Model 690000, PA-300-012MSC, electronic siren shall be provided with noise cancelling microphone.</p> <p>This siren to be active when the battery switch is on and that emergency master switch is on.</p> <p>Siren head shall be located near the overhead switches.</p> <p><u>SIREN CONTROL</u> The electronic siren shall be controllable on the siren head and horn ring only. No foot switches shall be required.</p> <p>The driver shall have the option to control the siren or the chassis horns from the horn button by means of a selector switch located on the instrument panel.</p> <p><u>SPEAKER</u> There shall be one (1) Federal Signal DynaMax®, Model ES100, 100-watt speaker provided. The speaker shall use a Federal Signal, Model ESFMT-EF, recess mount with stainless steel grille. The speaker shall be connected to the siren amplifier.</p> <p>The speaker shall be recessed in the right side of the front bumper, just outside of the frame rail.</p> <p><u>AUXILIARY MECHANICAL SIREN</u> A Federal Q2B® siren shall be furnished.</p> <p>The control solenoid shall be powered up after the emergency master switch is activated. The mechanical siren shall be mounted on the bumper deck plate. It shall be mounted on the left side. The siren mounting shall include a reinforcement plate.</p>		

	Bidder Complies	
	Yes	No
<p>The mechanical siren shall be actuated by one (1) foot switch located on the driver's side.</p> <p>A momentary red switch shall be included in the left side overhead switch panel to activate the siren brake.</p> <p><u>CAB ROOF LIGHTBAR</u></p> <p>There shall be one (1) 56.00" Whelen, Model Justice LED lightbar provided.</p> <p>This lightbar shall include the following:</p> <ul style="list-style-type: none"> • Six (6) red flashing forward facing LED modules. • Two (2) clear flashing forward facing LED modules. • Two (2) red flashing front corner LED modules. • Two (2) red flashing rear corner LED modules. <p>All lenses shall be clear.</p> <p>There shall be a switch located in the cab on the switch panel to control the lightbar.</p> <p>The white warning lights shall be disabled when the parking brake is set.</p> <p><u>CAB FACE WARNING LIGHTS</u></p> <p>There shall be a pair of flush mounted Whelen, Model C6**, SuperMax Series LED flashing lights provided on the cab face.</p> <p>The color of these lights shall be red Super LED/red lens.</p> <p>A lighted switch shall be provided inside the cab on the switch panel for actuation.</p> <p>These lights shall be installed with a flange.</p> <p>Any white light shall be deactivated when the parking brake is applied.</p> <p><u>SIDE ZONE LOWER LIGHTING</u></p> <p>There shall be six (6) Whelen®, Model C6L**, 5.12" high x 7.56" wide x 1.54" deep flashing LED warning lights with chrome trim installed per the following:</p> <ul style="list-style-type: none"> • Two (2) lights located, one (1) each side on the bumper extension. The driver's side, side front light to include red warning LEDs and the passenger's side, side front light to include red warning LEDs. • Two (2) lights located, one (1) each side of cab rearward of crew cab doors. The driver's side, side middle light to include red warning LEDs and the passenger's 		

	Bidder Complies	
	Yes	No
<p>side, side middle light to include red warning LEDs.</p> <ul style="list-style-type: none"> • Two (2) lights located, one (1) each side above rear wheels. The driver's side, side rear light to include red warning LEDs and the passenger's side, side rear light to include red warning LEDs. • The warning light lens colors to be the same as the LEDs. <p>There shall be a switch in the cab on the switch panel to control the lights.</p> <p><u>SIDE WARNING LIGHTS</u></p> <p>There shall be two (2) Whelen®, Model C9L**, 8.12" high x 10.12" wide x 1.56" deep flashing LED warning light(s) with chrome trim provided front corner of the rescue body.</p> <p>The light(s) to include red flashing LEDs.</p> <p>The warning light lens colors to be the same as the LEDs.</p> <p>There shall be a switch in the cab on the switch panel to control the light(s).</p> <p>The light(s) may be load managed when the parking brake is applied.</p> <p><u>REAR ZONE LOWER LIGHTING</u></p> <p>There shall be two (2) Whelen®, Model C6L**, 5.12" high x 7.56" wide x 1.56" deep flashing LED warning light(s) with chrome trim provided at the rear of the apparatus.</p> <ul style="list-style-type: none"> • the driver's side rear light to be red • the passenger's side rear light to be red • the warning light lens colors to be the same as the LEDs <p>There shall be a switch in the cab on the switch panel to control the lights.</p> <p><u>REAR AND SIDE UPPER ZONE WARNING LIGHTS</u></p> <p>There shall be four (4) Whelen®, Model C9P**, 8.12" high x 10.12" wide x 1.56" deep flashing LED warning lights chrome trim provided per the following:</p> <ul style="list-style-type: none"> • One (1) light installed on the left side, side of the apparatus as high and close to the rear as practical. The side rear upper light on the driver's side to include red LEDs. • One (1) light installed on the left side, rear of the apparatus as high and close to the outside as practical. The rear upper light on the driver's side to include red LEDs. • One (1) light installed on the right side, rear of the apparatus as high and close to the 		

	Bidder Complies	
	Yes	No
<p>outside as practical. The rear upper light on the passenger's side to include red LEDs.</p> <ul style="list-style-type: none"> • One (1) light installed on the right side, side of the apparatus as high and close to the rear as practical. The side rear upper light on the passenger's side to include red LEDs. • The same color as the LED's. <p>There shall be a switch in the cab on the switch panel to control the lights.</p> <p><u>TRAFFIC DIRECTING LIGHT</u></p> <p>There shall be one (1) Whelen® Model TAM65, 36.00" long x 2.87" high x 2.25" deep, amber LED traffic directing light installed at the rear of the apparatus.</p> <p>The Whelen Model TACTL5 control head shall be included with this installation.</p> <p>The control head shall be energized when the battery switch is on.</p> <p>The auxiliary flash to be activated when the emergency master switch is on.</p> <p>This traffic directing light shall be surface mounted over the rear door, at the rear of the apparatus as high as practical.</p> <p>The traffic directing light control head shall be located overhead in reach of the driver.</p> <p><u>ELECTRICAL SYSTEM GENERAL DESIGN for ALTERNATING CURRENT</u></p> <p>The following guidelines shall apply to the 120/240 VAC system installation:</p> <p><u>General</u></p> <p>Any fixed line voltage power source producing alternating current (ac) line voltage shall produce electric power at 60 cycles plus or minus 3 cycles.</p> <p>Except where superseded by the requirements of NFPA 1901, all components, equipment and installation procedures shall conform to NFPA 70, National Electrical Code (herein referred to as the NEC).</p> <p>Line voltage electrical system equipment and materials included on the apparatus shall be listed and installed in accordance with the manufacturer's instructions. All products shall be used only in the manner for which they have been listed.</p> <p><u>Grounding</u></p> <p>Grounding shall be in accordance with Section 250-6 "Portable and Vehicle Mounted Generators" of the NEC. Ungrounded systems shall not be used. Only stranded or braided</p>		

	Bidder Complies	
	Yes	No
<p>copper conductors shall be used for grounding and bonding.</p> <p>An equipment grounding means shall be provided in accordance with Section 250-91 (Grounding Conductor Material) of the NEC.</p> <p>The grounded current carrying conductor (neutral) shall be insulated from the equipment grounding conductors and from the equipment enclosures and other grounded parts. The neutral conductor shall be colored white or gray in accordance with Section 200-6 (Means of Identifying Grounding Conductors) of the NEC.</p> <p>In addition to the bonding required for the low voltage return current, each body and driving or crew compartment enclosure shall be bonded to the vehicle frame by a copper conductor. This conductor shall have a minimum amperage rating of 115 percent of the nameplate current rating of the power source specification label as defined in Section 310-15 (amp capacities) of the NEC. A single conductor properly sized to meet the low voltage and line voltage requirements shall be permitted to be used.</p> <p>All power source system mechanical and electrical components shall be sized to support the continuous duty nameplate rating of the power source.</p> <p><u>Operation</u></p> <p>Instructions that provide the operator with the essential power source operating instructions, including the power-up and power-down sequence, shall be permanently attached to the apparatus at any point where such operations can take place.</p> <p>Provisions shall be made for quickly and easily placing the power source into operation. The control shall be marked to indicate when it is correctly positioned for power source operation. Any control device used in the drive train shall be equipped with a means to prevent the unintentional movement of the control device from its set position.</p> <p>A power source specification label shall be permanently attached to the apparatus near the operator's control station. The label shall provide the operator with the following information:</p> <ul style="list-style-type: none"> • Rated voltage(s) and type (ac or dc) • Phase • Rated frequency • Rated amperage • Continuous rated watts • Power source engine speed <p>Direct drive (PTO) and portable generator installations shall comply with Article 445</p>		

	Bidder Complies	
	Yes	No
<p>(Generators) of the NEC.</p> <p><u>Overcurrent protection</u> The conductors used in the power supply assembly between the output terminals of the power source and the main over current protection device shall not exceed 144.00" (3658 mm) in length.</p> <p>For fixed power supplies, all conductors in the power supply assembly shall be type THHW, THW, or use stranded conductors enclosed in nonmetallic liquid tight flexible conduit rated for a minimum of 194-degree Fahrenheit (90 degrees Celsius).</p> <p>For portable power supplies, conductors located between the power source and the line side of the main overcurrent protection device shall be type SO or type SEO with suffix WA flexible cord rated for 600-volts at 194 degrees Fahrenheit (90 degrees Celsius).</p> <p><u>Wiring Methods</u> Fixed wiring systems shall be limited to the following:</p> <ul style="list-style-type: none"> • Metallic or nonmetallic liquid tight flexible conduit rated at not less than 194 degrees Fahrenheit (90 degrees Celsius) • or • Type SO or Type SEO cord with a WA suffix, rated at 600 volts at not less than 194 degrees Fahrenheit (90 degrees Celsius) <p>Electrical cord or conduit shall not be attached to chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components, or low voltage wiring. In addition, the wiring shall be run as follows.</p> <ul style="list-style-type: none"> • Separated by a minimum of 12.00" (305 mm), or properly shielded, from exhaust piping • Separated from fuel lines by a minimum of 6.00" (152 mm) distance <p>Electrical cord or conduit shall be supported within 6.00" (152 mm) of any junction box and at a minimum of every 24.00" (610 mm) of continuous run. Supports shall be made of nonmetallic materials or corrosion protected metal. All supports shall be of a design that does not cut or abrade the conduit or cable and shall be mechanically fastened to the vehicle.</p> <p><u>Wiring Identification</u> All line voltage conductors located in the main panel board shall be individually and permanently identified. The identification shall reference the wiring schematic or indicate the final termination point. When prewiring for future power sources or devices, the unterminated ends shall be labeled showing function and wire size.</p>		

	Bidder Complies	
	Yes	No
<p><u>Wet Locations</u> All wet location receptacle outlets and inlet devices, including those on hardwired remote power distribution boxes, shall be of the grounding type provided with a wet location cover and installed in accordance with Section 210-7 "Receptacles and Cord Connections" of the NEC.</p> <p>All receptacles located in a wet location shall be not less than 24.00" (610 mm) from the ground. Receptacles on off-road vehicles shall be a minimum of 30.00" (762 mm) from the ground.</p> <p>The face of any wet location receptacle shall be installed in a plane from vertical to not more than 45 degrees off vertical. No receptacle shall be installed in a face up position.</p> <p><u>Dry Locations</u> All receptacles located in a dry location shall be of the grounding type. Receptacles shall be not less than 30.00" (762 mm) above the interior floor height.</p> <p>All receptacles shall be marked with the type of line voltage (120-volts or 240-volts) and the current rating in amps. If the receptacles are direct current, or other than single phase, they shall be so marked.</p> <p><u>Listing</u> All receptacles and electrical inlet devices shall be listed to UL 498, Standard for Safety Attachment Plugs and Receptacles, or other appropriate performance standards. Receptacles used for direct current voltages shall be rated for the appropriate service.</p> <p><u>Electrical System Testing</u> The wiring and associated equipment shall be tested by the apparatus manufacturer or the installer of the line voltage system.</p> <p>The wiring and permanently connected devices and equipment shall be subjected to a dielectric voltage withstand test of 900-volts for one (1) minute. The test shall be conducted between live parts and the neutral conductor, and between live parts and the vehicle frame with any switches in the circuit(s) closed. This test shall be conducted after all body work has been completed.</p> <p>Electrical polarity verification shall be made of all permanently wired equipment and receptacles to determine that connections have been properly made.</p> <p><u>Operational Test per Current NFPA 1901 Standard</u> The apparatus manufacturer shall perform the following operation test and ensure that the power source and any devices that are attached to the line voltage electrical system are properly connected and in working order. The test shall be witnessed, and the results certified by an independent third-party certification organization.</p> <p>The prime mover shall be started from a cold start condition and the line voltage electrical system loaded to 100 percent of the nameplate rating.</p>		

	Bidder Complies	
	Yes	No
<p>The power source shall be operated at 100 percent of its nameplate voltage for a minimum of two (2) hours unless the system meets category certification as defined in the current NFPA 1901 standard.</p> <p>Where the line voltage power is derived from the vehicle's low voltage system, the minimum continuous electrical load as defined in the current NFPA 1901 standard shall be applied to the low voltage electrical system during the operational test.</p> <p><u>ONAN 25kW SINGLE PHASE GENERATOR</u></p> <p>The apparatus shall be equipped with a complete electrical power system. The wiring and generator installation shall conform to the present National Electrical Code Standards of the National Fire Protection Association. The installation shall be designed for continuous operation without overheating and undue stress on components.</p> <p>The generator shall be a single phase, four (4)-wire, Onan 25kW driven by a transmission "power takeoff" attached to the side of the transmission.</p> <p>Generator performance shall meet the American National Standards Institute (ANSI) C84.1-1982 voltage requirement as utilized from the receptacle.</p> <p>Generator shall have a built-in automatic voltage control.</p> <p>Generator shall have a NEMA MG21 rating.</p> <ul style="list-style-type: none"> - Continuous Duty Rating: 25,000 watts - Phase: Single - Nominal Cycles: 60 hertz - Nominal Amp Rating: 104 at 240-volts - Engine Speed at Engagement: Idle - Engine Speed Engaged: 1100/1400 rpm range - Generator RPM: 1800 rpm - Weight: 398 lbs. <p>The output of the generator shall be controlled by an electronic governor. The governor shall be programmed so the generator's output is at 60 hertz.</p> <p>The main chassis transmission PTO shall power the generator. A stainless-steel splash guard shall be installed to reduce the amount of road spray on this frame-mounted generator.</p> <p>The generator shall be operable in the stationary mode with a shift control located inside the cab with an indicator light to note engagement. For safety, the automatic high idle shall be activated through interlocks only after the chassis parking brake control is in the park position, the generator PTO transmission has made a complete shift and the truck transmission is in neutral.</p>		

	Bidder Complies	
	Yes	No
<p>An electric/hydraulic valve shall supply hydraulic fluid to the clutch engagement unit provided on the chassis PTO drive.</p> <p>To properly monitor the generator performance and load demands during operation, the generator shall be equipped with a full instrument and control package. This panel shall be mounted adjacent to the load center. The following instruments shall be installed in the panel:</p> <ul style="list-style-type: none"> - One (1) Voltmeter - Two (2) Ammeters - One (1) Frequency Meter - One (1) Hour Meter - One (1) "Power On" Green Indicator Light - One (1) PTO Engagement Indicator Light - Two (2) Fuse Holders: With two (2) amp fuses for gauge protection <p>The meter and indicators shall be installed near eye level in the compartment. Instruments shall be flush mounted in an appropriately sized weatherproof electrical enclosure. All instruments used shall be accurate within +/- two (2) percent.</p> <p>The system shall be installed by highly qualified electrical technicians to assure the required level of safety and protection to the lifesaving crew apparatus operators. The wiring, electrical fixtures and components shall be to the highest industry quality standards available on the domestic market. The equipment shall be the type designed for mobile installations subject to vibration, moisture, and severe continuous usage.</p> <p>All electrical wiring from the load center shall be fine stranded copper S.O. type with a 600-volt jacket. The wire shall be sized to the load and circuit breaker rating. The wire size shall be ten (10)-gauge on 30-amp circuits, 12-gauge on 20-amp circuits and 14-gauge on 15-amp circuits. The S.O. cable shall be run in corner areas and extruded aluminum pathways built into the body for easy access. Any S.O. cord not run in an enclosed raceway or cable tray shall have an additional abrasion resistant covering.</p> <p>The main load center shall have circuit breakers rated to load demand.</p> <p>Individual breakers shall be provided for all receptacles to isolate a tripped breaker from affecting any other on-line equipment.</p> <p><u>GENERATOR LOCATION</u> The generator shall be mounted under the body between the frame rails.</p> <p><u>GENERATOR START</u> There shall be a switch provided on the cab instrument panel to engage the generator.</p> <p><u>CIRCUIT BREAKER PANEL</u> The circuit breaker panel shall be located low on the left wall of compartment LS4.</p>		

	Bidder Complies	
	Yes	No
<p><u>AC POWERED TRIPOD LIGHTING</u></p> <p>There shall be two (2) Whelen, ground tripod light assemblies installed on the apparatus.</p> <p>The light head(s) shall be Whelen, Model PCP2AFS, 150-watt 120-volt AC light(s) with switches on the light heads.</p> <p>The painted parts of this light assembly to be white.</p> <p>The light(s) shall be installed on ground portable tripods, located rear of truck-one each side.</p> <p>The light(s) selected above shall include a 20-amp, 120-volt twist lock receptacle and plug.</p> <p><u>LIGHT TOWER</u></p> <p>There shall be one (1) Will-Burt, Model NS2.3-600 WHL light tower provided.</p> <p>There shall be four (4) Whelen Model PFP2AC, 150-watt 120-volt AC light heads included on this tower.</p> <p>The painted parts of the light tower and the light heads to be white.</p> <p>This tower shall be connected to the Do Not Move Truck Indicator in the cab.</p> <p>The lights included on this tower shall be powered through the AC breaker box.</p> <p><u>LIGHT TOWER LOCATION</u></p> <p>The light tower shall be installed forward, on the rescue body roof.</p> <p><u>LIGHT TOWER CONTROLLER</u></p> <p>There shall be one (1) handheld wired controller included.</p> <p><u>LOCATION FOR THE LIGHT TOWER CONTROLLER</u></p> <p>The light tower controller shall be installed in the driver's side front body compartment.</p> <p><u>ELECTRIC CORD REEL</u></p> <p>Furnished with the 120-volt AC electrical system shall be a Hannay, Series 1600, cord reel. The reel shall be provided with a 12-volt electric rewind switch that is guarded to prevent accidental operation and labeled for its intended use. The switch shall be protected with a fuse and installed at a height not to exceed 72.00" above the operators standing position.</p> <p>The exterior finish of the reel(s) shall be painted #269 gray from the reel manufacturer.</p> <p>A captive roller assembly to be provided to aid in the payout and loading of the reel. A ball stop shall be provided to prevent the cord from being wound on the reel.</p> <p>A label shall be provided in a readily visible location adjacent to the reel. The label shall</p>		

	Bidder Complies	
	Yes	No
<p>indicate current rating, current type, phase, voltage, and total cable length.</p> <p>A total of two (2) cord reels shall be provided one (1) in compartment LS1 high and to the right and one (1) in compartment RS1 high and to the left.</p> <p>The cord reel should be configured with three (3) conductors.</p> <p><u>CORD</u> Provided for electric distribution shall be two (2) lengths, one (1) for each reel, of 200 feet of yellow 10/3 electrical cord, weather resistant 105 degree Celsius to -50 degree Celsius, 600-volt jacketed SOOW cord. A Hubbell L5-20, 20-amp, 120-volt, twist lock connector body shall be installed on the end of the cord.</p> <p><u>PORTABLE JUNCTION BOX</u> There shall be two (2) Akron EJBX electric junction box(es) provided.</p> <p>There shall be a cable strain relief and a 1.00' pigtail with black plastic ribbed grip, NEMA L5-20, 20-amp, 120-volt twist lock plug provided for each box.</p> <p>Each box shall be provided with the following:</p> <ul style="list-style-type: none"> • two (2) 15/20-amp 120-volt AC duplex straight blade receptacle with flip up covers • two (2) 20-amp 120-volt AC twist lock single receptacles with flip up covers • a 120-volt AC light inside the box <p><u>120 VOLT RECEPTACLES</u> There shall be two (2), 20-amp 120-volt AC three (3) wire twist lock receptacle(s) installed Rear of truck with Tripod lights. The NEMA configuration for the receptacles shall be L5-20R. There shall be a weatherproof flip up cover installed if the receptacle is installed in an exposed location. There shall be an interior cover plate install if the receptacle is installed in a protected location.</p> <p>The receptacle(s) shall be powered from the generator.</p> <p>There shall be a label installed near the receptacle(s) that state the following:</p> <ul style="list-style-type: none"> • Line Voltage • Current Rating (amps) • Phase • Frequency • Power Source 		

	Bidder Complies	
	Yes	No
<p><u>240 VOLT RECEPTACLE</u></p> <p>There shall be one (1), 30-amp 240-volt AC three (3) wire twist lock receptacle(s) with exterior flip up cover(s) installed LS1. The NEMA configuration for the receptacles shall be L6-30R.</p> <p>The receptacle(s) shall be powered from the on-board generator.</p> <p>There shall be a label installed near the receptacle(s) that state the following:</p> <ul style="list-style-type: none"> • Line Voltage • Current Rating (amps) • Phase • Frequency • Power Source <p><u>AIR REEL FOR TOOLS</u></p> <p>There shall be a total of two (2) reels provided. The reel(s) shall be located LS1-RS1 upper portion beside the cord reel. Each shall be capable of holding up to 200' of low pressure, 0.38" inside dimension hose.</p> <p>The air to this reel shall be supplied from the chassis air brake system. An additional air tank shall be provided in the chassis air system to supply the reel. The reel system shall be piped from the chassis air system with a pressure protection valve to ensure adequate air to the brake system. Plumbing to the reel shall be accomplished with as few air restrictions as possible. The output flow of the engine air compressor varies with engine RPM. Full compressor output is only achieved at governed engine speed. Engine speed may be limited by generators, pumps, and other PTO driven options.</p> <p>The hose reel shall include the following features:</p> <ul style="list-style-type: none"> • The side discs shall have rolled edges and concentric reinforcing ribs • The drum shall be roll formed with a full-length weld • A bearing shall support the axle at each end of the reel to provide smooth rotation and eliminate weight on the swivel joint • The reel axle shall be the full length of the reel • The swivel joint inlet shall permit the reel to rotate freely while connected <p>The reel shall be equipped with a 12-volt DC electric rewind motor operated by a push button switch which is guarded to prevent accidental operation. The switch shall be</p>		

	Bidder Complies	
	Yes	No
<p>installed at a height not to exceed 72.00" above the operator's standing position. A properly rated circuit breaker shall be provided to protect the rewind motor against short circuit and overload. A 12-volt fuse shall protect the rewind control circuit.</p> <p>The exterior finish of the reel(s) shall be painted #269 gray from the reel manufacturer.</p> <p>A captive roller assembly to be provided to aid in the payout and loading of the reel. A ball stop shall be provided to prevent the end of the hose from being wound onto the reel.</p> <p>A label shall be provided in a readily visible location adjacent to the reel. The label shall indicate utility air, the operating pressure, total hose length and hose size (inside dimension).</p> <p><u>Hose</u> Each low-pressure reel shall be equipped with 200' of Goodyear "Insta-Grip", number 9273 heavy duty blue hose with an inside dimension of 0.38". The hose shall be continuous with no unions. The hose end shall have a female Hansen quick disconnect. To monitor the pressure in the supply line, a gauge and valve shall be provided at the air control panel (air control panel priced separately).</p> <p><u>HYDRAULIC POWER SUPPLY</u> A Hurst, Model P 650 SE-220, 240-volt, 10,000 psi hydraulic power supply shall be provided.</p> <p>The unit shall be capable of operating two (2) tools simultaneously or one (1) tool with turbo function which doubles the flow of hydraulic fluid to one (1) tool to increase speed.</p> <p>The power supply shall be provided with a quick disconnect for the electrical plug and Streamline® mono-coupling connections for the hydraulic lines. Each mono-coupling shall be made of machined aluminum and hardened steel. The mono-coupling system shall have an interlocking push-twist positive locking capability allowing the twin hose to be connected into a single coupling for safe and quick connection of hydraulic hoses. Only the female mono couplings are mounted on the connecting block of the unit.</p> <p>A total of quantity of one (1) shall be provided LS1.</p> <p><u>13'-20' HIGH PRESSURE HYDRAULIC CONNECTION HOSE</u> A 13'-20' section of Hurst high pressure 10,000 psi twin line hose shall be provided. The hose shall be black with a black guard.</p> <p>The hose shall be one (1) continuous length without unions.</p> <p>The hose shall be equipped with a Streamline mono-coupling connection type fitting on one (1) end with swivel fittings on the opposite end.</p> <p>The Streamline mono-coupling connection fitting shall allow the twin line hose system to be converted into a single coupling.</p>		

	Bidder Complies	
	Yes	No
<p>A total of one (1) section(s) of high-pressure hose shall be provided.</p> <p>A colored insert shall be provided on each guard to differentiate sections of hose.</p> <p>The colored insert(s) shall be installed on the hose(s) as follows:</p> <ul style="list-style-type: none"> • Hose 1: Green • Hose 2: Red <p>The hose(s) shall be located from pump to hose reels.</p> <p><u>HIGH PRESSURE HYDRAULIC HOSE</u></p> <p>A 98' section of Hurst high pressure 10,000 psi twin line hose shall be provided. The hose shall be blue/grey with a black guard.</p> <p>The hose shall be one (1) continuous length without unions.</p> <p>The hose shall be equipped with a Streamline mono-coupling connection type fitting on one (1) end with swivel fittings on the opposite end.</p> <p>The Streamline mono-coupling connection fitting shall allow the twin line hose system to be converted into a single coupling.</p> <p>A total of two (2) section(s) of high-pressure hose shall be provided.</p> <p>A colored insert shall be provided on each guard to differentiate sections of hose.</p> <p>The colored insert(s) shall be installed on the hose(s) as follows:</p> <ul style="list-style-type: none"> • Hose 1: Green • Hose 2: Red <p>The hose(s) shall be located one on each reel.</p> <p><u>HYDRAULIC REEL WITH CAPACITY FOR 100' OF HOSE</u></p> <p>A hydraulic hose reel shall be provided. The reel shall be operated by a 12-volt electric motor controlled by a rewind switch. The motor shall be protected by a circuit breaker and the rewind circuit shall be protected by a fuse. The switch shall be installed at a height not to exceed 72.00" above the operator's standing position. The switch shall be guarded to prevent accidental operation.</p> <p>The reel capacity shall be a minimum of 100' of 0.25" inside diameter dual hydraulic hose. Surfaces where the hose comes in contact with the reel roller shall be constructed of either stainless steel, chrome plated steel or plastic.</p>		

	Bidder Complies	
	Yes	No
<p>A captive roller assembly to be provided to aid in the payout and loading of the reel. A ball stop shall be provided to prevent the hose from being wound around the reel.</p> <p>A label shall be provided in a readily visible location adjacent to the reel. The label shall indicate maximum flow pressure and total length of hose installed on the reel.</p> <p>A total of two (2) reels shall be installed One LS1 beside electric reel, one in RS1 beside electric reel.</p> <p>The reel shall be designed for a New Hurst.</p> <p><u>LOOSE EQUIPMENT</u> The following equipment shall be furnished with the completed unit:</p> <ul style="list-style-type: none"> - One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts, and washers, as used in the construction of the unit. <p><u>NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY VENDOR</u> The following loose equipment as outlined in NFPA 1901, 2016 edition, section 10.9.3 shall be provided by the Vendor.</p> <ul style="list-style-type: none"> - Four (4) Scott 4.5 X3 Pro 4500 SCBA w/ PASS Less Cylinder & Face Mask Model number X8814021005303.- <u>NO EXCEPTION DUE TO COMPATIBILITY.</u> - Eight (8) spare Scott SCBA cylinders 4500 psi/45-minute model number 804722-01. <u>NO EXCEPTION DUE TO COMPATIBILITY.</u> -Four (4) Scott AV3000 HT facemask w/ Bracket- <u>NO EXCEPTION DUE TO COMPATIBILITY.</u> - One (1) first aid kit. - Four (4) traffic vest for each vest to comply with ANSI/ISEA 207, <i>Standard for High Visibility Public Safety Vests</i>, and have a five-point breakaway feature that includes two at the shoulders, two at the sides, and one at the front. - Five (5) fluorescent orange traffic cones not less than 28" (711 mm) in height, each equipped with a 6". (152 mm) retro-reflective white band no more than 4" (152 mm) from the top of the cone, and an additional 4" (102 mm) retro-reflective white band 2" (51 mm) below the 6" (152 mm) band. - Five (5) illuminated warning devices such as highway flares, unless the five fluorescent orange traffic cones have illuminating capabilities. - One automatic external defibrillator (AED). 		

	Bidder Complies	
	Yes	No
<p>- One (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.</p> <p>- One (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.</p> <p><u>PAINT PROCESS</u></p> <p>The exterior custom cab and/or body painting procedure shall consist of a seven (7) step finishing process. A commercial chassis paint process shall follow similar processes as determined by the chassis manufacturer. The following procedure shall be used by the apparatus manufacturer:</p> <ol style="list-style-type: none"> 1. <u>Manual Surface Preparation</u> - All exposed metal surfaces on the custom cab and body shall be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces shall be removed and sanded to a smooth finish. Exterior seams shall be sealed before painting. Exterior surfaces that shall not be painted include chrome plating, polished stainless steel, anodized aluminum, and bright aluminum treadplate. 2. <u>Chemical Cleaning and Pretreatment</u> - All surfaces shall be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces shall be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces shall be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion. A final pure water rinse shall be applied to all metal surfaces. 3. <u>Surfacer Primer</u> - The Surfacer Primer shall be applied to a chemically treated metal surface to provide a strong corrosion protective base coat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a critical aesthetic finish. The surfacer primer shall be a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded. 4. <u>Finish Sanding</u> - The surfacer primer shall be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat. 5. <u>Sealer Primer</u> - The sealer primer is applied prior to the base coat in all areas that have not been previously primed with the surfacer primer. The sealer primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when top coated. 6. <u>Base coat Paint</u> - Two coats of a high performance, two component high solids 		

	Bidder Complies	
	Yes	No
<p>polyurethane base coat shall be applied. The Base coat shall be applied to a thickness that shall achieve the proper color match. The Base coat shall be used in conjunction with a urethane clear coat to provide protection from the environment.</p> <p>7. <u>Clear Coat</u> - Two (2) coats of clear coat shall be applied over the base coat color. The clear coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style doors shall be clear coated to match the body. Paint warranty for the roll-up doors shall be provided by the roll-up door manufacturer.</p> <p>Specifications are written to define cyclic corrosion testing, physical strengths, durability, and minimum appearance requirements must be met in order for an exterior paint finish to be considered acceptable as a quality finish.</p> <p>Each batch of base coat color shall be checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again to make sure that it matches the color standard. Electronic color measuring equipment shall be used to compare the color sample to the color standard entered into the computer. Color specifications are used to determine the color match. A Delta E reading shall be used to determine a good color match within each family color.</p> <p>All removable items such as brackets, compartment doors, door hinges, and trim shall be removed and separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly shall be finish painted before assembly.</p> <p><u>Environmental Impact</u> Contractor shall meet or exceed all current State regulations concerning paint operations. Pollution control shall include measures to protect the atmosphere, water, and soil. Controls shall include the following conditions:</p> <ul style="list-style-type: none"> • Topcoats and primers shall be chrome and lead free. • Metal treatment chemicals shall be chrome free. The wastewater generated in the metal treatment process shall be treated on-site to remove any other heavy metals. • Particulate emission collection from sanding operations shall have a 99.99 percent efficiency factor. • Particulate emissions from painting operations shall be collected by a dry filter or water wash process. If the dry filter is used, it shall have an efficiency rating of 98 percent. Water wash systems shall be 99.97 percent efficient. • Water from water wash booths shall be reused. Solids shall be removed on a 		

	Bidder Complies	
	Yes	No
<p>continual basis to keep the water clean.</p> <ul style="list-style-type: none"> • Paint wastes shall be disposed of in an environmentally safe manner. • Empty metal paint containers shall be recycled to recover the metal. • Solvents used in clean-up operations shall be recycled on-site or sent off-site for distillation and returned for reuse. <p>Additionally, the finished apparatus shall not be manufactured with or contain products that have ozone depleting substances. Contractor shall, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with the state EPA rules and regulations.</p> <p><u>PAINT</u> To ensure a perfect color match between the body and chassis, the apparatus manufacturer shall also repaint the commercial chassis cab. The apparatus shall be painted Sikkens GREEN METALLIC FLNA91652.</p> <p><u>COMMERCIAL CHASSIS REPAINT</u> In order to assure a perfect match between the chassis cab and the rest of the apparatus, or to provide the specified color not typically available from a commercial chassis manufacturer, the chassis cab shall be repainted by the apparatus manufacturer. Since it is not practical to repaint certain areas of the cab such as the fire wall, radiator core support, or bottom of the cab, the best results shall be obtained by ordering the commercial chassis painted a neutral color.</p> <p><u>PAINT CHASSIS FRAME ASSEMBLY</u> The chassis frame assembly shall be painted black by the chassis manufacturer. It shall remain the commercial grade finish as provided.</p> <p><u>COMPARTMENT INTERIOR FINISH</u> The interior of the compartments shall be the natural aluminum finish. There shall not be any paint or other type of finish applied to the compartments.</p> <p><u>REFLECTIVE BAND</u> A 10.00" white reflective band shall be provided across the front of the vehicle and along the sides of the body.</p> <p><u>REFLECTIVE VINYL ON FRONT BUMPER</u> There shall be a reflective vinyl band provided across the front bumper.</p> <p><u>REAR CHEVRON STRIPING</u> There shall be alternating chevron striping located on the rear-facing vertical surface of the apparatus. Covered surfaces shall include the exterior rear wall. Rear compartment doors, entry doors, or walkway areas shall not be covered.</p>		

	Bidder Complies	
	Yes	No
<p>The colors shall be red and fluorescent yellow green diamond grade.</p> <p>Each stripe shall be 6.00" in width.</p> <p>This shall meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface shall be covered with chevron striping.</p> <p><u>REFLECTIVE STRIPE, CAB DOORS</u></p> <p>A reflective "chevron" stripe shall be provided across the interior of each cab door. The colors shall be alternating red diamond grade and lime yellow diamond grade. The "chevron" stripe will be located approximately 1.00" up from the bottom.</p> <p>This stripe shall meet the NFPA 1901 requirement.</p> <p><u>LETTERING</u></p> <p>Lettered to Kingsport Lifesaving Crew Specifications.</p> <p><u>MANUAL, BODY PARTS ONLY</u></p> <p>A custom parts manual for the factory installed parts only shall be provided in USB flash drive format with the completed unit.</p> <p>The manual shall contain the following:</p> <ul style="list-style-type: none"> - Job number - Part numbers with full descriptions - Table of contents - Parts section sorted in functional groups reflecting a major system, component, or assembly - Parts section sorted in Alphabetical order - Instructions on how to locate parts <p>The manual shall be specifically written for the body model being purchased. It shall not be a generic manual for a multitude of different bodies.</p> <p><u>SERVICE PARTS INTERNET SITE</u></p> <p>The service parts information included in this manual are also available on the factory website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.</p> <p><u>MANUALS, SERVICE</u></p> <p>A USB flash drive format service manual supplement containing parts and service information on factory installed components shall be provided with the completed unit. The manual shall be specifically written for the unit being purchased. It shall not be a generic manual for a multitude of different units.</p>		

	Bidder Complies	
	Yes	No
<p><u>MANUAL, CHASSIS OPERATION</u> One (1) chassis operation (manufacturers standard) shall be provided with the completed unit.</p> <p><u>ONE (1) YEAR MATERIAL AND WORKMANSHIP</u> Each new piece of apparatus shall be provided with a minimum one (1) year basic apparatus material and workmanship limited warranty. The warranty shall cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>CHASSIS WARRANTY</u> The chassis manufacturer shall provide a three (3) year or 100,000-mile warranty.</p> <p><u>TEN (10) YEAR PRO-RATED PAINT AND CORROSION</u> Each new piece of apparatus shall be provided with a ten (10) year pro-rated paint and corrosion limited warranty on the apparatus cab. The warranty shall cover painted exterior surfaces of the body to be free from blistering, peeling, corrosion, or any other adhesion defect caused by defective manufacturing methods or paint material selection that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>CAMERA SYSTEM WARRANTY</u> A fifty-four (54) month warranty shall be provided for the camera system.</p> <p><u>COMPARTMENT LIGHT WARRANTY</u> The compartment lights shall not offer an extended warranty.</p> <p><u>TRANSMISSION WARRANTY</u> The transmission shall have a five (5) year/unlimited mileage warranty covering 100 percent parts and labor. The warranty to be provided by Allison Transmission and not apparatus builder.</p> <p><u>TEN (10) YEAR STRUCTURAL INTEGRITY</u> Each new piece of apparatus shall be provided with a ten (10) year material and workmanship limited warranty on the apparatus body. The warranty shall cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY</u> A Gortite roll-up door limited warranty shall be provided. The mechanical components of the roll-up door shall be warranted against defects in material and workmanship for the lifetime of the vehicle. A six (6) year limited warranty shall be provided on painted and</p>		

	Bidder Complies	
	Yes	No
<p>satin roll up doors.</p> <p>A copy of the warranty certificate shall be submitted with the bid package.</p> <p><u>FIVE (5) YEAR GENERATOR WARRANTY</u> There shall be a 5-year limited warranty provided for Onan hydraulic and Protec generators.</p> <p><u>TEN (10) YEAR PRO-RATED PAINT AND CORROSION</u> Each new piece of apparatus shall be provided with a ten (10) year pro-rated paint and corrosion limited warranty on the apparatus body. The warranty shall cover painted exterior surfaces of the body to be free from blistering, peeling, corrosion, or any other adhesion defect caused by defective manufacturing methods or paint material selection that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>VEHICLE STABILITY CERTIFICATION</u> The rescue apparatus manufacturer shall provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification shall be provided at the time of bid.</p> <p><u>CAB INTEGRITY</u> The cab has been tested to and passed the following standards:</p> <ul style="list-style-type: none"> - ECE Regulation No.29 - SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks. <p><u>AMP DRAW REPORT</u> The bidder shall provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.</p> <p>The manufacturer of the apparatus shall provide the following:</p> <ul style="list-style-type: none"> • Documentation of the electrical system performance tests. • A written load analysis, which shall include the following: <ul style="list-style-type: none"> ○ The nameplate rating of the alternator. ○ The alternator rating under the conditions specified per: <ul style="list-style-type: none"> ▪ Applicable NFPA 1901 or 1906 (Current Edition). ○ The minimum continuous load of each component that is specified per: <ul style="list-style-type: none"> ▪ Applicable NFPA 1901 or 1906 (Current Edition). 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> ○ Additional loads that, when added to the minimum continuous load, determine the total connected load. ○ Each individual intermittent load. <p>All of the above listed items shall be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).</p>		

EXHIBIT “A”
EXCEPTIONS TO RFP

EXHIBIT “B”
MANUFACTURER HISTORY

EXHIBIT “C”

REFERENCES

EXHIBIT “D”
DEALER AUTHORIZATION

EXHIBIT “E”
BUSINESS LICENSES

EXHIBIT “F”
WARRANTIES

EXHIBIT “G”
GENERAL LIABILITY INSURANCE

EXHIBIT “H”
EXCESS LIABILITY INSURANCE

EXHIBIT “I”
BANKRUPTCY

EXHIBIT “J”
SURETY (BID) BOND

EXHIBIT “K”
IRAN DIVESTMENT ACT AFFIDAVIT

IRAN DIVESTMENT ACT AFFIDAVIT

As per Tennessee Code Annotated, Title 12, and effective July 1, 2016:

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

Signature

Date