

**Pierce County Board of Commissioners  
Emergency Medical Services**

**BIDS DUE ON  
June 28<sup>th</sup>, 2022, at 10:00AM  
FOR BID SPECS, CONTACT  
ANSLEE SWETMAN, FINANCE DEPARTMENT  
912.449.2022  
PURCHASING@PIERCECOUNTYGA.GOV**

**Invitation to Bid  
For  
Ambulance(s) and Equipment**

DATE: *May 23, 2022*

**GENERAL SPECIFICATIONS**

It is the intent of these specifications to furnish the Pierce County Board of Commissioners with the following AMBLUANCE(S) AND EQUIPMENT according to the attached. It is clearly understood that the following are minimum specifications and are made in order to show the exact specifications of the service proposed. All Bidders should contact Anslee Swetman, Finance Department at [purchasing@piercecounyga.gov](mailto:purchasing@piercecounyga.gov) or 912-449-2022.

*Pierce County Board of Commissioners* is soliciting competitive, sealed bids from qualified vendors for the purchase of two (2), 2022, Type I, ambulance(s) for *Pierce County EMS*. *Pierce County Board of Commissioners* reserves the right to reject any and/or all bids. *Pierce County Board of Commissioners* also reserves the right to accept the bid most advantageous to *Pierce County EMS*.

This invitation is extended to all qualified vendors/manufacturers that are specifically in the business of building emergency medical vehicles and/or equipment.

This invitation is issued by:  
*Pierce County Board of Commissioners*  
312 Nichols Street, Suite 5  
Blackshear, GA 31516  
Email: [purchasing@piercecounyga.gov](mailto:purchasing@piercecounyga.gov)

Contact Person: Blake James  
Ansee Swetman

**Schedule of Events Applying to this Procurement**

Bids must be mailed, or hand delivered to: Pierce County Board of Commissioners, Attn: Anslee Swetman, 312 Nichols Street, Suite 5, Blackshear, GA 31516. Bids must be by **Tuesday, June 28<sup>th</sup>, 2022, at 10:00 AM** and will be opened at that time. No bids will be accepted after this date.

Bids will be awarded at the Pierce County Board of Commissioners regular monthly meeting which will begin at 6:00 PM on July 5<sup>th</sup>, 2022.

This is an invitation to bid **NO EXCEPTIONS ALLOWED**.

This Bid is intended to provide vendors with a common, uniform set of specifications to assist them in the development of their Bids and to provide a uniform method for the Bidding agency to fairly evaluate Bids and subsequently select a vendor from which to purchase this Ambulance.

The following specification describes a new Ambulance that is expected to be acquired by the County. The specification describes the needs of this purchaser as far as chassis configuration and module body design. A state-of-the-art vehicle is required. Manufacturers that utilize prototype equipment will not be considered. The builder's manufacturing history shall be supported by documentation where applicable, and by the reference section within this specification. Please note that the following specifications represent minimum general terms or requirements. While it is not the intent of the county to preclude any qualified Bidder from submitting a proposal, it must be clear that any Bidder deviating in any substantial manner from these specifications will be rejected as being non-compliant.

In responding to this Bid, vendors should follow the prescribed format and use the forms included, thus providing the County with data that is easily compared with data submitted by other vendors in order to fairly and objectively evaluate the proposal.

Pierce County Board of Commissioners assumes no responsibility for conclusion or interpretations derived from the information presented in this Bid, or otherwise distributed or made available during this procurement process. In addition, the County will not be bound by or be responsible for any explanation, interpretation or conclusions of the Bid or any documents provided by the bidding agency other than those given in writing by the County through the issuance of addenda. In no event may a vendor rely on any oral statement by the County or its agents, advisors or consultants. It is the full responsibility of the vendor to thoroughly investigate the needs, requirements of the County not necessarily assumed in this Bid and to submit a Bid for:

**Anti-Collusion Statement:** By executing and submitting this Bid, the Offeror certifies that his Bid is made without reference to any other Bid and without any agreement, understanding, collusion or combination with any other person in reference to such Bid.

**Service and Warranty Repair:** Successful vendor must have a comprehensive ambulance service and repair facility in the state of Georgia to administrate warranty repair as needed. Vendor must have authorized factory trained service specialists and carry necessary inventory levels to affect prompt repair. Vendor shall have mobile service capabilities and provide them at no additional cost when practical and convenient. **NO EXCEPTIONS.**

Bidders must list below their service facility and parts department profile to the purchaser.

FACILITY NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

CONTACT NAME: \_\_\_\_\_

APPROX. MILES FROM PURCHASER: \_\_\_\_\_

YRS OF EXPERIENCE IN AMBULANCE REPAIR BUSINESS: \_\_\_\_\_

SQUARE FT. OF FACILITY: \_\_\_\_\_

NO. OF SERVICE BAYS: \_\_\_\_\_

NO. OF EMPLOYEES: \_\_\_\_\_

NO. OF FULL TIME AMBULANCE TECHNICIANS: \_\_\_\_\_

ARE TECHNICIANS FACTORY TRAINED? \_\_\_\_\_

TOTAL YEARS SHOP REPAIR EXPERIENCE: \_\_\_\_\_

VALUE OF SERVICE AND PARTS INVENTORY: \_\_\_\_\_

24-HR TURN AROUND TIME ON WARRANTY AND SERVICE? \_\_\_\_\_

NUMBER OF LIFT AREAS FOR SERVICE: \_\_\_\_\_

CAN SERVICE FACILITY PERFORM REMOUNTS? \_\_\_\_\_

CAN SERVICE FACILITY PERFORM ALUMINUM MODULE REPAIR? \_\_\_\_\_

IS FACILITY AND AUTHORIZED PPG COMMERCIAL FLEET PAINT CENTER AND REPAIR FACILITY? \_\_\_\_\_

CAN SERVICE FACILITY DO SCOTCHLITE & LETTERING? \_\_\_\_\_

Materials and Workmanship: All equipment furnished shall be guaranteed to be new and of current manufacture, meet all requirements of this specification, and be in an operable condition at the time of delivery. All parts shall be of high-quality workmanship, shall be in production at the time of Bid, and no part or attachment shall be substituted or applied contrary to the manufacturer's recommendations and standard practices.

All workmanship shall be of quality and performed in a professional manner so as to insure a safe and functional apparatus with an aesthetic appearance.

**Pre-Construction Conference**

There shall be a required pre-construction conference at the successful Bidder's manufacturer's facility before any construction can begin.

NOTE: The pre-construction conference meeting shall be conducted at the “primary builder”, of the ambulance. No meeting shall take place at the dealerships place of business. This is the only method that will be the only acceptable way to conduct the pre-construction meeting. NO EXCEPTIONS.

Three (3) department personnel along with a representative or dealer of the successful Bidder shall attend.

At this meeting both parties shall again go over the specifications to ensure the ambulance is built to meet or exceed all requirements.

After this meeting the representative of the successful Bidder shall present the department with detailed drawings and work order to be used in the production of the ambulance being Bid.

### **Pre-Delivery Inspection (Final)**

There shall be a pre-delivery inspection trip at the factory of the successful Bidder. The inspection trip shall consist of three (3) members from the County along with the representative of the successful Bidder, to ensure compliance to all specifications.

NOTE: All expenses relating to the Pre-Construction, and Final inspection trips shall be at the cost of the successful Bidder and be at no cost to the Department. This is to include all meals and lodging while at the inspection along with travel allowances (commercial round trip coach air flight. Private plane is not acceptable), for up to 3 representatives for any factory that is over (250) miles from the Buying Authority.

Do you comply to all inspection trips? ( ) Yes ( ) No

**ONE MONTH SERVICE CALL:** After the vehicle has been in service for approximately one month, the successful vendor shall send a trained "FACTORY" employed personnel to the County, for a service and warranty review.

The Factory technician shall check all operating systems and repair or replace any items found defective or in need of re-work.

However, should a problem occur before the one-month service call, the County will require immediate service from the FACTORY technician, at the Departments location. **NO EXCEPTIONS**

Does Your Bid Comply? ( ) YES ( ) NO

There shall be provided with your Bid package, a detailed set of scaled computer drawings. These drawings must be for this particular unit that the County has specified, not a standard manufacturer drawing. Also, the County is not seeking nor will they accept a stamped utility body or a bent aluminum style body.

The County is looking for an aluminum extruded body that will give them the best long-term value for their investment.

These drawings must show all the options and equipment to mount on the apparatus and shall include both front and rear views, both sides, roof, slide outs, interior showing both side walls, front wall and rear wall and shall show all required equipment mounted in the designated compartments. **NO EXCEPTIONS**

Does Your Bid Comply? ( ) YES ( ) NO

### SUBMISSION REQUIREMENTS AND SPECIFICATIONS

**BID FORM:** The Bid shall be in the form of a firm price for the entire contract period. The Bid price shall include, and Contractor shall be responsible for: all costs and charges other than the Bid price, including without limitation storage, transportation / delivery, environmental fees, insurance, bonding, and all other costs. The **County** shall not be responsible for any charges or cost not set forth in Contractor's Bid documents.

**IT IS AGREED BY THE UNDERSIGNED BIDDER THAT THE SIGNING AND DELIVERY OF THIS BID REPRESENTS THE BIDDER'S ACCEPTANCE OF THE TERMS AND CONDITIONS OF THE FOREGOING SPECIFICATIONS AND PROVISIONS, AND IF AWARDED THE BID BY **THE COUNTY**, WILL REPRESENT THE AGREEMENT BETWEEN THE PARTIES.**

Sign in ink in the space provided below. UNSIGNED Bids will be considered incomplete and will be subject to rejection.

Name of Firm: \_\_\_\_\_

Signed (in ink): \_\_\_\_\_  
(Signature of Officer of Company)

Title: \_\_\_\_\_ Date Signed: \_\_\_\_\_

Street Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Numbers: Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email Address: \_\_\_\_\_

Ambulance Manufacturer: \_\_\_\_\_

Model Year: \_\_\_\_\_ Model Designation: \_\_\_\_\_

### SUBMISSION REQUIREMENTS AND SPECIFICATIONS (continued)

Delivery will be made within \_\_\_\_ days of receipt of chassis by the Manufacturer





inside rear tires without removing the outer tire. The extenders shall have a braided stainless steel outer jacket to resist abrasions and cuts. The filler end shall be supported by a valve bracket.

Does Your Bid Comply? ( ) YES ( ) NO

**RUNNING BOARDS:** The running boards shall be finished with bright aluminum diamond plate. Boards shall include nonmetallic spacers to prevent trapping of dirt and water between the running boards and the body cab. Design of the running boards shall incorporate a splash shield to protect the front of the modular body from the wheel wash.

All running boards shall be gusseted and provide brackets to prevent flexing, sagging and damage. The Running board will have 5 equally spaced 1 inch drain holes starting at the front of the running board and ending at the rear inside corner to allow water and debris to pass through. Running board installation to conform to chassis manufacturer's recommendation.

Does Your Bid Comply? ( ) YES ( ) NO

**HEAT SHIELD:** To further insulate and protect the patient compartment the ambulance manufacturer shall install 18-gauge galvanized steel below the subfloor material to act as a heat shield. The heat shield shall have waterproof insulation laminated to it shall be installed directly to the bottom of the floor tubes. This will create a sandwich style construction to further insulate the patient floor from the muffler and exhaust.

Does Your Bid Comply? ( ) YES ( ) NO

## **SECTION 2.0 - MODULE CONVERSION BODY CONSTRUCTION**

**OVERVIEW:** The dimensions of the patient module shall be in accordance with manufacturer's specifications with minimum dimensions of (Specify dimensions) 149" in length, 96" in width, and 72" headroom.

There shall be a bulkhead separating the cab and patient compartment that allows for a pass-through area.

The ambulance body shall be constructed of custom designed aluminum extrusions and aluminum plate. The ambulance body shall be designed and engineered specifically as an emergency vehicle and shall be built to meet the heavy-duty requirements of emergency service.

The body shall be of welded construction for maximum strength and integrity for the entire life of the ambulance. The aluminum extrusions shall be custom designed structural shapes that are an alloy of 6061 and heated to a temper of T6 hardness.

The aluminum shapes shall be designed with a force fit interlocking system that shall eliminate any vibration to the welded structural members. The interior structural members, sides and roof shall be spaced a minimum of 14 inches on center. The floor structure shall be a minimum 14 inches on center. The floor, roof and sides shall be of a cage-type construction that is built to form an independent structure.



The exterior walls shall be constructed of a minimum of .125" aluminum plate 3003 alloy with a heat-treated plate that is stretch leveled to a tolerance of +/- 0.003 inches. The exterior walls shall interlock into place.

All exterior compartments shall be separate and individual components and no two compartments shall share a common wall.

Does Your Bid Comply? ( ) YES ( ) NO

**BODY TO CHASSIS MOUNTING:** OEM "High Hat" laterals with 2" x 2" x 4" x 3/16" thick structural steel angle welded to each end are attached laterally to the chassis on OEM rubber body mounting bushings. The frame spacers are to be supported by outriggers made of 5" x 5" x 5" x 3/8" thick steel angles which are bolted to the outer side of the chassis frame rails with three (3) 1/2" Grade 5 bolts each. Additionally, steel surfaces that will come into contact with aluminum floor structure components are to be covered with PVC tape to prevent contact between the dissimilar metals.

At the floor structure is to be bolted in place with not less than twelve (10) 1/2" Grade 5 T-head bolts through holes in the 2" x 2" aluminum longitudinal floor framing members and steel angle brackets welded to the ends of steel lateral frame spacers. This design allows the body to be removed and remounted without disturbing the finish floor in the interior patient compartment.

Does Your Bid Comply? ( ) YES ( ) NO

**VEHICLE LOWER RUB RAIL:** The lower rub rail shall be of an anodized aluminum "C" channel that is 2" wide x 3" high. The "C" channel shall have a recessed section that will have reflective Blue/white striping applied. The extruded rub rails shall be installed on lower sides of the modular body using stainless steel fasteners and rubber spacers between the rail and body.

Does Your Bid Comply? ( ) YES ( ) NO

**ROOF RADIUS:** The roof radius shall be an extruded aluminum shape with an alloy and temper of 6061-T6 with an ultimate strength of 42,000 PSI. The shape shall be a 4" radius with a built-in inner structural connector to form a one-piece side and roof structure. The roof radius shall incorporate a built-in drip molding to aid in the channeling of water.

Does Your Bid Comply? ( ) YES ( ) NO

**ROOF CONSTRUCTION:** The roof shall be constructed of 0.125" thick aluminum plate. The roof structure shall consist of 2" x 3" 6063-T5 aluminum tubing that shall span the full width of the body and have a bow effect to facilitate water runoff from the roof. Roof structure that is less than 0.125" thick will not be accepted. The roof tubes shall be welded to the roof and to the inner structural connector of the radius. The aluminum plate sheet roof shall be completely welded to the roof radii.

Does Your Bid Comply? ( ) YES ( ) NO

**CORNER RADIUS:** The corner radius shall be of the same heavy-duty construction as the roof radius, except there shall be a built-in drip molding. The corner radius shall be a 3" radius. All corners shall be a semi-hollow shape for structural strength and shall give a smooth exterior appearance without the need for bending or forming sheet metal.

Does Your Bid Comply? ( ) YES ( ) NO

**SIDE STRUCTURE:** The sides shall be constructed with four corner radii. The radii shall be a 3" arc shape with interlocking edges on both sides. The extrusions shall be of an alloy of 6061 with a heat-treated temper of T6. The corner and roof shall be designed to work as a system that has a double gusset connector in each corner joint.

**NOTE: THE ROOF, CORNER AND SIDES SHALL BE WELDED. NO BOLTS, MECHANICAL FASTENERS OR RIVETS ARE ACCEPTABLE.**

The sides shall be of a 'jig-locked' style construction. The jig shall hold the corners and body side panels in place while an inner 6063-T5 structure is welded into place. The members shall be located 14 inches on center and welded to the roof rail and inner structure connector that shall be the roof members.

The exterior aluminum panels .125" shall interlock with the roof, corner and specially designed extruded aluminum compartment door frames and shall be constructed of a 6063-T5 material. The door frame extrusion shall be designed to match fit the exterior compartment doors. The frame shall be a full 1/4" thick to allow for taping for door hinges. The door frame shall have an exterior trim edge that shall channel any water away from the compartment openings.

Does Your Bid Comply? ( ) YES ( ) NO

**FLOOR STRUCTURE:** The floor structure shall consist of 2" x 3" x 0.125" structural 6063-T5 aluminum tubing. The tubing shall be located on 12" centers. These tubes shall extend the full width of the body between compartment boxes. The floor tubes shall be completely welded to the side structure channels.

Does Your Bid Comply? ( ) YES ( ) NO

**VAPOR BARRIER:** To further insulate and protect the patient compartment the ambulance manufacturer shall install an aluminum vapor barrier. A 0.63 aluminum sheet shall be installed directly between the flooring and the 2" x 2" floor tubes. This will create a sandwich style construction to further insulate the patient floor from heat generated by the muffler and exhaust system. The entire underside of the modular body shall be sealed.

Does Your Bid Comply? ( ) YES ( ) NO

**CORNER PROTECTORS:** The lower rear corners of the body shall have approximately 12 1/2" high, .0125 aluminum diamond plate rolled around the corners radius and terminate at the rear kick plate area. These stone guards shall be fastened to the body with 1/2" – 10 TX-25 Type F Torx head screws. The top edge of each stone guard shall be sealed to prevent moisture and debris from collecting behind the guards

Does Your Bid Comply? ( ) YES ( ) NO

**COMPARTMENT CONSTRUCTION:** All exterior compartments shall be constructed of 0.125" smooth aluminum plate. All corners and seams shall be completely welded to prevent outside elements from entering the compartment.

Each compartment shall be fully finished with a three-component acrylic-reinforced aliphatic, aromatic polyurethane protective coating. This material shall have high tensile strength, excellent abrasion resistance as well as a high non-skid rating.

Does Your Bid Comply? ( ) YES ( ) NO

**DOOR CONSTRUCTION:** All door edges and frames shall be constructed of a specially designed extruded aluminum shape of 6063-T5 alloy and temper. All door frames shall be welded to the exterior sheets and to the side structure channels. The exterior sheets shall fit into the door frame and shall be welded to the frame from the inside of the door body. The door edges shall all be welded together and then welded to the outer panels.

Exterior door panels shall be 0.090" thick 5052-H32 aluminum plate with an ultimate strength of 38,000 PSI. The panel shall fit into the door edge extrusion and shall be welded to the extrusion from the inside of the door.

The door inner liner shall be constructed of 0.090" aluminum plate sheets with reflective blue / white chevron striping. The liners shall be fastened to the door extrusions with stainless steel machine screw with thread locker. The liner shall be removable for access to the latching mechanism. The upper aluminum panel shall be covered with color coordinated vinyl. The lower aluminum panel shall be covered with blue/White Reflective striping.

Does Your Bid Comply? ( ) YES ( ) NO

**DRIP RAIL:** Every compartment door opening shall have a built-in integral drip rail.

Does Your Bid Comply? ( ) YES ( ) NO

**EBERHARD LOCKING "GRABBER" HANDLES:** All exterior compartment doors (compartment or patient entry) shall have a chrome plated Eberhard Model # 21000 "E Grabber Series", locking handle(s) with neoprene gasket on the exterior. The entry doors will have EBERHARD LOCKING INSIDE RELEASE LATCH 21000-PKL-42 with automated locking and unlocking which is interfaced with the door lock system on the chassis so when the vehicle is locked or unlocked the entry doors on the compartment are activated simultaneously.

The handle shall be large and easy enough to use. The assembly shall include a double-bitted key cylinder in locking versions, factory installed gasket and free-wheeling feature, water resistant, and blind mounting brackets for security and appearance. Handle(s) will be connected to the latching mechanism by threaded rods. Latching systems using cables or pinned rods will NOT be acceptable.

Does Your Bid Comply? ( ) YES ( ) NO

**DOOR LATCHING HARDWARE:** All module doors, compartment and entry, shall utilize two (2) rotary style latches per door leaf, closing onto two (2) "Nader" striker pins with capped heads and adjustable cage nuts. Construction using other latching methods, striker pins without capped ends, or single striker pins are NOT acceptable.

Does Your Bid Comply? ( ) YES ( ) NO

**STAINLESS STEEL DOOR HINGES:** There shall be provided a stainless-steel continuous hinge on each of the exterior doors. The hinges shall extend the full length of the door and shall contain a minimum ¼” stainless steel pin. All hinges shall be bolted to the door and door frame using ¼” stainless steel bolts for easy removal if damaged. The hinge shall be separated from the door and frame by a Mylar strip which shall act as a corrosion barrier.

Does Your Bid Comply? ( ) YES ( ) NO

**DOOR WINDOWS:** The patient compartment side entry door shall have a window that measures approximately 18” x 24”. Window shall be centered in the door and approximately 6” down from the top of the door. The dark tinted window shall be capable of opening via a sliding section of the glass. The sliding section must be positively latched when in the closed position to prevent it from being opened from the outside. It must also include a sliding screen section to cover the opening.

Two (2) 14" wide x 24" high black aluminum framed Fixed window is to be centered in the entry door, with the top of the window about 6" down from the top of the door. The dark tinted window shall be single piece fixed glass.

Does Your Bid Comply? ( ) YES ( ) NO

**DOOR SPRING DOOR CHECKS:** There shall be provided a door spring opener and closer on each exterior compartment and side entry door. The door spring shall be bolted to the door using a fabricated spring hold bracket. The door spring hold back shall operate on a ‘50/50 principal’: if the door is partially opened, it shall close or if the door is over halfway open, the door will open fully.

Does Your Bid Comply? ( ) YES ( ) NO

**REAR DOOR HOLDERS:** There shall be provided two (2) cast aluminum door grabbers installed on the rear entry doors. The cast grabbers shall consist of two parts: a loop and receiver. The loop shall be installed on the upper portion of the rear entry door. The corresponding receiver shall be installed on the rear wall. When the rear doors are opened, the door grabbers shall securely hold the doors open.

Does Your Bid Comply? ( ) YES ( ) NO

**MODULE AND ENTRY DOOR INSULATION:** The modular ambulance body shall be insulated with a material that is non-flammable with a Class A, Class 1 fire rating. It shall be certified to meet the smoke and flammability requirements of FMVSS 302. The exposed walls of the exterior compartments and wheel wells that intrude into the interior of the modular shall be covered with reflective insulating material with a value of R-14.

Does Your Bid Comply? ( ) YES ( ) NO

**SIDE ENTRY STEP WELL:** There shall be provided inside the module side entry door, a step well utilizing two steps. The two-step well shall be fabricated using heavy-duty aluminum diamond plate. The step well shall be approximately 32 inches in width x 20 inches in depth. The step platforms shall be a minimum 9 inches deep and the steps approximately 7 inches in height. The step well shall come completed with a LED light that automatically activated upon opening of the curb door.

Does Your Bid Comply? ( ) YES ( ) NO

**FENDERS:** A polished aluminum fender flair shall be installed around the rear wheel well openings. They will be installed so as not to interfere with tire rotation, movement, or replacement. A layer of butyl self-sealing tape will be applied between the fender flares and the body panels for corrosion protection.

Does Your Bid Comply? ( ) YES ( ) NO

**REAR BUMPER:** The rear bumper sub-structure must be constructed from 1 ½" x 3" steel channels and 10-gauge steel plate. The components must be fully welded and coated with automotive water-based undercoating to prevent rust, and then bolted to the OEM frame rails.

Aluminum diamond plate bumper pods, approximately 23" wide x 11" deep x 4" high shall be constructed to fit over the outboard ends of the sub-structure and must be bolted in place using stainless steel fasteners

The middle portion of the bumper assembly (approximately 48" wide) shall incorporate a fold up section of aluminum grip strut material. The hinge must be stainless steel and installed so that the step folds toward the body to facilitate stretcher loading. NOTE: The bottom must be closed off on the flip up section, leaving sides open for drainage.

The rear bumper shall meet the requirements set forth in the AMD Standard 018-Rear Step and Bumper Test. The bumper shall be able to accommodate a 500 lbs. load with maximum deflection of 1" and no more than ¼-inch permanent deformation.

Does Your Bid Comply? ( ) YES ( ) NO

**CAB TO PATIENT COMPARTMENT PASS-THROUGH:** A 17" wide x 17" high pass-through opening with a hinged Plexiglas window shall be framed into the front wall. It shall have a head bumper for occupant safety and shall coincide with an opening of equal size framed into the back wall of the chassis-cab. The space between the cab and module shall be sealed by the installation of a flexible rubber "accordion" style enclosure. Inflatable or rigid seals are not acceptable.

Does Your Bid Comply? ( ) YES ( ) NO

### **EXTERIOR COMPARTMENTS**

**STREET SIDE – FORWARD:** Shall be located on the street side, forward of the ambulance body. Compartment shall measure approximately 72" high x 20" wide x 22" deep and shall be "sweep-out" style. Compartment shall have a single, vertically hinged door.

The compartment shall be designed to house either an "M" or "H" size medical oxygen cylinder and shall contain an approved oxygen cylinder retention system. The oxygen retention system floor plate will be supported so the weight of the cylinder will not allow the floor plate to bend down weakening the integrity of the retention system. There shall be proved access to this compartment from within the patient compartment through a hinged access door located in the Action Area adjacent to the Attendant's Seat.

Does Your Bid Comply? ( ) YES ( ) NO

**STREET SIDE – INTERMEDIATE:** Shall be located on the street side, forward of the rear wheel area and aft of the street side forward compartment. Compartment shall measure approximately 40” high x 30” wide x 20” deep and shall be “sweep-out” style. Compartment shall have a single, vertically hinged door.

There shall be provided one (1) adjustable shelf and house customer specified inverter.

Does Your Bid Comply? ( ) YES ( ) NO

**STREET SIDE – REAR:** Shall be located on the street side aft of the rear wheels. Compartment shall measure approximately 42” high x 40” wide x 20” deep and shall be “sweep-out” style. Compartment shall have a single, vertically hinged door. A system to secure a Stryker stair chair will be attached to the door.

There shall be provided one (1) adjustable shelf.

Does Your Bid Comply? ( ) YES ( ) NO

**CURB SIDE – FORWARD:** Shall be located on the curb side, forward of the side patient compartment entry door. Compartment shall open into the Right Front ALS Cabinet and shall provide a pass-through opening approximately 55” high x 18” wide. Compartment shall have a single, vertically hinged door.

There shall be provided two (2) adjustable shelves.

Does Your Bid Comply? ( ) YES ( ) NO

**CURB SIDE – REAR FORWARD:** Shall be located on the curb side, aft of the rear wheels. Compartment shall measure approximately 20” high x 24” wide x 16” deep and shall be “sweep-out” style. Compartment shall have a single, vertically hinged door.

Does Your Bid Comply? ( ) YES ( ) NO

**CURB SIDE – REAR:** Shall be located on the curb side, aft of the rear wheels. Compartment shall measure approximately 72” high x 16” wide x 20” deep and shall be “sweep-out” style. Compartment shall have a single, vertically hinged door.

Compartment shall have one (2) vertical divider

Does Your Bid Comply? ( ) YES ( ) NO

**DOOR SILL PROTECTION:** There shall be formed brushed aluminum protection plates compartment door sill protection for all exterior compartments. The protector shall be affixed with heavy-duty double side tape to the top surface of the doorsills and extend over the radius edge.

Does Your Bid Comply? ( ) YES ( ) NO

### **SECTION 3.0 - PATIENT COMPARTMENT INTERIOR MODULE**

**CONSTRUCTION REQUIREMENTS:** In general, the interior of this ambulance shall incorporate features to mitigate injuries to passengers caused by sudden hard braking or accident impact. Exposed edges shall be protected by radius or chamfer trim and, where possible, corners shall be rounded with radius trim.

All devices and equipment will be mounted as flush as possible with its surrounding surface. Padding shall be installed in areas where features may obstruct head movement as attendants work within the patient compartment.

Does Your Bid Comply? ( ) YES ( ) NO

**INTERIOR PATIENT COMPARTMENT LAYOUT:** The patient compartment cabinets shall be identified as: LEFT WALL – Cabinets on the left or street side of the patient compartment. SQUAD BENCH – Cabinets on the right or curb side of the patient compartment. FRONT or BULKHEAD – Cabinets on the front bulkhead of the patient compartment.

Cabinets shall be constructed of ¾" plywood with a high-pressure plastic laminate finish. The exterior color of the cabinets shall be determined during the Pre-Construction Conference. The interior of each cabinet shall be white.

The patient compartment cabinets shall provide a minimum storage capacity of 35 cu. ft.

Does Your Bid Comply? ( ) YES ( ) NO

**CABINET DOORS:** All cabinets along the street and curb side of the vehicle shall have a mitered framed, sliding transparent (clear) Plexiglas door assembly. Each door shall be fitted with a full length, extruded aluminum door handle. The door pull extrusion shall also add bend resistance to the door. The door track/frame extrusion shall incorporate a rubber track to prevent the door from sliding free during transit. These cabinets shall have hinged flip up Plexiglas doors and held shut by Southco locks and a gas strut to hold the door open. Additionally, the corners of the assembly shall have supported corner angle.

Does Your Bid Comply? ( ) YES ( ) NO

**LEFT WALL CABINET:** The left wall cabinet shall contain the forward Action-Area and rear Telemetry-Area. The cabinet shall be divided into multiple storage areas, which shall be maximized for equipment and supply storage.

**ACTION-AREA / TELEMETRY-AREA:** The Action-Area and Telemetry-Area shall have a storage tray constructed of solid-surface material such as STARON or CORIAN. A cardiac monitor mount for a PHYSIO CONTROL LIFEPAK 15 monitor will be installed in the telemetry area.

**SQUAD BENCH CABINET:** The squad bench cabinet shall be on the curb side of the vehicle and shall run from the side entry door to the rear of the patient interior. There shall be provided a fixed backrest(s) and hinged cushion with storage underneath. The cushion shall have a gas-strut type hold-open device that will automatically hold the cushion in either the open or closed position.

Seating positions one and two shall be equipped with 6-point seat belt harnesses. Three [3] sets of retractable seat belts shall be installed on the face of the squad bench to restrain a patient on a secondary stretcher or spine board.

Does Your Bid Comply? ( ) YES ( ) NO

**SHARPS / WASTE DISPOSAL AT HEAD OF SQUAD BENCH**: A sharps drop and waste container shall be provided in the squad bench lid. The opening shall align with sharps and trash container (specified elsewhere in this specification) installed beneath the bench lid.

The sharps opening shall be covered with a hinged ¼" red Plexiglas door. The trash opening shall have a ¼" black Plexiglass door. A vinyl biohazard sticker shall be applied to the Plexiglas door in accordance with OSHA regulations.

Does Your Bid Comply? ( ) YES ( ) NO

**UPPER SQUAD BENCH CABINET**: A cabinet shall be located over the squad bench at the ceiling level, rearward of the entry/egress door opening. This cabinet shall be divided into three (3) separate sections. The cabinet shall be finished in the same material as the rest of the interior cabinets. These cabinets shall have hinged flip up Plexiglas doors and held shut by Southco locks.

Does Your Bid Comply? ( ) YES ( ) NO

**GLOVE BOX CABINET(s)**: A cabinet shall be built and installed above the side entry door to house three (3) boxes of disposal gloves. The cabinet shall have a single, clear Plexiglas door with three oval cutouts to allow gloves to be removed without opening the door.

A cabinet shall be built and installed on the wall adjacent to the squad bench to house three (3) boxes of disposal gloves. The cabinet shall have a single, clear Plexiglas door with three oval cutouts to allow gloves to be removed without opening the door.

Does Your Bid Comply? ( ) YES ( ) NO

**RIGHT FRONT / BULKHEAD CABINET**: A designated ALS cabinet shall be located on the front bulkhead adjacent to the side entry door. The main cabinet shall be accessible from both the patient compartment as well as through the curb side forward compartment door. It will have 2 shelves capable of being set to different heights. There will be two doors with plexiglass centers. There will be a securement device on the top and bottom for the doors that is non locking but prevents the doors from coming open unintentionally. The floor of the cabinet shall have a padded tray sized for storing a Lucas automated CPR device and contain straps, or similar securement device, to prevent it from moving during transit. This will be set closest to the exterior door for easy access from the outside.

The upper portion of the cabinet shall be sized for storing a drug bag, medication box, or jump bag. This portion will not be accessible from the exterior. There will be a solid cabinet door with a stainless-steel hinge across the top running the full length of the door. The door shall have a gas-strut type hold-open device that will automatically hold the door in either the open or closed position. a coded lock securement device will be installed on the door.



Does Your Bid Comply? ( ) YES ( ) NO

**GRAB BAR ABOVE COT:** Two (2) 1.25" diameter x 72" yellow grab bars shall be provided and securely fastened to the ceiling over the primary cot and over squad bench. The grab rails shall be fastened with bolts, washers and nuts of the appropriate dimension, through the interior ceiling panel and through the .090" aluminum accessory plate welded into the roof structure.

Does Your Bid Comply? ( ) YES ( ) NO

**UPHOLSTERY:** All vinyl upholstery shall be vacuum or heat-formed seating, applied over high density foam. For seat cushions, the foam must be 2.5" thick. For back and head rests, it shall be 2" thick.

To reduce the possibility of blood-borne pathogens contaminating the upholstery, all seat cushions, back, arm, head rests and header pads shall be vacuum formed seamless design.

Does Your Bid Comply? ( ) YES ( ) NO

**SEAT CUSHION ATTACHMENT:** To assist in cleaning and/or disinfecting, all seat cushions shall be attached to seat bases using Velcro or 3M Dual-Lock fastening systems.

Does Your Bid Comply? ( ) YES ( ) NO

**PADDED TRIM:** To mitigate injury to passengers, trim pieces consisting of aluminum covered with 1/2" high density foam and wrapped with heavy-duty vinyl to match seating upholstery will be installed:

- A. At the vertical outside corner of the cabinet forward of the attendant seat
- B. At the upper horizontal and vertical corners above the action area
- C. At the upper horizontal and vertical corners above the defibrillator shelf

Does Your Bid Comply? ( ) YES ( ) NO

**FLOOR:** An .090 aluminum sub-floor shall be installed over the floor structural tubing. A non-wood, PVC flooring will be installed above the aluminum sub-flooring. The composite flooring shall consist fully of PVC. The PVC floor shall be lightweight, have less than 1% water absorption, be rot, insect, mold, mildew and algae resistant.

Does Your Bid Comply? ( ) YES ( ) NO

**FLOOR COVERING:** There shall be provided a heavy-duty commercial grade vinyl floor covering the interior patient compartment. The floor covering shall be Lon plate II heavy-duty safety vinyl. The floor covering shall be constructed of multiple layers composed of polyvinyl chloride (PVC) resin, plasticizers, fillers and pigments.

The co-calendar wear layer shall be formulated to provide maximum resistance to foot traffic and most commercial and healthcare chemicals. The middle layer shall provide dimensional stability, sound-absorbing properties and resiliency under foot.

The flooring material shall be covered or otherwise roll-up both the left wall and squad bench cabinets approximately 4".

Does Your Bid Comply? ( ) YES ( ) NO

**REAR THRESHOLD:** There shall be a heavy-duty aluminum anodized threshold protector installed on the rear interior of the body. The protectors shall run the entire width of the floor at the door opening.

Does Your Bid Comply? ( ) YES ( ) NO

**CEILING HEADLINER:** The patient compartment headliner shall be constructed of durable, white glossy fiberglass material. The headliner shall be securely affixed to the roof bows. There shall be a full-length inspection access/wire race in the center of the ceiling, which provides access to the wiring harness and antenna bases/leads. The access shall have a removable padded vinyl cover and also troughs built in for LED strip lighting.

Does Your Bid Comply? ( ) YES ( ) NO

**ATTENDANT'S SEAT:** A rear-facing, high back attendant seat shall be located at the head end of the primary cot. The material shall be sixty (60) ounce vacuumed formed, seamless vinyl compliant with OSHA regulations for easy removal of blood-borne pathogens.

The seat shall be mounted on a powered coated black two (2) – position swivel base with the ability to lock in the forward and rear facing positions and shall be securely bolted through the subfloor structure.

The seat shall incorporate a built-in Child Safety Seat equipped with a five (5) – point harness. An integrated three (3) – point, retractable adult lap/shoulder ALS seat belt shall also be provided.

Does Your Bid Comply? ( ) YES ( ) NO

**COT FASTENER SYSTEM:** A Stryker power load and compatible Stryker cot will be provided and installed in accordance with the manufacturers recommendations. **NO EXCEPTION.**

Does Your Bid Comply? ( ) YES ( ) NO

Electrical components

**ELECTRICAL SYSTEM:** The ambulance electrical system shall be an electronic plug-and-play style system with a printed circuit board.

Does Your Bid Comply? ( ) YES ( ) NO

**WIRING INSTALLATION:** The ambulance body and accessory electrical equipment shall be served by circuit(s) separate and distinct from the vehicle chassis circuits. All wiring provided by the ambulance manufacturer shall be copper and conform to all the SAE J1292 requirements and shall have type GXL "cross linked" high temperature polyethylene or better insulation rated to 300 degrees Fahrenheit and conforming to SAE J1127 and J1128.

Wiring shall be permanently color coded to identify wires. Wires shall be permanently heat ink embossed with both number and function codes. The function code shall be the "descriptive" name of the circuit served. The number code shall be the exact purpose of that circuit. This number code shall be completely referenced in a detailed wiring schematic provided with the vehicle. The function and number code shall be embossed at a minimum of 4" intervals the entire length of the wire.

Wiring shall be routed in conduit or high temperature looms with a rating of 300 degrees Fahrenheit where necessary to protect it. All added wiring shall be located in accessible, enclosed, and protected locations and kept at least six inches away from the exhaust system components. Electrical wiring and components shall not terminate in the oxygen storage compartment except for the oxygen-controlled solenoid, compartment light, and door switch. Wiring necessarily passing through an oxygen compartment shall be routed in rigid conduit.

All conduits, looms, and wiring shall be secured to the body or frame with insulated metal cable straps to prevent sagging and movement which results in chafing, pinching, snagging or any other damage. All apertures on the vehicle shall be properly grommeted and sealed for passing wiring and conform to SAE 1292. All items used for protecting or securing the wiring shall be appropriate for the specific application and be standard automotive, aircraft, marine or electronic hardware.

Does Your Bid Comply? ( ) YES ( ) NO

**WIRING CRITERIA:** All wiring devices, switches, outlets, etc., except circuit breakers, shall be rated to carry at least 125% of the maximum ampere load for which the circuit is protected. There shall be a master electrical component panel located in the ambulance. It is preferred that this panel be mounted on or near the bulkhead of the patient compartment. Standard circuit breakers, relays, and diodes shall be mounted on a printed circuit panel and shall be easily accessible through a door or hatch. All components on the circuit board are to be permanently labeled as to their function.

Above section Bid exactly as written: Yes No

**PRINTED CIRCUIT BOARD:** The printed circuit board shall be designed and manufactured as follows: A screen printed board with all circuits fully numbered and labeled. The circuit board shall be a double-sided copper trace printed circuit board with a double-sided laminated isolator. The board shall be non-photo-imaginable solder mask over bare copper with hot air leveled solder over non-masked copper. The board traces shall be three-ounce copper panel. Fuse capacity is the beginning factor in calculating trace width to ensure proper current carrying capability.

The circuits shall then be oversized as much as space permits for maximum cooling of the board. All holes shall be plated through. The terminal strips shall be mounted on the board for connection of above-mentioned wiring harnesses.

The printed circuit board shall incorporate visual onboard diagnostics for input, output, and switching circuits for troubleshooting at a glance.

Does Your Bid Comply? ( ) YES ( ) NO

**VOLTMETER:** Shall be the chassis OEM voltmeter.

Does Your Bid Comply? ( ) YES ( ) NO

**LOW VOLTAGE MONITORING SYSTEM:** There shall be installed, as an integral function of the ambulance conversion main power board, circuitry that continually monitors electrical system voltage. This system shall activate an audible alarm warning to indicate that the system voltage has fallen below 1.7 volts. An alarm silent switch shall be located on the front console

Does Your Bid Comply? ( ) YES ( ) NO

**IGNITION CONTROLLED MODULE DISCONNECT SOLENOID:** An ignition-controlled module disconnect shall be installed into the control panel of the module acting as a module power disconnect when the ignition power is off.

Does Your Bid Comply? ( ) YES ( ) NO

**FRONT CONTROL CONSOLE.** A front floor mounted console will be constructed of aluminum or plywood and shall be finished with a three-component acrylic-reinforced aliphatic, aromatic installation of customer installed radio(s), and other components. The console shall include a storage area for two (2) drink containers.

Does Your Bid Comply? ( ) YES ( ) NO

**PATIENT COMPARTMENT CONTROL CONSOLE:** All switches and controls for the patient compartment, shall be located in the Action-Area. These switches shall be of the same design and construction as found in the driver's control console. These switches shall not be activated unless the "MASTER" switch in the is in ON. A master switch will be located in the front control console and the patient compartment control console.

Does Your Bid Comply? ( ) YES ( ) NO

**WARNING INDICATORS:** The electrical system shall incorporate a warning light panel in the driver's console. It shall provide indicator lights for showing: patient compartment door(s), side and rear, are open. This shall be a flashing RED light. There shall be an exterior compartment "door-open" warning light. This shall be a flashing AMBER light of the same size.

Does Your Bid Comply? ( ) YES ( ) NO

**RADIO PRE-WIRE:** Two [2] 10-gauge power and two [2] 10-gauge ground wires, one [1] RG58U coax cables, and one [1] PL259 connectors shall be installed as "prewires" for the installation of radio communications equipment. Power, ground, and coax shall be terminated and bundled inside the front control console. There shall be an 18" service loop at the antenna base in the center of the vehicle roof and a 36" service loop at the termination in the cab. Two [2] RG58U coax cables, and two [2] PL259 connectors shall be installed as "prewires" for the installation of radio communications equipment mounted in the roof of the patient compartment. There shall be an 18" service loop at the antenna base and a 36" service loop at the termination in the The PL259 connectors shall be shipped loose. The location of the first antenna will be half the distance between the front of the compartment and the middle of the compartment. The location of the second antenna will be half the distance between the rear of the compartment and the middle of the compartment. A protective cap will be placed on all three to protect them from weather and damage until an antenna is placed on them.

Does Your Bid Comply? ( ) YES ( ) NO

**INTERNAL 12 VOLT POWER SOURCE:** The patient compartment shall be furnished with a 12-volt DC, 20 ampere capacity, separately protected circuit, with one (1) cigar lighter style outlet located in the curb side right front ALS cabinet and one (1) in the Action-Area.

This circuit shall also include a "Schottky" diode to isolate medical equipment batteries from any electrical loads imposed by the remainder of the vehicle electrical systems. The Schottky diode shall be heat-sink mounted and having an inverse voltage rating of at least 45 volts and rated to carry the maximum short circuit current until the circuit breaker opens.

Does Your Bid Comply? ( ) YES ( ) NO

**120 VOLT AC UTILITY POWER:** The vehicle shall be furnished with a 2-wire plus ground 120-volt AC wiring system that is separate and distinct from the vehicle's DC wiring system(s). Listing shall be by a nationally recognized testing laboratory, recognized by OSHA under Appendix A to 29 CFR 1910.7. The AC system is to be utilized while the vehicle is stationary for powering maintenance devices, medical equipment and battery chargers. The AC system shall not be utilized for operational ambulance interior lighting, such as dome and cot lights.

Does Your Bid Comply? ( ) YES ( ) NO

**UTILITY POWER CONNECTOR:** An automatic power line disconnect system shall be furnished for the vehicle shoreline. The outlet shall be located on the street side forward of the vehicle. The disconnect mechanism shall be sealed to prevent contamination by road dirt and to ensure a long and reliable life.

To eliminate arcing at the connector contact, a novel internal contact arrangement will close and open the 120-volt A.C. circuit after the mating connector is inserted and before the connector is removed.

The disconnect system shall be connected to the vehicle starter circuit so that ejection occurs when the engine is cranked. The power connector shall be rated for 30 amperes.

Does Your Bid Comply? ( ) YES ( ) NO

**ELECTRICAL 120 VOLT AC RECEPTACLES:** The crew compartment shall be furnished with four (4) each 3-wire plus ground duplex 120-volt AC receptacles. There shall be (1) inside the front ALS cabinet, (1) in the Action-Area, (1) in the monitor/defib area, (1) in the driver's side rear cabinet. Receptacles shall be near flush, vertically mounted. All outlets shall have an indicator within each receptacle as a line monitor indicating a live (hot) circuit and shall be labeled with the following: "120 VOLT AC."

Does Your Bid Comply? ( ) YES ( ) NO

**INVERTER:** There shall be provided a combination battery charger and inverter for use with medical electronics. The inverter portion shall be rated at a continuous 1050 watts output with a surge capacity of up to 2100 watts. The output shall be modified sine wave with voltage of 120-volts AC.

There shall also be an automatic transfer switch that will disable the inverter output whenever the shoreline system is engaged. The battery charger portion shall have a charging capacity of 15 amps to 55 amps with input current of 12 volts.

The entire unit shall have a black, painted aluminum chassis with non-corrosive hardware and should measure approximately 12.5" wide x 6" high x 11" deep (approximate) and should weigh no more than 22 pounds. Additionally, the unit shall have a thermostatically controlled fan for internal cooling. The inverter/charger will be mounted in the street side intermediate cabinet. There will be a on/off, not momentary, switch for the inverter located on the rear switch panel.

Does Your Bid Comply? ( ) YES ( ) NO

**PATIENT COMPARTMENT HVAC:** A HOSELINE 12VDC/110VAC HVAC SYSTEM 3015CDC will be installed and powered via the utility power connector.

Does Your Bid Comply? ( ) YES ( ) NO

**BACK UP ALARM:** An audible alarm shall be installed to activate when the vehicle is placed into reverse gear. There shall be installed on the front console and wired through the vehicle electrical system, a momentary cutoff switch to disable the alarm. The switch shall automatically reset each time the vehicle is placed into reverse gear.

Does Your Bid Comply? ( ) YES ( ) NO

**BACK UP AND PATIENT COMPARTMENT CAMERA:** one (1) camera located at the rear of the ambulance that is activated when putting the ambulance into reverse gear. This camera will display real time video to the driver when in reverse gear. One(1) camera located at the rear centered above the double doors facing the front of the compartment. When not in reverse the monitor will be able to show the patient compartment. The 7" display will be mounted on the front console so as to not impede passenger space.

Does Your Bid Comply? ( ) YES ( ) NO

**PATIENT COMPARTMENT CLOCK:** One (1) 12-volt Intellitec "Emergency Time Manager" digital clock shall be provided in the patient compartment. It shall feature a digital display of time (hours: minutes), a sweep second hand, elapsed time counter (hours: minutes), preset alarm intervals at one (1) minute, two (2) minutes, five (5) minutes and ten (10) minutes and shall have approximate dimensions of 4.75" high x 6.75" wide x 1" deep. 12-volt power to this clock shall be constant.

Does Your Bid Comply? ( ) YES ( ) NO

**CARDIAC MONITOR:** A Physio Control Lifepak15 will be included in the patient compartment. The Lifepak will come with 2 batteries, ac power adapter, extension cable, power cable, and right angle power cable, have the capability to transmit data wirelessly, assess NIBP with 5 sizes of reusable cuffs and coiled tubing, Utilize Masimo SET LNC patient pulse oximetry with LNCS® Reusable sensor adult and pediatric size, Include a 12-Lead ECG Cable trunk cable with 4-Wire limb leads and 4-wire cable comb, a 12-lead ECG cable 6-Wire Precordial attachment, CO2 monitoring, temperature monitoring with temperature adapter cable. A QUIK-COMBO Therapy cable for the utilization of Defibrillation, cardioversion, pacing, and ECG electrodes with QUIK-COMBO connector. A REDI-

CHARGE base for the Lifepak 15 with AC power cord. An approved securement device for the cardiac monitor will be installed in the telemetry area and be capable of rotation.

Does Your Bid Comply? ( ) YES ( ) NO

**MAIN OXYGEN SOLENOID AND DIGITAL MONITOR WITH BYPASS VALVE:** The main oxygen supply line at the tank will have a regulator with transducer and gauge assembly, a double unit digital oxygen monitor with solenoid bypass valve, and a stand alone switch in the patient control console to activate an electric oxygen solenoid valve. There will be two(2) medical gas outlets on the street side in the action area and one(1) medical gas outlet in the curb side wall positioned approximately eight(8) inches past the entry door.

**SUCTION/VACUUM PUMP:** a pump will be installed in the street side intermediate compartment. A panel mount regulator with gauge will be installed in the action area adjacent to the medical gas outlets. A standard wall suction quick connect adapter plate will be mounted in the action area between the medical gas outlet and the panel mount regulator. The pump power switch will be located in the patient compartment control console.

### **VEHICLE LIGHTING AND WARNING REQUIREMENTS**

**VEHICLE EXTERIOR REQUIREMENTS:** The basic exterior vehicle lighting shall comply with FMVSS Standard No. 108 and the requirements herein and include: amber front and rear directional signals and hazard warning lights, front and rear side marker lights, backup light(s), loading light(s), clearance lights, ambulance emergency lights, floodlights, and spotlight(s). All FMVSS lights, except chassis OEM lights shall be LED.

Does Your Bid Comply? ( ) YES ( ) NO

**STOP/TAIL/TURN/BACK UP LIGHTS:** The rear stop/tail lights shall be Whelen M series fully populated red LED lights, with chrome flange housing.

The rear turn signals shall be Whelen M series amber arrow style LED lights with chrome flange housing.

The rear back-up lights shall be Whelen M series maximum populated LED lights with chrome flange housing.

Lights shall be stack mounted on the rear of the vehicle above the rear bumper riser panel.

Does Your Bid Comply? ( ) YES ( ) NO

**TAG LIGHT:** The rear license plate illumination lights shall be LED. These lights shall be mounted within the rear license plate mounting frame on the rear bumper riser panel.

Does Your Bid Comply? ( ) YES ( ) NO

### **EMERGENCY LIGHTING SYSTEM.**

The emergency lighting system must provide the vehicle with 360 degrees of visual warning conspicuity. The system must display highly perceptible and attention-getting signals that function in

a modal system and convey the message in the PRIMARY MODE - "Clear the Right-of-Way" and in the SECONDARY MODE - "Hazard Vehicle Stopped on Right-of-Way".

The vehicle warning light layout shall be as follows:

Grille Lights: Four (4) Whelen ION, two(2) white, two(2) red, LED warning lights with ION chrome flange with clear lens. The grille lights shall be located at least 30" above the ground and below the bottom edge of the windshield and be laterally separated equally spaced measured from centerline to centerline of each lamp. Lights shall be positioned as follows from left to right: W R R W. These four(4) should be synced with the two intersection lights.

Intersection Lights (Front): Two (2) Whelen Ion red LED warning lights with chrome trim flange and clear lens. Lights shall be mounted as close as possible to the front upper edge of each front fender. These two(2) lights should be synced with the grille lights.

Front Light Wall: Four (4) each Whelen M9 red LED warning lights with clear lens and chrome trim flanges. Two (2) each Whelen M9 combination red and clear LED warning lights with clear lens and chrome trim flanges. One (1) each Whelen M9 clear LED warning light with clear lens and chrome trim flanges. Lights shall be positioned as follows from left to right: R R/W R C R R/W R.

Side Body Lights: Two (2) each side Whelen model M9 red LED warning lights with clear lens with chrome plated flanges. One(1) each side M7 amber LED warning light with clear lens with chrome plated flanges.

Rear Body Lights: Two (2) upper outer warning lights shall be Whelen model M9 red LED warning lights with clear lens and chrome trim flanges. One (1) Whelen M9 amber LED warning light with clear lens and chrome mounting flange shall be center mounted over the rear entry door. Two (2) Whelen model M9 red LED warning lights with clear lens and chrome mounting flanges shall be mounted on the rear of the modular body and positioned to show through the rear entry doors windows when said doors are in the open position. These lights shall also act as brake lights when the user applies for braking.

Does Your Bid Comply? ( ) YES ( ) NO

### **NON-EMERGENCY LIGHTING SYSTEM**

**SCENE / LOADING LIGHTS:** Scene and loading lights shall not be less than 75" above the ground and shall not be obstructed by open doors. Floodlights shall be located on the left and right sides of the ambulance and be firmly fastened to the body surfaces below the roof line. The lamp(s) H-V shall be projected downward at an angle of 13 degrees from the horizontal plane.

There shall be two (2) Whelen M Series, model M Gradient Opti-Scene LED on each side of the modular body as side scene or flood lights. Each light shall contain 24 diodes and have a unique internal and external optic design. Scene light switches shall be located on the cab console and control each side independently.

The curb side scene lights shall automatically illuminate anytime the Master Switch is in the on position and the side entry door is opened.



There shall be two (2) Whelen M Series, model 9SC0ENZR Gradient Opti-Scene LED on the rear of the ambulance as rear loading lights. Each light shall contain 24 diodes and have a unique internal and external optic design. The rear loading lights shall operate automatically whenever the Master Switch is on and the rear doors are opened and shall be incorporated with the FMVSS backup lighting system.

Does Your Bid Comply? ( ) YES ( ) NO

**HAND SPOTLIGHT:** A handheld "Blue-Eye" spotlight shall be provided with a minimum of 400,000 candle power. It shall be in a corrosion-proof housing with a protected momentary switch to prevent accidental activation and a minimum 8 ft. heavy-duty coiled cord. It shall be hard wired into the vehicle 12-volt DC system (for antitheft reasons) and stowed in the cab area accessible to the driver and passenger.

Does Your Bid Comply? ( ) YES ( ) NO

**VEHICLE INTERIOR LIGHTING:** The basic interior ambulance lighting configuration shall be designed to minimize electrical loads and include: a driver's compartment dome light, instrument panel lights, master switch panel and console light(s), and above the passenger seat a dome light capable of red and white illumination. Lighting shall be designed and located so that no glare is reflected into the driver's eyes or his line of vision from the switch control panels or other areas that are illuminated while the vehicle is in motion.

Does Your Bid Comply? ( ) YES ( ) NO

**PATIENT COMPARTMENT DOME LIGHTS:** The patient compartment shall be provided with eight (8) overhead low profile "dual-intensity" LED dome lights. Whelen 80C0EHCR. Each dome light shall provide excellent color rendering for patient care/diagnosis. The light lens shall be smoothed faced and guaranteed not to yellow or haze. There shall be four (4) lights located on the street side ceiling area and four (4) over the curb side ceiling area. These lights shall meet AMD Standard 016.

The action area will have a Whelen 3SC0CDCR light centered over it controlled by an individual switch in the patient compartment control console.

The telemetry area will have a Whelen 3SC0CDCR light centered over it controlled by an individual switch in the patient compartment control console.

These lights shall be controlled from the rear compartment switch console. The dual level lighting shall work together or may be separately selected from side to side. The dual level feature shall be activated by rocker type switches located in the attendant's control panel. When either the side or rear door(s) are opened, the four (4) lights over street side area shall be automatically activated in the low intensity mode. The lights over the curb side area shall not light automatically to conserve power. There will be a switch in the front console to turn on the curb side lights in low intensity mode.

Does Your Bid Comply? ( ) YES ( ) NO

**CHECK-OUT TIMER:** A 15-minute spring wound mechanical timer shall be provided and installed at the head of squad bench adjacent to the side entry door. Timer to control the curb side dome lights.

Does Your Bid Comply? ( ) YES ( ) NO

**EXTERIOR COMPARTMENT LIGHTS:** Lighting for exterior storage compartments shall be accomplished utilizing UL Listed Hi-Brite Flex light strip with surface-mounted LEDs on a flexible printed circuit board strip. Lights shall have an expected lifetime of 50,000 hours and shall be water, dust and impact resistant. Lights shall be activated by magnetic door jamb switches.

Each exterior compartment shall have one (1) strip LED light installed full height on each side of the door opening. Lights shall not run across the top of the compartment door opening. All strip lights are to be installed as close to the door opening edge as possible but cannot interfere with the access to equipment and supplies.

Does Your Bid Comply? ( ) YES ( ) NO

**AUDIBLE WARNING SYSTEMS**

**SIREN:** The ambulance shall be equipped with a Whelen model 295HFSA7 Remote Dual Siren Amplifier, with Flush Mount Control Head. Hand's free function and Radio rebroadcast is not optional.

Does Your Bid Comply? ( ) YES ( ) NO

Howler siren amplifier with two (2) speakers mounted behind the vehicle bumper adjacent to each siren speaker. An appropriate size cut out will be made in the bumper with a protective metal cover for the speakers.

Does Your Bid Comply? ( ) YES ( ) NO

**SIREN SPEAKERS:** Two (2) 100-watt speakers shall be installed through the front OEM bumper.

Does Your Bid Comply? ( ) YES ( ) NO