

AUGUSTA FIRE DEPARTMENT - HEAVY RESCUE BID SPECIFICATIONS

BIDDING TERMS Bidder Has Read and Fully Understand the Bidding Terms: YES NO

The information contained in this document will reference the minimum specifications for the purchase of one (1) or more custom built heavy rescue apparatus as detailed below. Proposals that are submitted shall reference only one (1) apparatus to avoid any confusion with number of items or equipment that may be included in the event that multiple units of this vehicle are purchased.

The following minimum specifications are intended to cover this particular brand new (never used) custom built heavy rescue apparatus and the latest production design of this unit delivered to Augusta Fire Department.

Any bidder who does not follow the requirements of these bid specifications shall be considered non-responsive and shall be disqualified for further consideration.

The final preparations for this apparatus shall be constructed entirely within the Continental United States utilizing every American made material or product available at time of production to meet the specifications of the Augusta Fire Department.

Each bidder shall submit their information on the required **“BIDDER INFORMATION FORM”** found at the end of this document. Any bidder who does not complete the required information and include this form with their bid proposal shall be considered non-responsive and shall be disqualified for further consideration.

Each bidder shall include one original copy of their proposal and one set of CAD drawings with their bid proposal. If being delivered by mail, the bid proposal shall be sealed inside a second interior envelope that is clearly marked **“HEAVY RESCUE SEALED BID”**. Any bidder who does not have the envelope clearly marked as requested shall be considered non-responsive and shall be disqualified for further consideration.

Each subsequent section of the bid specifications shall contain a check box for each bidder to identify whether or not they comply 100% with the specification as it has been provided by the Augusta Fire Department.

Each bidder shall either check **“YES”** or **“NO”** on each section.

All sections that receive a **“YES”** checkmark shall follow the specification precisely as it has been provided in the bid specifications.

All sections that receive a **“NO”** checkmark must be accompanied by an explanation in the vendor provided exceptions page attached to the end of their proposal.

Failure to indicate **“YES”** or **“NO”** to any section and failure to fully explain any exception, no matter how minor, will result in immediate disqualification.

Sections of the specifications that are clearly marked as accepting **“NO EXCEPTIONS”** shall not be deviated from and will be cause for immediate rejection of the bid.

All bid proposals shall be valid for a period of no less than 60 calendar days from the bid opening date and shall not be withdrawn. The Augusta Fire Department reserves the right to reject any and all bids that do not satisfy these requirements and do not meet the specific needs of the department.

EXCEPTIONS TO SPECIFICATIONS

Bidder Complies: YES ___ NO ___

If there are any exceptions or deviations to the original specifications, regardless of how minor they may be, they shall be explained in detail on a vendor supplied sheet attached at the end of the bid proposal.

In the event that there are exceptions noted, they shall only be acceptable if it is for a superior substitution to the original specification, but according to bidding requirements must be noted as an exception. This type of exception shall not be considered negative toward the bidder, but should be stated for later comparison of all bids. If no exceptions are noted, the original specifications shall be strictly adhered too at time of final inspection and delivery.

PROPOSAL FORMAT

Bidder Complies: YES ___ NO ___

All proposals submitted for consideration shall be formatted in the **same layout and same order** as the bid specifications for ease of comparison.

Any bid proposal that is not presented in this exact order and format will be rejected and excluded for future consideration.

GENERAL INFORMATION

Bidder Complies: YES ___ NO ___

Descriptions and specifications of the following apparatus including the equipment detailed or described herein are intended to outline the design, quality and integrity of this all American manufactured apparatus.

The following specifications are intended to cover only this particular newly constructed custom rescue apparatus and our latest production design of this unit for the Augusta Fire Department.

The apparatus shall be constructed entirely within the Continental United States utilizing every American made material or product available at time of production.

APPARATUS FACTORY LOCATION

Bidder Complies: YES ___ NO ___

The apparatus factory location shall be clearly listed in the proposal.

INTENT OF SPECIFICATIONS

Bidder Complies: YES ___ NO ___

It is the intent of these specifications to cover the fabrication and delivery of one custom built heavy duty rescue vehicle to the Augusta Fire Department as hereinafter specified.

These specifications cover general requirements as to the type of construction and tests to which the apparatus must conform, together with certain details as to finish, equipment, and appliances to which the contractor shall supply and conform.

Minor details of construction and materials where not otherwise specified are left to the discretion of the contractor, who shall be solely responsible for the design and construction of all features.

The apparatus shall conform to the recommendations of NFPA 1901-2016, Standard for Automotive Fire Apparatus, unless otherwise stated in these specifications.

GENERAL CONSTRUCTION

Bidder Complies: YES ___ NO ___

The apparatus shall be designed and the equipment mounted with due consideration to distribution of load between the front and rear axles so that all specified equipment, including filled water tank, a full complement of personnel and fire hose will be carried without injury to the apparatus. Weight balance and distribution shall be in accordance with the recommendations of NFPA 1901.

The GAWR and GVWR of the chassis shall be adequate to carry the fully equipped apparatus including unequipped personnel weight and a miscellaneous equipment allowance per NFPA criteria. It shall be the responsibility of the purchaser to provide the contractor with the weight of equipment to be carried if it is in excess of the allowance as set forth by NFPA.

The materials and components called for in the construction and finish of the apparatus described herein such as the body, plumbing, sub-frame, electrical, cab/chassis and etc. shall be strictly adhered to.

This heavy duty rescue vehicle shall be of the highest quality available and provide an extended in-service life for the Augusta Fire Department.

PRE-BUILD MEETING

Bidder Complies: YES ____ NO ____

There shall be a pre-build meeting held between factory personnel and representatives of the Augusta Fire Department to finalize details prior to the start of fabrication.

This meeting shall be held at the apparatus manufacturer's facility.

PERIODIC APPARATUS INSPECTIONS

Bidder Complies: YES ____ NO ____

At any time during the build process, representatives of the department are always encouraged to visit the factory at any time during business hours to check-in on the progress of their new custom built apparatus.

A factory representative will always be on site to give updates and let department members see their truck as it is being built.

Appointments are never necessary for these periodic visits, but for safety reasons we do ask that you arrive wearing appropriate clothing in order to enter the fabrication areas.

Eye protection and additional safety equipment will be provided as needed.

PROGRESS PICTURES

Bidder Complies: YES ____ NO ____

Each week the website at the apparatus manufacturer shall be updated with "IN PROGRESS" pictures of all apparatus currently in production.

This allows any department members the opportunity to check-in on their new apparatus each week regardless of their location or work schedule.

FINAL INSPECTION VISIT

Bidder Complies: YES ____ NO ____

During the final inspection visit to the factory, representatives from the Augusta Fire Department shall perform a final inspection of the apparatus when it is completed. Following the final inspection visit, the vehicle will be available for final delivery.

TRAVEL ALLOWANCE

Bidder Complies: YES ____ NO ____

If the manufacturer's facility is farther than 200 road miles from the fire department, travel accommodations shall be included for up to four (4) department personnel.

The travel shall include the following:

- Airfare from Lexington, Kentucky (LEX)
- Rental Car
- Food Voucher
- Hotel

Travel accommodations shall be included for the following trips:

- Pre-Build Meeting
- Final Inspection and Delivery

DELIVERY REQUIREMENTS

Bidder Complies: YES ____ NO ____

The apparatus shall be completely equipped as per these specifications upon arrival and on completion of the required tests shall be ready for immediate service to the Augusta Fire Department.

Should any alterations be required at the time of delivery to comply with these specifications, it shall be completed at the expense of the contractor.

Augusta Fire Department personnel shall take delivery of the finished apparatus at the factory. During the final factory inspection and at time of accepting delivery, a factory technician shall be on site and remain with Augusta Fire Department representatives a sufficient length of time to instruct personnel in the proper use, operation, care and maintenance of the apparatus.

To ensure a proper break-in period for all engine, transmission and driveline components, it is recommended that the finished apparatus shall be driven home under its own power.

The following items, in quantity shown, will be included in the bid price submitted for the apparatus and will be furnished to the fire department upon delivery:

- One (1) Operator's Manual
- One (1) Equipment Maintenance Manual

- One (1) Complete "As Wired" electrical diagram for apparatus

Estimated maximum delivery time would be approximately 150 working days after the arrival of the cab and chassis. In the event that there are no delays in receiving the chassis and other components, the finished apparatus will be delivered in a more timely fashion. This is assumed to be the worst case scenario.

CAD DRAWINGS

Bidder Complies: YES ___ NO ___

There shall be a full set of CAD drawings included with this bid proposal to show details of the apparatus being presented.

The drawings shall be to scale and shall include left, right, top and rear views of the entire apparatus with scaled dimensions.

FAMA MEMBERSHIP

Bidder Complies: YES ___ NO ___

The apparatus manufacturer shall be a current 2017 member of the Fire Apparatus Manufacturer's Association.

NON-PROPRIETARY PARTS

Bidder Complies: YES ___ NO ___

The finished apparatus shall be manufactured with parts that are commonly used by the heavy-duty trucking industry in order to assist the department in the future with cost and availability of replacement parts.

COOPERATIVE PURCHASING

Bidder Complies: YES ___ NO ___

The apparatus manufacturer will honor the pricing in this proposal for any other government based agency that wishes to purchase a replica of this apparatus through a cooperative purchasing agreement.

PRIME (SINGLE SOURCE) BODY BUILDER

Bidder Complies: YES ___ NO ___

The apparatus manufacturer shall be the prime builder of this severe duty all aluminum fire apparatus quality body. **NO EXCEPTIONS**

All engineering, design, fabrication, paint and finishing shall take place at the apparatus manufacturer's main facility.

Bodies that are mass produced from lower quality materials such as thin stamped utility style designs, bolted together designs or those that are manufactured by a third party for the apparatus manufacturer shall be considered sub-standard and shall not be acceptable for this project.

The body shall be designed and manufactured entirely from formed and welded aluminum plate and aluminum extrusions to ensure a high quality design and finish that shall provide years of uninterrupted service. Bodies that incorporate steel as structural support or that utilizes steel in any way shall be considered sub-standard and shall not be acceptable for this project.

RE-MOUNTING

Bidder Complies: YES ___ NO ___

The body shall be designed, manufactured and installed on the chassis to allow for complete removal for future re-mounting onto another chassis.

QUALITY AND WORKMANSHIP

Bidder Complies: YES ___ NO ___

Workmanship and materials provided shall be of a quality unsurpassed for this apparatus and shall embody the latest approved automotive engineering practices.

All components requiring regular maintenance, lubrication and visual inspections shall be readily accessible without the use of special tools and the apparatus shall be designed and manufactured for ease of operation and have the highest level of safety available.

Construction shall be rugged and ample safety factors must be provided to carry loads as specified to meet both on and off road "Performance Tests and Requirements".

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 the American Welding Society codes upon hire and every three (3) years thereafter.

PERFORMANCE TESTS AND REQUIREMENTS Bidder Complies: YES ____ NO ____

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. Vehicles shall adhere to the following parameters:

- The apparatus, when fully equipped and loaded, shall have not less than 25 percent or 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.
- 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.
- 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.
- The apparatus, fully loaded, shall be capable of obtaining a speed of 60 mph on a level concrete highway with the engine not exceeding the governed rpm (full load).

FAILURE TO MEET TEST

Bidder Complies: YES ____ NO ____

In the event the apparatus fails to meet the test requirements of these specifications on the 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.

CERTIFICATION OF NFPA 1901 COMPLIANCE

Bidder Complies: YES ____ NO ____

As per NFPA 1901, the purchaser shall assume the responsibility of determining, prior to the purchase of the apparatus, which will be responsible for ensuring that all aspects of NFPA 1901-2016 are met. The manufacturer shall be responsible for providing or performing only the items requested by the purchaser in the documents provided to the manufacturer by the purchaser.

Written certification shall be provided by the manufacturer stating that the delivered apparatus complies with the NFPA 1901-2016 Standard. If the purchaser has elected to provide, perform, outsource and/or contract with a third party, any item required by NFPA 1901-2016 (per the previous paragraph), the manufacturer shall provide, upon delivery, a "Statement of Exceptions" per Chapter 4 of NFPA 1901. This "Statement of Exceptions" shall include the following:

1. A separate specification of the section of the NFPA Standard for which the apparatus is lacking compliance.
2. A description of the particular aspect of the apparatus that is not compliant.
3. A description of the further changes or modifications to the delivered apparatus which must be completed to achieve full compliance.
4. An identification of the entity that will be responsible for making the necessary post-delivery changes or modifications to the apparatus to achieve full compliance with the applicable standard.

The responsibility shall rest with the purchaser to ensure that the apparatus not be placed into active emergency service until fully compliant with NFPA 1901.

WARRANTIES AND GUARANTEES

Bidder Complies: YES ____ NO ____

The finished rescue vehicle as it is specified in NFPA 1901 shall carry full product warranty as described as it is provided by the individual component manufacturer as listed below:

- Overall Apparatus - 1 Year Bumper-To-Bumper Warranty On All Components
- Apparatus Body/Sub-structure - 10 Year Structural and Perforation Warranty
- Body Paint and Finish - 7 Year Warranty
- Chassis - 12 Months Bumper-To-Bumper Factory Warranty
- Engine - 60 Months / 100,000 Miles
- Transmission - 60 Months / Unlimited Miles
- Whelen Electrical, Lights, Wiring - 5 Year Warranty

APPARATUS SERVICE CENTER

Bidder Complies: YES ____ NO ____

The apparatus manufacturer operates a full service maintenance center to include engine and mechanical repair, preventative maintenance, full capacity fabrication shop, full paint and body shop, fire pump maintenance and repair, collision repair, electrical service and repair as well as a full service custom graphics shop.

There shall be multiple service centers across the United States that are authorized by the factory to perform service repairs. The authorized service centers shall operate fully capable mobile service vehicles so repairs can be made on site at the convenience of the department.

If there is a service center outside of our current network that you prefer to use, the apparatus manufacturer shall coordinate service work with any qualified repair station to meet the specific needs of the department.

INSURANCE REQUIREMENTS

Bidder Complies: YES ____ NO ____

The apparatus manufacturer 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.

COMMERCIAL GENERAL LIABILITY INSURANCE

During the performance of the contract and for three (3) years following acceptance of the product, the apparatus manufacturer shall keep in force at least the following minimum limits of commercial general liability insurance:

- Each Occurrence: \$1,000,000
- Products/Completed Operations Aggregate: \$2,000,000
- Personal and Advertising Injury: \$1,000,000
- General Aggregate: \$2,000,000

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

During the performance of the contract, the apparatus manufacturer shall keep in force at least the following minimum limits of commercial automobile liability insurance:

- Each Accident Combined Single Limit: \$1,000,000

UMBRELLA/EXCESS LIABILITY INSURANCE

During the performance of the contract and for three (3) years following acceptance of the product, the apparatus manufacturer shall keep in force at least the following minimum limits of umbrella liability insurance:

- Aggregate: \$1,000,000
- Each Occurrence: \$1,000,000

USA MANUFACTURER

Bidder Complies: YES ____ NO ____

The entire apparatus shall be assembled within the borders of the Continental United States to insure more readily available parts (without added costs and delays caused by tariffs and customs) and service, as well as protection for the purchaser should legal action ever be required.

PATENTS

Bidder Complies: YES ____ NO ____

The apparatus manufacturer will pay all royalties and license fees and will hold and save the fire department, its officers, agents, servants, and employees harmless from liability of any nature and kind, including costs, and expenses for or on account of any patented or non-patented invention, process, article, or appliance manufactured or used on the performance of the contract including its use by the fire department.

In this respect, the successful bidder will defend all suits or claims for infringement of any patent or license right.

ASSIGNMENTS

Bidder Complies: YES ____ NO ____

The manufacturer will not assign, transfer, convey, or otherwise dispose of the contract or his right to execute it or his right, title, or interest to it or any part thereof: or assign any of the money's due or become due under the contract, without the prior written consent of the fire department.

2017 KENWORTH T-370 CAB AND CHASSIS

MISSION: Fire Truck Service Application – Heavy Duty

DIMENSIONS: Wheelbase: 205”, CA: 138”, Axle to Frame: 75”

DIESEL ENGINE: Cummins {Paccar PX-9} EPA 10, 380 HP @ 2000 RPM
FAN DRIVE {Horton} Direct Drive Type, Two Speed
RADIATOR, 1,000 Square Inches with Surge Tank
FEDERAL EMISSIONS Compliant
AIR CLEANER Single Element
EMISSION COMPLIANCE Engine Shutdown System Exempt Vehicles, Complies With California Clean Air Regulations
OBD COMPLIANCE (On Board Diagnostics)

TRANSMISSION: {Allison 3000EVS} 5th Generation Controls; Close Ratio, 6-Speed; With Overdrive, Includes Oil Level Sensor, With Provision for PTO
OIL COOLER, AUTO TRANSMISSION
TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000
SHIFT CONTROL PARAMETERS Allison S-1 Performance Programming in Primary and Allison Fixed Programming in Secondary
TRANSMISSION OIL Synthetic
ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS)
Automatic Neutral Feature
Rear Transmission Support System Installed

FRONT AXLE: Wide Track, I-Beam Type, 14,600-lb Capacity
Spring Suspension w/ Shock Absorbers: 14,600-lb Capacity
Air Brake Package

REAR AXLE: Single Reduction, 30,000-lb Capacity
Gear Ratio: 5.38

Spring Suspension: 30,000-lb Capacity

Air Brake Package w/ Locking Feature {Park}

CAB: Conventional

CAB INTERIOR TRIM: Deluxe – Silver/Gray Panel

SEATBELT WARNING DEVICE Seat Belt Switches and Seat Sensors for all Belted Positions

VEHICLE DATA RECORDER

BUCKET SEAT, DRIVER {National} NFPA Compliant, Air Suspension, High Back With Integral Headrest, Lumbar Support, 2 Position Front Cushion Adjust, 6 to 23 Degree Back Angle Adjust, Dual Arm Rests, 3-Point Restraint

BUCKET SEAT, PASSENGER {National} NFPA Compliant, High Back With Integral Headrest, Tool Box Seat Base, Dual Arm Rests, 3-Point Restraints

GRAB HANDLE {NFPA COMPLIANT} Each Side

MIRRORS Rectangular, 7.00" x 16.00", 8.00" Convex Both Sides, Breakaway Type, Heated Heads Thermostatically Controlled, Power Both Sides, Bright Finish Heads & Brackets

SEAT BELTS All Red

AIR CONDITIONER With Integral Heater & Defroster

INSTRUMENT PANEL GAUGE CLUSTER {English Measurements}

DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

WINDOW, PS POWER, Power Door Locks DS and PS

SELF CANCELLING TURN SIGNALS with Dimmer Switch

FUEL TANK: 56 Gallon (Minimum) Aluminum Tank - Polished

DEF TANK: 11 Gallon Tank - Polished Stainless Steel Cover - Heated Tank

FRONT TIRES: (2) 22.5 16 ply - Road Tread

FRONT WHEELS: WHEELS, FRONT DISC; 22.5" Steel, 10-Stud Hub Piloted, Flanged Nut

REAR TIRES: (4) 11R22.5 16 ply - Deep Lug M/S - Bridgestone

REAR WHEELS: WHEELS, REAR DISC; 22.5" Steel, 10-Stud Hub Piloted, Flanged Nut

CHASSIS MODEL: 2017 Model T-370

FRONT TOW HOOKS: TOW HOOK, FRONT (2) Frame Mounted Receivers
{Removable Insert Hooks}

FRAME RAILS: FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.625" x 3.50" x 0.312"

FRONT BUMPER: BUMPER, FRONT Full Width, Aerodynamic, Chrome Plated Steel – Standard Bumper

BRAKE SYSTEM: BRAKE SYSTEM, AIR Dual System for Straight Truck Applications

AIR DRYER Standard

DRAIN VALVE Manual

AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control
System with Electronic Stability Control Programming

Spring Actuated Parking Brake

AIR COMPRESSOR: AIR COMPRESSOR {Cummins} 18.7 CFM Capacity

STEERING WHEEL: STEERING WHEEL 4-Spoke, 18" Diam., Black

STEERING COLUMN Tilting and Telescoping

ENGINE EXHAUST: EXHAUST SYSTEM Single Horizontal, Aftertreatment Device, Frame Mounted Right
Side, for Use With Long Tail Pipes

ENGINE BRAKE: ENGINE TURBO EXHAUSE BRAKE

ELECTRICAL SYSTEM: ELECTRICAL SYSTEM 12-Volt, Standard Equipment

CIGAR LIGHTER Includes Ash Cup

ALTERNATOR {Leece-Neville} Brush Type; 12 Volt 320 Amp. Capacity,
Pad Mount

DATA RECORDER: DATA RECORDER Includes Display

BATTERIES: BATTERY BOX

BATTERY SYSTEM {Paccar} Maintenance-Free, (2) 12-Volt 1400CCA

BATTERY DISCONNECT SWITCH Lever Operated (CAB)

STARTER: STARTING MOTOR 12 Volt

INDICATOR LAMPS: INDICATOR, LOW COOLANT LEVEL
 INDICATOR, BATTERY WARNING Green BATTERY ON Indicator, Mounted on Left Side of Instrument Panel, To be Used with Battery Disconnect Switch

CIRCUIT BREAKERS: CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses

FRONT GRILL: GRILLE Stationary, Chrome / Polished Insert
 GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System

FRONT HOOD: FRONT END Tilting, Fiberglass

CAB PAINT: PAINT TYPE Base Coat/Clear Coat, Single Color: Viper Red

CHASSIS CAB STEPS

Bidder Complies: YES NO

The cab and chassis shall come from the chassis manufacturer’s factory with an aluminum fuel tank and aluminum cab steps.

Steps shall have a stamped grip strut surface for an aggressive stepping surface.

SEATING CAPACITY

Bidder Complies: YES NO

The seating capacity for this apparatus shall be two (2) persons.

There shall be a permanent tag installed in the cab area displaying the total number of seated positions.

AIR HORNS

Bidder Complies: YES NO

There shall be a pair of Grover stutter tone air horns provided and installed on the apparatus.

The horns shall have round trumpets and shall be mounted on each side of the chassis hood.

The horns shall be activated from foot switches located on either side of the cab.

WINCH RECEIVERS

Bidder Complies: YES ____ NO ____

There shall be two (2) portable winch receivers provided in the following locations:

- Rear - Below Rear Step Bumper
- Front - Front of Apparatus Cab at Bumper

Each receiver location shall include a quick-connect electrical wiring receptacle.

WARN PORTABLE WINCH

Bidder Complies: YES ____ NO ____

There shall be a Warn 9.5ti portable winch provided with the finished apparatus.

There shall be a Warn portable winch carrier provided.

There shall be electrical connections located at each of the apparatus winch receivers to power the 12 VDC winch.

The winch shall be supplied complete with wire rope, hook and remote control.

FLUID CAPACITY LABEL

Bidder Complies: YES ____ NO ____

A permanent plate shall be mounted in the driver's compartment specifying the quantity and type of the following fluids used in the apparatus for normal maintenance:

- | | |
|------------------------------------|-----------------------------------|
| - Engine Oil | - Engine Coolant |
| - Transmission Fluid | - Pump Transmission Fluid |
| - Drive Axle Fluid | - Air Conditioning Refrigerant |
| - Air Conditioning Lubrication Oil | - Power Steering Fluid |
| - Transfer Case Fluid | - Air Compressor System Lubricant |
| - Front tire cold pressure | - Rear tire cold pressure |

WHEEL DRESS UP PACKAGE

Bidder Complies: YES ____ NO ____

The outer wheels on the apparatus shall be finished with polished stainless steel wheel simulators.

CONSOLE

Bidder Complies: YES ____ NO ____

There shall be a custom console fabricated and installed between the front seats in the cab. It shall be constructed of .125" smooth aluminum plate.

The entire console shall be Zolatone coated black.

The rear of the console shall have a smooth writing surface with a hinged lid and storage for map books.

The front of the console shall contain emergency warning siren, PTO or pump controls and any accessory switches that cannot be contained in the dash switch packs.

The front portion of the console shall be easily accessed for serviceability.

ROCKER SWITCH PANEL

Bidder Complies: YES ____ NO ____

The warning light and scene light switches shall be contained on the in-dash custom switch control panel.

The switch panel shall be integrated into the dash by the chassis manufacturer for an even appearance.

Accessory switches that cannot be contained in this location shall be installed on the center console.

HELMET STORAGE

Bidder Complies: YES ____ NO ____

To meet the intent of NFPA 14.1.8.4.1, the helmet for each occupant shall be stored in an exterior compartment and shall not be worn while the apparatus is in motion.

There shall be a permanent label affixed in plain view of all passengers stating these instructions.

MUD FLAPS

Bidder Complies: YES ____ NO ____

There shall be black thick hard rubber mud flaps provided at the rear of each wheel opening.

SEAT BELT MONITORING SYSTEM

Bidder Complies: YES ___ NO ___

A seat belt monitoring system (SBMS) shall be provided and installed in the apparatus.

The SBMS shall be capable of monitoring up to two (2) seat positions indicating the status of each occupied seat position with a green or red LED indicator as follows:

- Seat Occupied Buckled **Green**
- Seat Occupied Unbuckled **Red**
- No Occupant Buckled **Red**

The SBMS shall include an audible alarm that shall be activated when a red illumination condition exists and the parking brake is released, or a red illumination condition exists and the transmission is not in park.

VEHICLE DATA RECORDER

Bidder Complies: YES ___ NO ___

A NFPA compliant vehicle data recorder (VDR) shall be provided and installed in the apparatus.

The VDR shall be installed for purposes of recording, storing and reading vehicle data information for future use.

The VDR shall be capable of operating in a voltage range from 8VDC to 16VDC and shall continue operation upon termination of power or at voltages below 8VDC for a minimum of 10 minutes.

The VDR shall not interfere with, suspend, or delay any communications that may exist on the CAN data link during the power up, initialization, runtime, or power down sequence.

The information stored on the VDR can be downloaded through a chassis mounted USB port with the provided software to any compatible laptop computer to retrieve the required information.

The vehicle data recorder shall be capable of recording the following data via hardwired and/or CAN inputs:

- 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
- Master Optical Warning Device Switch - On/Off
- Time - 24 Hour Time
- Date - Year/Month/Day

VEHICLE ROLLOVER STABILITY

Bidder Complies: YES ____ NO ____

The apparatus chassis shall be equipped with a stability control system and shall be certified to NFPA 1901 Rollover Stability requirements.

MAXIMUM TOP SPEED

Bidder Complies: YES ____ NO ____

The maximum top speed of this apparatus shall be determined using the following NFPA 1901 Chapter 4 criteria:

- Apparatus weighing over 26,000 pounds shall not exceed 68 MPH.

GENERAL BODY DIMENSIONS

Bidder Complies: YES ____ NO ____

The entire assembled body shall have an approximate overall length of 19 feet and 6 inches, including the rear step bumper.

The entire assembled body shall have an approximate overall width of 8 feet and 6 inches.

The entire assembled body shall have an approximate overall driving height of no more than 10 feet and 0 inches including lights.

EXTREME DUTY ALUMINUM 18' RESCUE BODY

Bidder Complies: YES ____ NO ____

The apparatus body shall be constructed of 3" x 3", .25 wall 6061 alloy extruded aluminum tubing, 3/16" 5052 alloy flat aluminum plate as well as 1/8" and 3/16" 3003 alloy polished diamond tread aluminum.

The sheet metal (3/16"aluminum) shall be formed and welded for smooth symmetrically rounded corners and edges.

The polished diamond tread aluminum shall feature an embossed non-slip design when installed on any surface intended for standing or walking.

The body shall be designed and manufactured with tubing and channel reinforcement as necessary for rigidity. There shall be no angle used as a structural component.

All body parts and attachments shall be fastened with rust resistant fasteners to preclude loosening of bolts and screws and/or the cracking of welded joints.

The body shall be reinforced as necessary where hose reels, hose troughs, ladder brackets and etc. are attached.

The body shall be an all welded structure.

All components shall be constructed to allow removal of any component for service and/or repair.

The body and components thereof shall be bolted to the frame of the chassis.

All welds shall be cleaned of any weld residue prior to coating or when presenting a natural finish in order to present a clean appearance on all surfaces.

The front of the body shall be covered on sides with .125" aluminum Tread-Brite plating for protection from road debris.

The wheel wells shall have smooth aluminum liners that shall allow access to the spring hangers.

There shall be a polished aluminum fenderette attached to the fender liners.

EXTREME DUTY SUB-FRAME

Bidder Complies: YES ___ NO ___

The fully integrated body and substructure of the *all* aluminum body shall assure endurance and strength.

The aluminum apparatus body shall be supported by means of an aluminum support system incorporating stanchion brackets. The support system shall consist of individual assemblies fastened together utilizing precision welding to insure sturdiness with proper dimensions and minimal distortion.

The Sub-Frame shall be constructed entirely of 6061 alloy extruded aluminum 3"x3"x.25" square wall crush resistant tubing running parallel to the chassis frame rails and underneath the full length of the rear all fully welded on 15" centers.

The Sub-Frame shall be bolted to the Chassis frame rails with grade 8 5/8" U-Bolts (incorporating shear plates as necessary) and the entire body shall be modular and allow removal from the chassis without cutting in any way.

BODY MOUNTING

Bidder Complies: YES ___ NO ___

There shall be heavy duty 1/2" thick shear plates attached directly to the chassis frame rail at pre-determined locations with 7/8" grade 8 bolts, locking nuts and flat washers.

The body sub frame shall be secured to the frame using 5/8" grade 8 U-bolts, locking nuts and flat washers in multiple locations along the frame rails in coordinating locations with the shear plates.

There shall be a 1"x3" flexible rubber vibration isolation pad, running the entire length of the body, installed between the chassis frame rails and body sub-frame. The isolation pads shall ensure no direct metal contact between the chassis frame and the body sub-frame and allows proper flexion of the entire unit as a whole to equally distribute the load throughout the entire body rather than place excessive stress on any one point.

BODY STORAGE COMPARTMENTS

Bidder Complies: YES ____ NO ____

The body compartments shall be constructed of formed and welded 3/16", 5052 formed aluminum plate and shall allow for the proper amount of flexion without the possibility of forming cracks.

Each body compartment shall be finished with a gray Zolatone coating.

All compartments shall incorporate a sweep out design on the lowest horizontal surfaces.

Each compartment shall be equipped with a ROM shutter style roll-up door.

The doors shall have a satin aluminum finish.

Each compartment shall utilize LED track-style lighting that shall be integrated into each compartment door track.

Each compartment light shall be activated individually and illuminate when the door is in the open position.

The compartment dimensions are close approximations and may be altered as much as +/- 2" to accommodate individual chassis features and/or department requested equipment options.

LEFT COMPARTMENT - L1

Bidder Complies: YES ____ NO ____

Immediately behind the cab on the driver side of the body shall be a compartment with the following approximate usable door dimensions:

- 56" high X 46" wide X 25" deep at the lowest floor.

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

The area above the chassis frame rails shall fully transverse into compartment R1.

LEFT COMPARTMENT - L2

Bidder Complies: YES ___ NO ___

Immediately behind compartment L1 on the driver side of the body shall be a compartment with the following approximate usable door dimensions:

- 56" high X 46" wide X 25" deep at the lowest floor.

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

The area above the chassis frame rails shall fully transverse into compartment R2.

LEFT COMPARTMENT REAR WALL - L2

Bidder Complies: YES ___ NO ___

There shall be a solid rear wall in compartment L2 to align with the lowest rear wall of the compartment.

The wall shall provide a compartment with a depth of 25" from top to bottom.

The remaining area behind the wall shall be included and accessed in the R2 compartment.

LEFT COMPARTMENT - L3

Bidder Complies: YES ___ NO ___

Immediately behind compartment L2 on the driver side of the body over the rear wheel well shall be a compartment with the following approximate usable door dimensions:

- 26" high X 46" wide X Full Transverse

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

The area above the chassis frame rails shall fully transverse into compartment R3.

LEFT COMPARTMENT - L4

Bidder Complies: YES ___ NO ___

Immediately behind compartment L3 on the driver side of the body behind the rear wheel well shall be a compartment with the following approximate usable door dimensions:

- 56" high X 46" wide X 25" deep at the lowest floor.

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

This compartment shall not transverse.

RIGHT COMPARTMENT - R1

Bidder Complies: YES ___ NO ___

Immediately behind the cab on the passenger side of the body shall be a compartment with the following approximate usable door dimensions:

- 56" high X 46" wide X 25" deep at the lowest floor.

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

The area above the chassis frame rails shall fully transverse into compartment L1.

RIGHT COMPARTMENT - R2

Bidder Complies: YES ___ NO ___

Immediately behind compartment R1 on the passenger side of the body shall be a compartment with the following approximate usable door dimensions:

- 56" high X 46" wide X 25" deep at the lowest floor.

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

The area above the chassis frame rails shall be approximately 72" deep as measured from the outside edge of the R2 compartment.

RIGHT COMPARTMENT - R3

Bidder Complies: YES ____ NO ____

Immediately behind compartment R2 on the passenger side of the body over the rear wheel well shall be a compartment with the following approximate usable door dimensions:

- 26" high X 46" wide X Full Transverse

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

The entire compartment shall fully transverse into compartment L3.

RIGHT COMPARTMENT - R4

Bidder Complies: YES ____ NO ____

Immediately behind compartment R3 on the passenger side of the body behind the rear wheel well shall be a compartment with the following approximate usable door dimensions:

- 56" high X 46" wide X 25" deep at the lowest floor.

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

This compartment shall not transverse.

REAR COMPARTMENT - REAR

Bidder Complies: YES ____ NO ____

Immediately behind both compartments L4 and R4 on the extreme rear of the vehicle shall be a compartment with the following approximate usable door dimensions:

- 56" high X 45" wide X 50" deep (Above the Chassis Frame)

Compartment shall be equipped with dual LED lighting that shall be activated when the door is opened.

Compartment shall be finished with a Zolatone coating.

COMPARTMENT ROLL UP DOORS - SATIN

Bidder Complies: YES ____ NO ____

All exterior side equipment compartments shall be equipped with ROM roll-up shutter doors with a natural satin aluminum un-painted finish.

The roll up door(s) will be fabricated from aluminum extrusions and be manufactured and assembled in the United States.

The door slats shall be double-wall extrusions with dimensions of 1.366" high x .315" thick. The exterior surface shall be flat and the interior surface concave to deflect loose equipment to prevent the door from jamming.

Each slat shall have interlocking end shoes to prevent the slat from moving side to side resulting in binding of the door. Each slat shall be separated by a co-extruded PVC and rubber inner seal to prevent metal to metal contact and minimize dirt and moisture from entering the compartment. The inner seal shall not be visible from the exterior to maintain a clean appearance of door.

The slats shall have interlocking joints with a folding locking flange to provide security and prevent penetration by sharp objects.

The track shall be a one (1) piece aluminum assembly that has an attaching flange and finishing flange incorporated into the design that facilitates installation and provides a finished look to the door without additional trim or caulking. A low profile side seal shall be utilized to maximize usable compartment space.

A drip rail designed to prevent water from dripping into the compartment shall be provided. The drip rail shall have a built in replaceable non-contacting seal to eliminate scratching of the surface of the door.

Bottom rail extrusion must have smooth back to prevent loose equipment from jamming the door and have "V" shaped double seal to prevent water and debris from entering the compartment.

A two (2) inch wide finger pull shall be integrated into the bottom rail extrusion for easy one hand opening and closing.

The door latch system shall be a full width one (1) piece lift bar that enables the user to operate with one hand.

A magnetic door ajar system shall be integrated in the lift bar handle and the lift bar handle retainer block to signal an open door.

The roll mechanism shall have a clip system that connects the curtain slats to the operator drum to allow for easy tension adjustment without tools. A four (4) inch diameter counterbalanced operator drum to shall be incorporated to assist in lifting the door.

COMPARTMENT LIGHTING - DUAL

Bidder Complies: YES NO

There shall be ROM LED compartment lights supplied and located on both sides of each compartment door opening.

Lights shall be designed and manufactured to be water proof meeting the IPX7 industry standard.

Lights shall have a streamline optic lens and a fixed lumen output across 9-16vdc and produce a bright 112 Lumens per 12 inch section (nominal).

The LED lights shall draw no more than 0.22 amps at 12.8vdc per 12 inch section of light strip.

The LED lights shall be mounted in an anodized aluminum track provided by ROM either as a standalone unit or an integrated part of the roll up shutter door track.

The LED lights shall be of interlocking design and shall be able to be serviced or replaced without the removal of the entire light assembly or shutter door.

The LED lights shall be able to be integrated with any door switch control wired either negative switching or positive switching.

In the event of voltage dropping below 12.5 volts the lights will automatically go into pulse width modulation decreasing the amp draw of the lights by 40%

Magnetic switches located in the lift bar assembly of each roll up door shall turn on the compartment lights when opened. The same switch shall also control a red flashing light in the cab. This light will be labeled: "Do Not Move Apparatus When Light Is On".

ROOF (COFFIN) COMPARTMENTS

Bidder Complies: YES ____ NO ____

The apparatus shall be equipped with roof mounted storage compartments that are incorporated into and are an integral part of the apparatus body structure.

There shall be two (2) separate compartments located on the roof and shall be identified according to their position on the vehicle.

There shall be a rear permanently mounted ladder to access this portion of the roof utilized for coffin storage compartments.

The polished diamond tread lids shall be constructed with lift style doors on each side and across the front that shall only be accessed from the top of the rescue body. The lids shall be constructed with a double lip design to prevent leakage and shall be held in the open position by pneumatic gas shocks.

There shall be LED lighting and a door ajar switch provided in each coffin compartment activated by a compartment proximity switch when the lid is opened.

LEFT ROOF COMPARTMENT

Bidder Complies: YES ____ NO ____

Located directly on top of the rescue body over the left side shall be an integrated roof storage compartment.

The left roof compartment shall be of the following approximate size:

- 22" deep X 22" wide X 185" long

This compartment shall be equipped with three folding style doors that shall be of an equal and appropriate length to prevent warping and be easily operated by one person.

The compartments shall be equipped with LED lighting.

The compartment shall be held in the open position by a gas shock and be held in the closed position by a quarter-turn latch assembly.

The compartment interior shall remain a satin (DA) finish.

RIGHT ROOF COMPARTMENT

Bidder Complies: YES ____ NO ____

Located directly on top of the rescue body over the right side shall be an integrated roof storage compartment.

The left roof compartment shall be of the following approximate size:

- 22" deep X 22" wide X 160" long

This compartment shall be equipped with two folding style doors that shall be of an equal and appropriate length to prevent warping and be easily operated by one person.

The compartments shall be equipped with LED lighting.

The compartment shall be held in the open position by a gas shock and be held in the closed position by a quarter-turn latch assembly.

The compartment interior shall remain a satin (DA) finish.

ROOF ACCESS

Bidder Complies: YES ____ NO ____

There shall be a ladder mounted to the rear of the apparatus to access the roof storage compartments.

The ladder shall be approximately 16" wide and run the full height of the apparatus body.

The ladder shall have grip tape applied to all stepping surfaces and there shall be adequate hand holds to ensure the safety of all persons while ascending and descending on the apparatus.

ROOF WALKWAY

Bidder Complies: YES ____ NO ____

There shall be a permanent walkway platform on top of the apparatus body to access the roof storage compartments.

This platform will be an integral portion of the roof of the apparatus body covered by a permanently affixed plate of embossed diamond tread aluminum to create a non-slip surface for walking.

COMPARTMENT VENTILATION

Bidder Complies: YES ___ NO ___

All compartments shall be vented in a manner which will allow for the flow of fresh air into the compartment while preventing exterior moisture from entering the compartments.

RUB RAILS

Bidder Complies: YES ___ NO ___

There shall be bolt on satin extruded aluminum rub rails around the base of the body spaced 1/2" from the body with delrin spacers.

The rub rails shall extend the full length of the lower body except for the areas between the rear wheel well openings.

FENDERETTES

Bidder Complies: YES ___ NO ___

There shall be polished aluminum fenderettes installed around both rear wheelwell openings.

The fenderettes shall have a neoprene welt installed between the trim and the body.

The fenderette shall be bolted in place for easy removal and replacement.

REAR STEP BUMPER

Bidder Complies: YES ___ NO ___

At the lower trailing edge of the body, a polished diamond tread aluminum step bumper shall be installed.

This step shall be supported using 3" X 3" welded aluminum extrusion and shall extend approximately 18" rearward from the body and 98" across the body.

WHEEL WELL LINER

Bidder Complies: YES ___ NO ___

Wheel well liners made of .080" 3003 aluminum, shall be installed following the inside radius of the wheel well opening.

MUD FLAPS

Bidder Complies: YES ___ NO ___

Two (one on each side) 24" X 24" mud flaps shall be installed directly behind the rear dual wheels. These mud flaps shall meet or exceed DOT requirements for dual wheel trucks.

BACK-UP ALARM

Bidder Complies: YES ___ NO ___

An electronic back-up alarm shall be installed and conform to the operating specifications detailed in SAE J994 (Aug. 93) and SAE J1211 (Nov. 78).

The 102db alarm shall be mounted at the rear of the vehicle and shall be wired into the chassis back-up lights to signal when the vehicle transmission has been placed into reverse.

FLOOR MATTING

Bidder Complies: YES ___ NO ___

There shall be Heavy Load "Turtle Tile" floor matting installed on the lowest floor of all compartments.

Additional "Turtle Tile" shall be installed on all adjustable shelving and roll out trays.

PAINT PROCEDURE - BASE COAT/CLEAR COAT

Bidder Complies: YES ___ NO ___

After the apparatus body has been fully assembled and all mounting holes, etc. have been punched, machined, or drilled, the apparatus shall be fully disassembled for the paint process.

The apparatus body shall not be mounted on the chassis during the paint process.

All seams or flanges on the apparatus body shall be caulked or properly sealed to prevent moisture accumulation in flanged areas.

PAINT PROCESS

Bidder Complies: YES ____ NO ____

The apparatus body paint procedure shall consist of an eight (8) step finishing process as follows:

1. Manual Surface Preparation: All exposed metal surfaces on the apparatus exterior shall be thoroughly cleaned with degreaser. All imperfections on the exterior metal surface shall be removed or filled prior to the priming process. All exposed metal shall be thoroughly abraded using a dual orbital air power sander.
2. Cleaning and Treatment: All surfaces shall be chemically cleaned per manufacturer specification to ensure proper adhesion.
3. Self-etching Primer Application: Acid etching primer shall be applied to the bare metal per manufacturer specification.
4. Primer/Surfacer Application: Sherwin-Williams urethane primer/surfacer shall be applied to the acid etching primer.
5. Dual Orbital Sanding: The primer/surfacer shall be thoroughly sanded to a superior smooth surface.
6. Cleaning: After sanding in step #5, all surfaces shall be chemically cleaned again per manufacturer specifications. The surface to be painted shall be clean of all oil, grease, and dirt to ensure proper adhesion.
7. Primer Sealer Application: Sherwin-Williams urethane primer/sealer shall be applied over the thoroughly sanded and cleaned primer/surfacer as per bulletin DFT-054.
8. Topcoat Application: Two coats of Sherwin-Williams basecoat color two component polyurethane paint shall be applied to the primer sealer. The base color shall be followed by two coats of Sherwin-Williams two component polyurethane clearcoat finish.

PAINT - ENVIRONMENTAL IMPACT

Bidder Complies: YES ____ NO ____

The apparatus manufacturer shall meet or exceeds all current state and federal regulations concerning paint operations.

Pollution control shall include measures to protect the atmosphere, water and soil.

Controls shall include the following conditions:

- Topcoats and primers must be chrome and lead free.
- Metal treatment chemicals must be chrome free. The wastewater generated in the metal treatment process must be treated to remove any other heavy metals.
- Particulate emissions from painting operations must be collected by a dry filter or water wash process.
- Solvents used in clean-up operations must be collected, sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus shall not be manufactured with or contain products that have ozone depleting substances.

CHASSIS PAINT COLOR

Bidder Complies: YES ____ NO ____

The chassis paint scheme shall be finish painted single color to meet the department's specification as follows:

- High Gloss Red Factory Base Color - Viper Red

The cab paint finish shall remain the high quality factory finish as provided by the chassis manufacturer.

BODY PAINT COLOR

Bidder Complies: YES ____ NO ____

The body paint scheme shall be finish painted single color Red to match the base color of the chassis as provided by the chassis manufacturer.

The body paint finish shall be of the highest quality and shall meet or exceed the finish provided by the chassis manufacturer.

CAB AND BODY GRAPHICS

Bidder Complies: YES ___ NO ___

There shall be a 6" band of white 3M Scotchlite around the base of the body.

There shall be up to sixty (60) Smart Gold letters 3" high with black shade provided.

There shall be red/yellow Scotchlite chevron markings covering at least 50 percent of the rear-facing vertical surfaces, visible from the rear of the apparatus, excluding any pump panel areas not covered by a door, arranged in a chevron pattern sloping downward and away from the centerline of the vehicle at an angle of 45 degrees. Each stripe shall be a minimum of 6" in width.

Graphics options shall be discussed and decided on at the pre-build meeting to meet the needs of the department.

BODY DOOR GRAPHICS

Bidder Complies: YES ___ NO ___

Each side of the apparatus body shall have reflective American Flag graphics applied prior to delivery.

The design layout shall be approved by the department prior to final installation.

BREATHING AIR CYLINDER STORAGE

Bidder Complies: YES ___ NO ___

There shall be a total of eight (8) air cylinder storage compartments provided and installed on the finished apparatus.

The compartments shall be fabricated from flat aluminum plate and shall be installed as referenced in the layout drawing.

The mounting location shall be in the R3 compartment.

TUNNEL STORAGE - COMPARTMENT R3

Bidder Complies: YES ___ NO ___

There shall be a storage tunnel located between the breathing air cylinder storage compartments located in the R3 compartment.

The tunnel shall be designed to contain long handled tools and shall be fabricated as large and deep as possible in the remaining space provided.

CRIBBING STORAGE AREA

Bidder Complies: YES ___ NO ___

There shall be a cribbing storage area fabricated and installed on the finished apparatus.

The cribbing storage area shall be constructed from flat aluminum plate and create shelving and dividers for storage of department supplied cribbing.

There shall be an internal bi-fold door located on the cribbing compartment to prevent cribbing from contacting and lodging against the roll-up compartment door.

The location of the cribbing storage shall be in compartment L3.

ADJUSTABLE SHELF TRACK

Bidder Complies: YES ___ NO ___

An extruded aluminum strut track with a minimum wall thickness of .125" shall be installed in each upper section of the side body compartments for current or future installation of adjustable shelves.

They shall be securely fastened to the wall of the compartment with stainless steel fasteners.

ADJUSTABLE SHELVES

Bidder Complies: YES ___ NO ___

The adjustable shelf pans shall be constructed of .187" 5052 smooth aluminum plate and shall retain a natural satin aluminum finish.

The edges shall have a minimum of a two inch (2") lip on the front and rear sides.

The shelves shall be attached to the adjustable strut brackets with a minimum of ¼" bolts with spring nuts.

The following shelves shall be included in the finished apparatus:

- (3) adjustable shelves in compartment L4
- (3) adjustable shelves in compartment R4

HIGH CAPACITY SLIDE TRAYS

Bidder Complies: YES ____ NO ____

The apparatus shall be equipped with the following slide trays:

- (1) 1,000-lb Single Direction Slide Tray (100%) - R2 Compartment
~ This tray shall be approximately 70" deep
- (1) 1,000-lb Single Direction Slide Tray (100%) - REAR Compartment

The slides shall be constructed of heavy steel channel and shall move on ball bearing rollers.

There shall be a locking mechanism for both the stowed and extended positions.

The slide tray pans shall be constructed of .187" 3003 alloy smooth aluminum plate and retain a natural aluminum satin finish.

The edges shall have a minimum of a two inch (3") lips on all four sides.

LOW CAPACITY SLIDE TRAY

Bidder Complies: YES ____ NO ____

The apparatus shall be equipped with the following low capacity slide out tray:

- 300-lb Single Direction Slide Trays - Compartment L2

The slides shall be constructed to move on ball bearing rollers.

There shall be a locking mechanism for both the stowed and extended positions.

The slide tray pan shall be constructed of .187" 3003 alloy smooth aluminum plate and retain a natural aluminum satin finish.

The edges shall have a minimum of a two inch (2") lip on all four sides.

The location of the slide tray shall be in the floor of the L2 compartment.

TRANSVERSE TOOL BOARDS

Bidder Complies: YES ____ NO ____

There shall be two (2) transverse vertical tool boards provided and installed on the finished apparatus.

The tool boards shall have a minimum weight capacity of 500-lbs and shall extend 70% of their length.

The tool boards shall be installed in compartment L/R-1.

12-VOLT WIRING SYSTEM

Bidder Complies: YES ____ NO ____

All 12-volt electrical wiring shall be rated to carry 125% of the maximum current for which the circuit is protected.

The wire shall be of sufficient size so that a voltage drop in any electrical device shall not exceed 10%.

All wiring shall be color coded with the function being labeled (as required by NFPA 1901).

All wiring shall be routed through heavy-duty PVC split loom, securely attached and protected against heat, oil, and physical damage. All locations where the wire passes through a body panel shall be protected with electrical grommets.

All connections shall be made using mechanical connectors and be screwed to terminal or junction box with machine screws.

Wire nut, insulation displacement, or piercing connections shall not be used.

All circuits shall be provided with properly rated low voltage over current protective devices of the automatic reset type.

A removable bulkhead shall be provided that extends from the floor to the ceiling of both side rear compartments shall be provided to protect rear wiring.

WARNING EQUIPMENT STANDARDS

Bidder Complies: YES ____ NO ____

All optical warning equipment shall conform to the current NFPA 1901-2016.

The optical warning system shall consist of four (4) zones to include an upper and a lower zone as recommended by NFPA.

The optical warning system shall be capable of two separate signaling modes during emergency operations that shall switch as the parking brake is applied as follows:

- One mode shall signal to drivers and pedestrians that the apparatus is responding to an emergency and is calling for right of way.
- The other mode shall signal that the apparatus is stopped and is blocking the right of way.

DOT TAIL/STOP/TURN LIGHTS

Bidder Complies: YES ____ NO ____

The apparatus shall be equipped with an all LED DOT tail/stop/turn lighting package that shall meet all standards of FMVSS in place at the time of manufacture.

These light modules shall be installed outboard of the rear open compartment on the lower portion of the apparatus body.

The fixture shall incorporate tail lights, stop lights, turn signals, four-way hazard flashers and back-up lights.

LED DOT marker and clearance lighting and reflectors shall be installed in appropriate areas around the entire body.

The tail lights modules shall be Whelen 600 series LED that are purpose made for tail/stop/turn and each shall have a polished or chrome trim bezel.

The lights and quantity shall be as follows:

- Two (2) Whelen 600 Series LED Taillights
- Two (2) Whelen 600 Series LED Amber Turn Arrows
- Two (2) Whelen 600 Series LED Back-Up Lights

There shall be a back up alarm and all necessary LED ICC lights and reflectors installed on the apparatus body.

VISUAL WARNING ZONES

Bidder Complies: YES ____ NO ____

The apparatus shall be divided into warning zones as recommended by NFPA 1901-2016. The upper and lower zones shall correspond to the apparatus as follows:

- Zone "A": Front
- Zone "B": Right Side
- Zone "C": Rear
- Zone "D": Left Side

VISUAL WARNING MODES

Bidder Complies: YES ____ NO ____

The use of the apparatus warning lights shall be broken into two separate modes of use.

The permissible colors or combination of colors in each zone for each signaling mode shall be as follows:

- Calling for Right-of-Way
 - Red - Any Zone
 - Blue – Any Zone
 - Yellow - Any Zone Except A
 - White - Any Zone Except C

- Blocking Right-of-Way
 - Red - Any Zone
 - Blue – Any Zone
 - Yellow - Any Zone
 - White - Not Permitted

Lighting colors shall be determined and discussed at pre-build meeting based on department location and their local laws governing emergency warning light colors.

VISUAL WARNING MODE SWITCHING

Bidder Complies: YES ____ NO ____

The ability to switch between warning modes shall be provided on the apparatus.

There shall be a sensor that detects the position of the parking brake and changes modes as follows:

- Parking Brake Engaged: "Blocking Right of Way Mode"
- Parking Brake Not-Engaged: "Calling for Right of Way"

Switching between the two visual warning system modes shall require no action by the operator other than setting the chassis parking brake.

VISUAL WARNING EQUIPMENT - LED

Bidder Complies: YES ____ NO ____

- Zone "A" - Front Upper
 - Federal Signal Jet Solaris 60" LED Lightbar provided and installed on the cab.
- Zone "A" - Front Lower
 - Two (2) Whelen 600 series red Super LED lights with red lenses shall be mounted on the chassis front grill.
- Zone "B" - Right Side Upper
 - Two (2) Whelen 900 series red Super LED lights with red lenses shall be mounted as high as possible across the top of the apparatus body.
- Zone "B" - Right Side Lower
 - Two (2) Whelen 700 series Super LED light with red lens shall be mounted as low as possible in the rear wheel well - In front of and behind rear wheels.
 - One (1) Whelen 700 series Super LED light with red lens shall be mounted as low as possible on the front fender.
- Zone "C" - Rear Upper
 - Two (2) Whelen 600 series Super LED lights with red lenses shall be mounted as high as possible on each side of the rear of the body.
- Zone "C" - Rear Lower
 - Two (2) Whelen 600 series Super LED lights with red lenses shall be mounted as low as possible on each side of the rear of the body.
- Zone "D" - Left Side Upper
 - Two (2) Whelen 900 series red Super LED lights with red lenses shall be mounted as high as possible across the top of the apparatus body.

- Zone "D" - Left Side Lower
 - Two (2) Whelen 700 series Super LED light with red lens shall be mounted as low as possible in the rear wheel well - In front of and behind rear wheels.
 - One (1) Whelen 700 series Super LED light with red lens shall be mounted as low as possible on the front fender.

All perimeter warning lights shall have red lenses and chrome trim bezels. The lights shall emit red light unless otherwise noted.

ELECTRONIC SIREN

Bidder Complies: YES ____ NO ____

There shall be a 200 watt Whelen electronic siren provided and installed at the console in the cab of the apparatus.

SIREN SPEAKER

Bidder Complies: YES ____ NO ____

There shall be one (1) polished aluminum Cast Products speaker provided and installed in the front bumper. The speaker shall be specifically designed to fit the chassis factory bumper.

FEDERAL "Q" SIREN

Bidder Complies: YES ____ NO ____

There shall be a Federal Q2B mechanical siren provided and installed in the apparatus front bumper.

The siren shall be controlled by a foot switch located on each side of the apparatus.

There shall be a switch located in the cab to operate the siren brake.

The siren shall be mounted through the front bumper.

12 VOLT STATIONARY SCENE LIGHTS

Bidder Complies: YES ___ NO ___

There shall be Code 3 LED stationary scene lights provided and installed on the apparatus body. The stationary scene lights shall be mounted as high as possible and be located adjacent to the body warning lights as follows:

- Two (2) Code 3 7"x9" LED Scene Lights - Right Body
- Two (2) Code 3 7"x9" LED Scene Lights - Left Body
- Two (2) Code 3 7"x9" LED Scene Lights - Rear Body
- Two (2) Code 3 7"x9" LED Scene Lights - Front Body

The scene lights shall be wired through three (3) switches located on the cab console.

All scene lights shall have clear lenses and chrome trim bezels.

WILL-BURT LIGHT TOWER

Bidder Complies: YES ___ NO ___

There shall be a Will-Burt Night Scan 2.3 LED light tower provided and installed on the finished apparatus.

The tower shall be a series of graduated extruded aluminum tubes that nest one inside another. The tower shall have an extended height of approximately 7.5 ft. / 2.3 m above the mounting location and a stowed height of approximately 9.75" / 24.8 cm above the mounting surface. The tower shall be approximately 27.125" / 68.9 cm wide by 51.75" / 131.4 cm in length. The tower shall be designed to sustain the intended top load with a 125 percent safety factor and shall exceed NFPA requirements of a minimum 50 mph (80 kph) wind when in a fully raised and unguyed position. The tower shall be of a compact design with a total weight of approximately 123 lbs. / 55.8 kg. The light tower shall not exceed 150 lbs. / 68 kg.

The tower tubular sections shall be constructed of high strength, heat-treated 6061-T6 aluminum tubes and collars. Each tube shall be protected by low friction synthetic collars for smooth operation and long life. Bumpers shall be designed to reduce shock on extension and retraction. All exterior surfaces shall be anodized for long life and fasteners shall be stainless steel for corrosion resistance.

The tower shall have an "auto-stow" function. A double click of the mast down button will stow, retract, and shut power off to the unit. An integrated saddle assembly with synthetic, non-marring rests shall be provided for the tower and flood light assembly in the nested position.

The tower shall be equipped with a Will Burt Model RCP (remote control positioner) to control the rotation and direction of the light. The remote control positioner unit shall be equipped with two (2) gear motors; one for rotation and one for the floodlight bank. The positioner shall also rotate the floodlight assembly from zero to 355 degrees and tilt the floodlight assembly from 0 to 337 degrees.

A safety yellow in color for high visibility, hand held remote control pendant, connected to a quick-disconnect, 25 ft. (7.62 meter) coiled cord shall be provided to control the tower. All functions of the tower shall be accessible through this remote control including elevating with "auto-up" ability, lowering with "auto-stow" ability, rotation and tilting of the floodlight assembly and floodlight switching. An auxiliary power button shall also be included to control optional equipment such as strobe lights or a camera that is mounted to the mast. An emergency stop button shall be integrated into the hand held control for added safety or shall be located on the junction box. Each button of the controller shall have a corresponding LED light that provides operational feedback. An LED display that includes alphanumeric feedback shall be located in the center of the controller. This display shall provide operational feedback and error codes if they occur.

The pneumatic controls to raise and lower the tower shall include an air regulator and solenoid valves. Lights will be operational within approximately 8 seconds from elevation initiation. The tower shall be able to be fully elevated in approximately 50 seconds. In the event of malfunction of the elevating system while the tower is in operation or being deployed, a method of limiting the rate of descent shall be provided to prevent injury to personnel or damage to the equipment.

Four (4) Fire Research Evolution II LED model FCA100-V11 lampheads shall be provided. Each lamphead shall have four (4) ultra-bright white LEDs. It shall operate at 12 / 24 volts DC, draw 7.5 / 3.75 amps and 90 watts, and generate 11,000 lumens each lamphead for a total of 44,000 lumens. The lamphead shall direct 50 percent of the light onto the action area while providing 50 percent to illuminate the working area. The lamphead shall incorporate heat-dissipating fins and be no more than 5 3/16" deep by 3 5/16" high by 7 5/8" wide. The lamphead shall be powder coated white.

The tower assembly shall carry a two (2) year parts and labor warranty. Exact provisions of such warranty shall be provided with the proposal and at time of delivery of product.

WHELEN TRAFFIC ADVISOR

Bidder Complies: YES ____ NO ____

There shall be a Whelen TAL-85 (Eight Head) amber traffic advisor provided and installed on the rear of this apparatus body.

The controller for the traffic advisor shall be mounted on the cab on the center console.

GROUND PERIMETER LIGHTING

Bidder Complies: YES ____ NO ____

The apparatus shall be equipped with LED ground lighting in areas designed for personnel to climb onto or descend from the apparatus, under the cab and at mid and rear body locations.

Lighting designed to provide illumination on areas under the driver and crew area exits, ground lights, and step lights shall be activated automatically when the parking brake is set and the tail lamps are "on".

LICENSE PLATE LIGHT

Bidder Complies: YES ____ NO ____

There shall be a rear license plate bracket provided at the rear of the apparatus with a LED lights installed for illumination.

TIRE CHAINS

Bidder Complies: YES ____ NO ____

Onspot brand six (6) strand automatic ice chains shall be installed on the rear axle of the chassis to provide instant traction while traveling on ice and snow at speeds below 35 MPH.

The tire chain system shall be activated by a covered and/or locking switch on the dash and/or console to deter accidental activation. The light on the switch shall illuminate when the tire chains are engaged.

BATTERY CONDITIONER

Bidder Complies: YES ____ NO ____

A Kussmaul 1000 battery conditioner shall be supplied.

A Kussmaul battery conditioner display shall be supplied.

A Kussmaul 20 amp super auto-eject electrical receptacle shall be supplied. It shall automatically eject the plug when the starter button is depressed.

The electrical inlet connection shall include a red cover.

BODY AUXILIARY POWER

Bidder Complies: YES ___ NO ___

There shall be a 12 VDC power terminal located in the L1 compartment.

The power source shall be utilized by the department to connect electrical chargers inside the apparatus body.

RETRACTABLE AWNING

Bidder Complies: YES ___ NO ___

There shall be one (1) electric activated retractable awning provided and installed on the finished apparatus.

The awning shall have an automatic retractable safety feature included to auto-stow in high wind conditions.

The location shall be on the driver side of the apparatus body above the roll-up compartment doors.

The color of the material shall be dark gray or black.

NFPA REQUIRED EQUIPMENT

Bidder Complies: YES ___ NO ___

The end user of this apparatus shall provide all other equipment and accessories that are required by NFPA 1901 but not specifically listed in these specifications.

PAYMENTS

Bidder Complies: YES ___ NO ___

The apparatus shall be paid in full at time of final delivery.

There shall be no advanced payments required for this project.

AUGUSTA FIRE DEPARTMENT

BIDDER INFORMATION FORM

BID PROPOSAL FOR HEAVY RESCUE

“HEAVY RESCUE SEALED BID”

MANUFACTURER: _____

ADDRESS: _____

PHONE: _____

DEALER – REPRESENTATIVE: _____

EMAIL: _____

PHONE: _____

Having examined the BUYER’S specifications for a HEAVY RESCUE, the BIDDER submits a TOTAL BID PROPOSAL PRICE OF:

_____ DOLLARS AND _____ CENTS

DELIVERY (CALANDER DAYS): _____

BIDDER understands that the bid proposal shall not be withdrawn for a period of 60 calendar days following the date of the bid proposal opening.

BIDDER understands that the BUYER may reject any and all bids and may not negotiate with any one BIDDER to reduce or alter the bid proposal.

Respectfully Submitted:

Signature _____ Title _____ Date: _____