Invitation to Submit Competitive Bids
For
Ambulance(s) and Equipment

DATE: *10/20/2019*

Jackson County EMS is soliciting competitive, sealed bids from qualified vendors for the purchase of two (2), Medium Duty, Class One (4 x 2), Configuration A ambulance(s) for *Jackson County EMS* . *Jackson County EMS* reserves the right to reject any and/or all bids. *Jackson County EMS* also reserves the right to accept the bid most advantageous to *Jackson County EMS.*

The attached specification defines a heavy-duty, commercial emergency medical vehicle, built to withstand adverse driving conditions. The vehicle shall meet or exceed the latest revision to federal specification KKK-A-1822, Federal Motor Vehicle Safety Standards (FMVSS), National Truck Equipment Association (NTEA) Ambulance Manufacturer's Division (AMD) standards and Ford Qualified Vehicle Modifier (QVM) Program Truck Guidelines.

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:
Jackson County EMS
67 Athens Street
Jefferson, Ga 30549
Email: myarbrough@jacksoncountygov.com

Contact Person: Myrna Yarbrough
Purchasing Manager

Schedule of Events Applying to this Procurement

GENERAL CONDITIONS:

PARTY IDENTIFICATION:

AGENCY: "Agency" is hereinafter defined as the customer. The customer is an individual or a group of individuals whom represent the interest of the city, borough, county, parish, state or private enterprise and has been charged with the responsibility of purchasing one or more emergency medical vehicle(s).
Bidder Complies YES_____ NO_____

BIDDER: "Bidder" is hereinafter defined as the vehicle manufacturer and/or its authorized representative. The bidder is an assigned representative who is authorized to commit to a contract with the "Agency".
Bidder Complies YES_____ NO_____

VENDOR: "Vendor" is synonymous with "Bidder".
Bidder Complies YES_____ NO_____

NOTICE TO BIDDERS: Bidders shall thoroughly examine any drawings, specifications, schedule, instructions and any other documents supplied as part of this invitation to bid.

Bidders shall make all investigations necessary to thoroughly inform themselves regarding the content of the written specifications, drawings and instructions supplied herein. No pleas of ignorance by the bidder pertaining to the content of the specifications, drawings, schedule or instructions will be considered by the agency once the deadline for bid submission has occurred. Failure or omission on the part of the bidder to make the necessary examinations and investigations into the content of the specifications shall not be accepted as a basis for making variations to the spec. Failure or omission by the bidder to make all clarifications or explanations of exceptions and conditions that exist or that may exist hereafter shall NOT be accepted as a basis for making variations to the **requirements** of the agency or **compensation** to the bidder.

DEFINITIONS:

CLARIFICATIONS: Clarifications shall be **written correspondence** between the bidder, the agency and all other qualified bidders. A Clarification shall include the paragraph number, page number, the text with unclear content (as written in the specification) and the definition of the clarification requested. Verbal clarifications shall be documented in writing and distributed to all other qualified bidders at least two business days prior to the deadline for bid submission.

EXPLANATION OF EXCEPTIONS: Bidders may take exceptions to any part of the bid contained herein with a written itemized schedule. The schedule shall include the paragraph number(s), the text that the bidder feels he can not comply with an explanation why the bidder feels that the requirement is not in the best interest of the agency and/or an alternate bidder solution. Alternate bidder solutions may be considered by the agency, if the bidder can show the agency that the alternate solution is, in quality and quantity, equal to OR better than the specified item. This agency will share the exception/alternate solution with all other Qualified Bidders. Explanation of exceptions shall be documented in writing at least two business days prior to the deadline for bid submission.
Bidder Complies YES_____ NO_____

CORE DESIGN INTENT: The core design intent of the specifications supplied herein is to purchase an ambulance with the highest level of engineering excellence. The "Core Design" intent of this vehicle shall be centered on the patient's need for pre-hospital care, in conjunction with a safe working environment for the Emergency Medical Personnel.
Bidder Complies YES_____ NO_____

BID PACKAGES SHALL NOT TAKE TOTAL EXCEPTIONS: Bidders are required under this bid invitation to give, for the consideration of the agency, a proposal that will comply with the written specifications, drawings and schedules supplied herein. The specifications supplied represent a compilation of input from all disciplines of users, patients, maintenance and management personnel who are directly affected by the vehicle's performance.

Careful consideration pertaining to safety, configuration, construction, and workmanship are based on working experiences by all the personnel who have direct, working contact with the subject vehicle specified herein. The "core design" of this ambulance was created as a result of resolving issues and improvement suggestions that have originated from the personnel most QUALIFIED to make such input.

This agency makes no claim that ALL potential issues or improvements are included in the specifications supplied herein. This agency will consider any VALID concern by any bidder and will consider minor specification exceptions or alternates of equal or better performance, provided that the exception(s) are steered toward meeting the "Core design" intent AND the exception(s) are cleared up not less than two days prior to the bid opening date.

Caution:

A bidder who submits a bid that takes "Total Exception" and makes an offering of some "Standard" or "Stock" unit will be viewed by the agency as a bidder who did not make, and is not prepared to make, a valid bid, and is not qualified to manufacture the ambulance as specified herein. Alternate bids will NOT be considered.
Bidder Complies YES_____ NO_____

VEHICLE QUANTITY: THIS AGENCY is currently seeking to purchase one vehicle per the specifications set forth in this solicitation for bid. THIS AGENCY AND/OR other government or private agencies that qualify to purchase under this contract will reserve the right to increase the number of vehicles purchased without incurring an obligation to obtain bids from other vendors for a period of two years. A contract extension may be provided to the successful, qualified vendor who has performed satisfactorily to the original contract.
Bidder Complies YES_____ NO_____

VENDOR QUALIFICATIONS:

FORD QVM: All Bidders shall be members in good standing of the Ford Motor Company's Qualified Vehicle Modifier Program (QVM). Even though this is not a Ford chassis, it offers a level of quality to be followed in the production process. Each bidder shall supply a copy of their valid QVM Certification with their bid package. If for any reason the QVM Certification has been withdrawn or suspended by Ford Motor Company within the past five years, the bidder shall supply a full written explanation as to why it was withdrawn. The written explanation shall include any corrective actions taken to regain the QVM Certification.
Bidder Complies YES_____ NO_____

PRODUCT LIABILITY INSURANCE: Proof of current liability insurance shall be supplied. The proof of insurance shall bear the insurance carrier's name, address and phone number. The proof shall also bear the name and address of the insured. This document shall contain the coverage schedule, explaining the type of insurance, the policy number, the effective date of coverage, the policy expiration date and the individual limits. The minimum amount of coverage shall be as follows:

Commercial General Liability - as follows:
Each Occurrence: $1,000,000
Damage to rented premises, each occurrence: $300,000
Medical Expenses: $5,000
Personal and Adv Injury: $1,000,000
General Aggregate: $4,000,000
Products - Comp/OP Agg: $4,000,000
Automotive Liability - Combined Single Limit: $1,000,000
Comprehensive/Collision Deductible: $1,000
Excess Liability - Umbrella Form
Each occurrence: $5,000,000
Aggregate: $5,000,000
Excess Liability: $20,000,000
Workers Compensation and Employers' Liability
E.L. Each Accident: $1,000,000
E.L. Disease policy - Each Employee: $1,000,000
E.L. Disease - Policy Limit: $1,000,000

Bidder Complies YES_____ NO_____

NON-DISCRIMINATION AND EQUAL OPPORTUNITY: The Bidder/Contractor agrees to comply with all federal statutes relating to non-discrimination. These include but are not limited to:

(a) Title VI of the civil rights act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin:

(b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 16811683, and 1685-1686), which prohibits discrimination on the basis of sex:

(c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), which prohibits discrimination on the basis of handicaps and the Americans with Disabilities Act of 1990:

(d) The Age Discrimination Act of 1974, as amended (42 U.S.C. 6101-6107), which prohibits discrimination on the basis of age:

(e) The Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse:

(f) The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism:

(g) 523 and 527 of the Public Health Service Act of 1912 (U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records:

(h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing:

(i) Any other nondiscrimination provisions in any specific statute(s) applicable to any Federal funding for this Agreement:

(j) The requirements of any other nondiscrimination statute(s) which may apply to this agreement.

Bidder Complies YES_____ NO_____

DRUG FREE WORK PLACE: The Bidder shall conduct business as a Drug Free Workplace. The Bidder/Manufacturer and ALL of its sub-contractors shall provide notice to their employees and sub-contractors as required under the Drug-Free Workplace Act of 1988. A copy of Bidder's Drug-Free Workplace Policy shall be furnished to this agency upon request.
Bidder Complies YES_____ NO_____

QUALITY MANAGEMENT SYSTEM REGISTERED: The manufacturer shall have a certificate of registration for ISO 9001(TM) 2015 for their Quality Management System (QMS). The QMS provides establishment, documentation, implementation, maintenance and improvement of management systems that impact the final quality of the product. Registration of the vendor's QMS demonstrates an enduring commitment to quality, a sharp focus on the customer, and robust communication throughout the product process chain to the customer. This registration provides for oversight with routine inspection of the QMS to maintain certification status. Proof of certification shall be readily available upon demand. Proof of Certification shall be provided with bid during initial bid process.
Bidder Complies YES_____ NO_____

NATIONAL TRUCK EQUIPMENT ASSOCIATION TESTING

AMD 001 - AMBULANCE BODY STRUCTURE STATIC LOAD TEST: The ambulance described herein shall be type tested to the National Truck Equipment Association's Ambulance Manufacturing Division, Standard 001 Ambulance Body Structure Static Load Test except the test weight shall be a minimum of 55,000 pounds. The test shall be conducted by an independent testing laboratory. The module body bid herein shall contain extrusion shapes and general structural layout identical to the test body used in the test.
Bidder Complies YES_____ NO_____

AMD 002 - BODY DOOR RETENTION COMPONENTS TEST: The ambulance described herein shall be type tested to the National Truck Equipment Association Ambulance Manufacturing Division, Standard 002 - Body Door Retention Components Test. The test shall be conducted by an independent testing laboratory. The module body bid herein shall contain identical door extrusion shapes, door skin configuration and general structural layout as the test body used in the test.

Safety is this Agency's first concern. Entry and compartment door integrity is crucial to the safety of the patient, public, passengers and crew. If the Bidder has experienced any of the following door conditions as a result of collision, roll over or other accidental impact, then the Bidder shall supply the Agency with a report containing the date, a full explanation of the incident and corrective actions taken.

A) Any entry door rendered inoperative.
B) Any door that has come open.
C) Foreign object penetration into patient cabin through the body structure.

Catastrophic door failure during a collision indicates mechanical defects in the design, hardware and/or the direct construction of the modular door. Any AMD Standard 002 testing prior to the incident is deemed invalid, regardless of the expiration date of the original test.

AMD 003 - OXYGEN TANK RETENTION SYSTEM STATIC TEST: The ambulance described herein shall be type tested to the National Truck Equipment Association Ambulance Manufacturing Division, Standard 003 - Oxygen Tank Retention System Static Test. The test shall be conducted by an independent testing laboratory.

Safety is this Agency's first concern. Main cylinder control is extremely important and is crucial to the safety of the patient, public, passengers and crew. If the Bidder has experienced a cylinder rack separation from the oxygen compartment wall, OR if the cylinder has come loose from the cylinder restraining device, then the Bidder shall supply the Agency with a report containing the date, a full explanation of the incident and corrective actions taken to prevent future failures. Main Oxygen/Air Cylinders that come loose during a collision indicate mechanical defects in the design of the restraining device or the mounting method. Any AMD Standard 003 testing prior to the incident is deemed invalid, regardless of the expiration date of the original test.

AMD 004 - LITTER RETENTION SYSTEM STATIC TEST: The cot/litter retention system described herein shall be tested to the National Truck Equipment Association, Ambulance Manufacturing Division Standard 004 - Litter Retention System Static Test. The cot mount hardware, mounting method and floor reinforcement areas shall exceed the test as described in AMD 004. This test shall be conducted by an independent testing laboratory.

Safety is this Agency's first concern. Main cot/litter retention is critical to patient care. If the Bidder has experienced a litter ejection due to a hardware defect or a defect in the mounting method, then the Bidder shall supply the Agency with a report containing the date, a full explanation of the incident and corrective actions taken to prevent future ejections. Main Cot/Litter ejection's that occur during a collision indicates mechanical defects in the design of the restraining device or the mounting method: Therefore ALL Bidder AMD Standard 004 testing dated prior to the incident is deemed invalid, regardless of the expiration date of the original test.

AMD 005 - 12-VOLT DC ELECTRICAL SYSTEMS TEST: The 12-Volt DC Electrical System described herein shall be tested to the National Truck Equipment Association, Ambulance Manufacturing Division Standard 005 - 12-Volt DC Electrical System s Test. This test is valid for the test article vehicle ONLY. The test shall be conducted on EACH ambulance. The results of the test shall be recorded on an electrical system performance sheet and shall be included with the delivery documents. This test shall be conducted by a qualified quality control electrician at the ambulance manufacturing plant.

Reliability and Safety is this Agency's first concern. The 12-volt electrical system must be functional under all normal or adverse driving and operating conditions. Each electrical device, electrical component, wire, wire route and connection quality shall be tested for reliability as a "SYSTEM" on each vehicle sold. If the Bidder has experienced an electrical fire or an electrical failure resulting in a disabled ambulance going to an emergency call or during transportation, shall supply the Agency with a report containing the date, a full explanation of the incident and corrective actions taken to prevent future electrical failures.

AMD 006 - PATIENT COMPARTMENT SOUND LEVEL TEST: The ambulance described herein shall meet or exceed the National Truck Equipment Association Ambulance Manufacturing Division Standard 006 - Patient Compartment Sound Level Test. The sound level in the driver or patient cabin shall be eighty decibels or less under the conditions described in AMD Standard 006.

AMD 007 - PATIENT COMPARTMENT CARBON MONOXIDE LEVEL TEST: The ambulance described herein shall meet or exceed the National Truck Equipment Association, Ambulance Manufacturing Division Standard 007 - Patient Compartment Carbon Monoxide Level Test. The patient and driver cabin shall be environmentally sealed from carbon monoxide gases that are emitted from internal combustion engines. The ambulance specified herein shall have safe carbon monoxide levels of ten parts per million or less while the vehicle is exposed to the conditions described in AMD Standard 007.

AMD 008 - PATIENT COMPARTMENT GRAB RAIL STATIC LOAD TEST: The patient cabin grab rails shall be tested to the National Truck Equipment Association, Ambulance Manufacturing Division Standard 008 - Patient Compartment Grab Rail Static Load Test. The ceiling mounted grab rails shall be subject to a three axis load of three hundred pounds.

The ceiling mounted grab rail shall not come loose from the ceiling or permanently deform. All mounting fasteners shall be threaded into metal structure not less than .125 inches thick.

AMD 009 - 125-VOLT AC ELECTRICAL SYSTEMS TEST: The patient cabin shall be wired per the National Truck Equipment Association, Ambulance Manufacturing Division Standard 009 - 125 -Volt AC Electrical Systems Test.

The ambulance wiring shall comply with the National Electric Code in effect at the time of manufacture of the ambulance. The system specified herein shall be a 2-wire system with a ground. All outlets and 120-volt hard wired devices, on the ambulance, shall have ground fault interrupter protection.

AMD 010 - WATER SPRAY TEST: The ambulance specified herein shall be water spray tested for water leakage into the patient's and driver's cabins. The door to jamb seal, window installation and seals shall be tested against leakage per the National Truck Equipment Association, Ambulance Manufacturing Division Standard 010 - Water Spray Test. This test shall be conducted on EACH ambulance by the quality assurance department.

AMD 011 - EQUIPMENT TEMPERATURE TEST: The ambulance and equipment specified herein shall operate satisfactorily operate between 30 degrees and 125 degrees Fahrenheit per the National Truck Equipment Association, Ambulance Manufacturing Division Standard 011 - Equipment Temperature Test. This standard must be type certified by an independent testing laboratory on a like test model.

AMD 012 - INTERIOR CLIMATE CONTROL TEST: The ambulance and equipment specified herein shall be equipped with a HVAC (Heating, Ventilation, and Air Conditioning) System that will meet or exceed the performance criteria set forth in the National Truck Equipment Association, Ambulance Manufacturing Division Standard 012 - Interior Climate Control Test. This standard must be type certified by an independent testing laboratory on a like test model.

AMD 013 - WEIGHT DISTRIBUTION GUIDELINES: The ambulance specified herein shall be weighed at the end of the ambulance manufacturer's production cycle to assure compliance with the National Truck Equipment Association, Ambulance Manufacturing Division Standard 013 Weight Distribution Guidelines.

The vehicle specified herein must be weighed on a four point scale that measures the weight imposed on EACH wheel. The side to side weight difference tolerance shall not exceed five percent (5%).

AMD 013 continued:
The total weight imposed on the FRONT axle shall not exceed the chassis manufacturer's gross axle weight rating minus three hundred pounds.

The total weight imposed on the REAR axle shall not exceed the chassis manufacturer's gross axle weight rating minus one thousand pounds.

The aggregate total of all four points shall not exceed the gross vehicle weight rating minus eleven hundred pounds regardless of customer specified equipment.

AMD 014 - ENGINE COOLING SYSTEM TEST: The cooling system in the ambulance specified herein shall be tested to assure compliance with the National Truck Equipment Association, Ambulance Manufacturing Division Standard 014 - Engine Cooling System Test. The vehicle specified herein must be tested at the end of the ambulance manufacturers manufacturing cycle to determine if the cooling system capacity is adequate to maintain safe engine operating temperature at ninety five degrees, ambient temperature for one hour. EACH ambulance shall be checked to assure a leak and trouble free cooling system performance.

AMD 015 - AMBULANCE MAIN OXYGEN SYSTEM TEST: Each ambulance's main Oxygen System shall be tested to assure compliance with the National Truck Equipment Association, Ambulance Manufacturing Division Standard 015 - Ambulance Main Oxygen System Test. The subject vehicle specified herein must be equipped with an Oxygen system that can withstand a 150 PSI charge of dry air or Nitrogen for a period of four hours without a loss exceeding five pounds per square inch of pressure. The results of this test shall be posted inside the oxygen tank stowage compartment. A certificate shall be supplied, describing the test conditions, the initial test pressure, the final pressure (after four hours) and the name of the inspector who performed the test.

AMD 016 - PATIENT COMPARTMENT LIGHTING LEVEL TEST: The ambulance and equipment specified herein shall be equipped with patient compartment lighting that will meet or exceed the performance criteria set forth in the National Truck Equipment Association, Ambulance Manufacturing Division Standard 016 - Patient Compartment Lighting Level Test. This standard must be type certified by an independent testing laboratory on a like test model.

AMD 017 - ROAD TEST: The ambulance and equipment specified herein will meet or exceed the performance criteria set forth in the National Truck Equipment Association, Ambulance Manufacturing Division Standard 017 - Road Test. This standard must be type certified by an independent testing laboratory on a like test model.

AMD 018 - REAR STEP AND BUMPER STATIC LOAD TEST The rear step and bumper shall be type tested to the National Truck Equipment Association, Ambulance Manufacturing Division Standard 018 - Rear Step and Bumper Static Load Test . This standard must be type certified by an independent testing laboratory on a like test model.

AMD 019 - MEASURING GUIDELINES: COMPARTMENTS AND CABINETS: The ambulance specified herein shall be in compliance with the National Truck Equipment Association, Ambulance Manufacturing Division Standard 019 - Measuring Guidelines: Compartments and Cabinets.

AMD 020 - FLOOR DISTRIBUTED LOAD TEST: The ambulance specified herein shall be type tested to the National Truck Equipment Association, Ambulance Manufacturing Division Standard 0 20 - Floor Distributed Load Test. This standard must be type certified by an independent testing laboratory on a like test model.

AMD 021 - ASPIRATOR SYSTEM TEST, PRIMARY PATIENT: Each ambulance's primary patient aspirator system shall be tested to assure compliance with the National Truck Equipment Association, Ambulance Manufacturing Division Standard 021 - Aspirator System Test, Primary Patient.

AMD 022 - COLD ENGINE START TEST The ambulance specified herein shall be type tested to the National Truck Equipment Association, Ambulance Manufacturing Division Standard 022 - Cold Engine Start Test.

AMD 023 - SIREN PERFORMANCE TEST: The ambulance siren system shall be type tested to the National Truck Equipment Association, Ambulance Manufacturing Division Standard 0 23 - Siren Performance Test.

AMD 024 - PERIMETER ILLUMINATION TEST: The ambulance and equipment specified herein shall be equipped with perimeter lighting that will meet or exceed the performance criteria set forth in the National Truck Equipment Association, Ambulance Manufacturing Division Standard 016 - Perimeter Illumination Test. This standard must be type certified by an independent testing laboratory on a like test model.

AMD 025 - MEASURING GUIDELINES: OCCUPANT HEAD CLEARANCE ZONES: The ambulance specified herein shall be in compliance with the National Truck Equipment Association, Ambulance Manufacturing Division Standard 025 - Measuring Guidelines: Occupant Head Clearance Zones.
Bidder Complies YES_____ NO_____

CRASHWORTHINESS: Safety is a primary objective for modular ambulance vehicles produced under this specification. In addition to compliance with design criteria incorporated herein, manufacturer shall also provide certified documentation to provide proof of crash worthiness of vehicle(s) proposed.

Crash worthiness of vehicle shall be demonstrated through a minimum of two actual crash tests of modular body ambulance under laboratory conditions. These crash tests will be similar in scope to testing performed by the National Highway Traffic Safety Administration and the Insurance Institute for Automobile Safety to verify the crash worthiness of passenger vehicles. An independent test laboratory accepted and utilized by the National Highway Traffic Safety Administration for their crash tests shall perform this testing and provide certification. Testing shall be performed and verified by SAE Member Engineers.

Test criteria shall be defined as a minimum of two actual high-speed impact crash tests between an ambulance and mid-size passenger vehicles. Collisions shall be into each side of manufacturer's standard production modular ambulance body mounted on a chassis, struck by an actual bullet vehicle. Crash energy at impact shall be a minimum of 3,000 pounds at 42 miles per hour.

Reports from crash testing shall be certified by testing lab, and shall include the following minimum results:

1) The required six-point medic restraint system shall hold all attendants in their seats. There shall be no head contact with anything except head rests. There shall be no excessive excursion of the attendants in their seats regardless of which way they were facing.
2) The ambulance body structure shall remain intact after both impacts. Bending of body shall be localized to point of impact, and doors adjacent to the actual crash point shall continue to operate. There shall be no intrusion into the patient compartment.
3) The body mount and pucks shall remain intact as a result of the impacts. There shall be no visual damage to body mounts or floor structure.
4) All interior cabinetry and fixtures shall remain in place and undamaged.

This provision requires actual crash testing of an ambulance by high-speed moving vehicles to validate safety and crash worthiness. Crash simulations, acceleration testing, sled testing: barrier testing or other theoretical tests are not sufficient to meet this requirement. Certified documentation from a qualified independent testing laboratory shall be provided with the bid in order to validate compliance with this requirement.
Bidder Complies YES_____ NO_____

QUALITY ASSURANCE: The vendor shall inspect and test all systems, electrical loads, per current Federal specification KKK-A-1822 Section 4. Testing results shall be documented and displayed in the Oxygen compartment and/or supplied with the delivery handbook.

QUALITY/COMPLIANCE ASSURANCE: A thorough quality/compliance inspection by this agency's employees or this agency's hired representative shall compare the Ambulance to the specifications within 10 calendar days of written notice of vehicle completion by the successful bidder. The notice may be faxed, followed by phone contact. The customer reserves the right to authorize the bidder's DEALER to conduct the inspection provided the DEALER is authorized and qualified to correct quality/compliance issues at the DEALER site.
Bidder Complies YES_____ NO_____

NON-COLLUSIVE BID CERTIFICATION: By submission of this bid response, the Bidder and/or the Bidder's authorized representatives, certify under penalty of perjury, that to the best of their knowledge and belief the following:

A) The prices in the bid response have been arrived at independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor, and:

B) Unless otherwise required by law, the prices which have been quoted in the bid response have not knowingly been disclosed by the Bidder and will not knowingly be disclosed by the bidder, prior to the public bid opening, either directly or indirectly to any competitor, and:

C) No attempt has been made or will be made by the Bidder, for the purpose of restricting competition, to induce any person, partnership or corporation not to submit a bid response .

Bidder Complies YES_____ NO_____

DEBARMENT STATUS: By submission of this bid response, the Bidder and/or its authorized representative, certify under penalty of perjury, that to the best of their knowledge and belief they are not currently debarred from submitting bids or bid on contracts by any agency within the home state of THIS AGENCY, nor are they an agent of any person or entity that is currently debarred from submitting bids on contracts by any agency within the home state of THIS AGENCY.

WARNING: This agency will not tolerate Vendors who state compliance to specifications but deliver an incomplete product and/or sub-standard materials and workmanship. Vendors who have made delivery of such an ambulance without making every reasonable effort to remedy the defects found at the time of delivery or within the warranty period will be notified that they are DEBARRED from submitting bids to this agency in the future. This agency will not waste valuable time (more than once) trying to recover legal costs and deal with lost in-service time of new apparatus, working with vendors who are unresponsive to the needs of this agency.
Bidder Complies YES_____ NO_____

YEARS IN BUSINESS: This bid requires a 25 year/unlimited mileage body structural warranty. Said warranty shall be supported by a company that has been in business under the same company name for the same number of years as the warranty or longer. The bidder shall offer names of customers in the state of Georgia that they have been doing business with for at least 20 years. There is no exception to this specification item allowed due to manufacturers intent to properly stand behind the vehicle being proposed.
Bidder Complies YES_____ NO_____

LOCAL REPRESENTATION: The bidder shall be working through a local Factory Authorized dealer that has been representing the ambulance product being proposed for a minimum of 10 years. The salesman must have been representing the dealership for at least 5 years to show longevity and knowledge of the product. The local representative must be within 200 miles from this agency.
Bidder Complies YES_____ NO_____

INSPECTIONS: This agency requires a final inspection (customer delivery) be performed. A total of two people from this agency will be on each trip. If the distance is less than 325 miles each way, this agency shall drive to and from the remount facility, but if the distance is more than 326 miles each way this agency shall require the successful bidder to arrange for air travel, hotel room for each person, meals and shuttle to and from a major airport.
Bidder Complies YES_____ NO_____

REFERENCES: This agency is extremely concerned with longevity and both initial and long term quality. Each bidder must list at least 2 agencies with contact information within the state of Georgia that this agency can contact to discuss satisfaction and possibly visit to inspect how the vehicles are holding up since they have been delivered and are in service. Vehicles must be at least three years old.
Bidder Complies YES_____ NO_____

CHASSIS

TYPE I MEDIUM DUTY AMBULANCE: The apparatus shall be a Class 1, Configuration A, 2-door conventional cab and chassis with a transferable, modular, ambulance body.
Bidder Complies YES_____ NO_____

TYPE I AMBULANCE: The apparatus shall be a 2020 or newer Class 1, Configuration A, 2-door Conventional cab and chassis with a transferable, modular, ambulance body.
Bidder Complies YES_____ NO_____

OEM: The acronym OEM is Original Equipment Manufacturer. The OEM is the chassis manufacturer and the vehicles Make Origin.

CHASSIS MAKE AND MODEL: The chassis shall be manufactured by Freightliner Truck. The model shall be an M2 106MD, Business Class, 4x2, low profile, regular two door cab with a 168 inch wheel base.
Bidder Complies YES_____ NO_____

ENGINE: A Cummins model ISB-300, three hundred (300 HP), inline six cylinder Diesel engine shall be provided with a minimum displacement of 6.7 liters (402 cu in). The engine shall deliver 660 foot-pounds of torque at 1,600 crank revolutions per minute. The engine performance shall comply with or exceed KKK-A-1822F.
Bidder Complies YES_____ NO_____

TRANSMISSION: An Allison 2100-EVS 5-speed, close ratio automatic transmission with over-drive shall be provided. This transmission shall have a maximum input rating of 660 pound feet of torque.

Bidder Complies YES_____ NO_____

TRANSMISSION SHIFTER: A "T" Handle shift control shall be supplied mounted on the dash by the OEM.
Bidder Complies YES_____ NO_____

AIR RESTRICTION INDICATOR: The engine air intake plenum shall feature an air restriction indicator without graduations shall be supplied.
Bidder Complies YES_____ NO_____

BATTERIES: Four (4) Group 31 batteries shall be mechanically tied down to the tray. The hold downs shall be easily removed for battery replacement: however the hold down device shall not interfere with in tray charging via external charger. The batteries shall be high cycle type with a minimum 730 Cold cranking amps at zero degrees Fahrenheit.
Bidder Complies YES_____ NO_____

BRAKES: 018-002 Air Brake Package. The parking brake shall be an independent air over mechanical, provided by the OEM
Bidder Complies YES_____ NO_____

EXHAUST SYSTEM: Right Hand inboard frame mounted horizontal aftertreatment system assembly with horizontal tailpipe. System to exit the body streetside, forward of the rear wheels.
Bidder Complies YES_____ NO_____

FRONT AXLE WEIGHT RATING (FAWR): The front axle shall be a MFS-10-143A. The FAWR shall be rated no less than 10,000 pounds.
Bidder Complies YES_____ NO_____

FUEL TANK: A drivers side aluminum fuel tank with at least 34 US gallon capacity shall be mounted beneath the driver door and provided by the OEM. The fuel range shall be at least 250 miles per KKK-A-1822.
Bidder Complies YES_____ NO_____

UREA TANK: The chassis shall be ordered with a single 6 US Gallon, Left Hand, mounted under cab with inlet near top of tank cover.
Bidder Complies YES_____ NO_____

GROSS VEHICLE WEIGHT RATING (GVWR): The gross vehicle weight rating shall be defined as the combined weight rating of the weakest components at each axle. The vehicle curb weight of the finished apparatus shall not exceed seventy eight (78) percent of the total gross vehicle weight rating. The GVWR of the chassis supplied shall be at least 25,000 pounds.
Bidder Complies YES_____ NO_____

REAR AIR SUSPENSION: A Freightliner Airliner (OEM) 15,000 pound rear air suspension shall be provided to increase ride quality. Air supply to the rear suspension shall be supplied from the engine driven air compressor. Dual leveling valves shall be installed to correct minor vehicle listing, due to air pressure variables. The curb weight of the conversion shall not exceed 1.5% variable left to right. A Ping Tank shall be installed to soften the deflection rate of the air bags and to absorb the shock normally felt during a high amplitude suspension jounce.

A Kneeling feature shall be supplied to adjust the load height 3" to 3-½". The vehicle shall kneel only if the transmission is placed in Park or neutral. The trigger for the kneeling feature shall be to turn ON the ENABLE switch in the cab console and simply open the TRAILING rear access door. The Enable switch is installed to reduce suspension cycling when not loading a patient and to save the air supply.
The air supply holding tank shall have enough capacity to cycle the suspension from dumped to ride height without falling below 60psi tank pressure.
Bidder Complies YES_____ NO_____

REAR AXLE: The rear axle shall be a single speed Meritor MS-17-14X.

Bidder Complies YES_____ NO_____
REAR AXLE WEIGHT RATING (RAWR): The RAWR shall be rated no less than 17,500 pounds.
Bidder Complies YES_____ NO_____

REAR AXLE TYPE AND RATIO: The axle shall be with a 4.33:1 gear ratio shall be provided.
Bidder Complies YES_____ NO_____

AIR HORNS: Two Grover model No 1510 "Stutter Tone" air horns shall be supplied and installed on each front fender. Each horn shall feature a mounting pedestal that is cast onto the sound unit and a bell support bracket located at a forward position on the horn bell. The front bracket shall feature a rubber insulator at the contact points to prevent finish damage to the bell and to minimize bell vibration.

An air passage designed to deliver air flow to the sound unit diaphragm shall be drilled into the pedestal with an NPT thread at the base for air line fitting installation. Exposed air line or air line fittings are not acceptable. Each horn bell shall measure twenty four and one half (24 1/2") inches long. Each horn shall emit a 128 decibel sound blast measured at five feet from the horn bell at 200 MHz (megahertz). The horns shall function adequately at a minimum air pressure of sixty (60) pounds per square inch. Air horn plumbing shall be flexible nylon "air brake" type tubing capable of supplying twenty two (22) CFM (cubic feet per minute) of air volume at ninety (90) PSI (pounds per square inch) of air pressure.
Bidder Complies YES_____ NO_____

ELECTRIC HORNS: Two OEM twelve volt electric horns shall be installed on the chassis at a forward location.
Bidder Complies YES_____ NO_____

DAYTIME RUNNING LIGHTS: Daytime running lights shall be OEM on the Chassis.
Bidder Complies YES_____ NO_____

PARKING BRAKE: A dash mounted air valve shall pressurize or depressurize an air over mechanical parking brake. The parking brake shall be a drive-line mounted with a drum that requires air pressure to release. Setting this parking brake shall automatically shift the transmission into neutral and turn on an indicator light in the dash.
Bidder Complies YES_____ NO_____

MIRRORS: Dual OEM, right and left hand West Coast mirrors with heated glass shall be supplied and installed by the OEM. The door mounted mirrors shall be set for 102" equipment width. The mirror heads shall feature a mold-in colored body. Both mirror heads shall feature electric remote position controls.
Bidder Complies YES_____ NO_____

CONVEX SIDE MIRRORS: Dual eight inch (8") OEM Convex mirrors shall be supplied and installed by the OEM.
Bidder Complies YES_____ NO_____

FRONT TIRES: Both front tires shall be identical make, tread type, size and load range. For aforementioned GVWR the tires shall be 245/70R19.5 Michelin XZE. A label with the recommended tire pressure shall be located above each wheel opening, unless specified otherwise by the purchaser. All tires shall be balanced per KKK-A-1822F 3.6.12.
Bidder Complies YES_____ NO_____

REAR TIRES: All four rear tires shall be identical make, tread type, size and load range. For aforementioned GVWR the tires shall be 245/70R19.5 Michelin XZE. The tread pattern shall operate silently. Tire "sing" is not acceptable. A label with the recommended tire pressure shall be located above each wheel opening, unless specified otherwise by the purchaser. All tires shall be balanced per KKK-A-1822E 3.6.12.
Bidder Complies YES_____ NO_____

SPARE TIRE: A spare tire and wheel shall be included with the ambulance. It shall be shipped loose and shall be the same aluminum wheel and tires as is on the chassis.
Bidder Complies YES_____ NO_____

WHEELS: The chassis front wheels and rear (inside and outside) wheels shall be Alcoa Aluminum Polished 19.5" x 7.50" aluminum disc. Polished outside only.
Bidder Complies YES_____ NO_____

HEADLIGHTS ON WITH WIPERS: The Chassis headlights shall automatically turn on with the activation of the windshield wipers.
Bidder Complies YES_____ NO_____

WIPER TO LOW SETTING: The windshield wipers shall automatically go to the lowest setting with the activation of the Park Brake.
Bidder Complies YES_____ NO_____

CAB AIR CONDITIONING: The cab shall be equipped with Freightliner's DATA book Code No 700-002 cab air conditioning, defrost and heater. The HVAC control panel shall be centrally mounted on the dash so that the driver or passenger can reach the controls.
Bidder Complies YES_____ NO_____

CAB INTERIOR COLOR: The cab interior shall be OPAL GRAY vinyl.
Bidder Complies YES_____ NO_____

CAB DOOR LOCKS: The cab door latches shall meet or exceed FMVS. 206 for personnel entry doors. The actuation handles shall feature power door locks. A momentary lock/unlock switch shall be installed in the chassis cab. Each switch shall lock or unlock both cab doors unless additional module doors are specified to be wired together. Both driver and passenger side doors shall be keyed the same.
Bidder Complies YES_____ NO_____

OEM GAUGES: The following gauges shall be included and installed by the OEM:

SPEEDOMETER: This instrument shall indicate vehicle speed in Miles per Hour.

TACHOMETER: This instrument shall indicate engine speed in Revolutions per minute (RPM). This instrument shall run up to a minimum of 3000 RPM.

ODOMETER: This instrument shall indicate the distance the vehicle traveled in its lifetime in miles.

TRIP ODOMETER: This resettable odometer shall indicate miles traveled on a given trip.

FUEL LEVEL GAUGE: This instrument shall indicate the amount of fuel remaining in the fuel tank in fractional units of one full tank.

OIL PRESSURE GAUGE: This instrument shall indicate Engine OIL PRESSURE in pounds per square inch (PSI).

AIR PRESSURE GAUGE: This instrument shall indicate the air pressure, supplied by the engine driven air compressor, inside the compressed air tank. The pressure shall be indicated in pounds per square inch.

TRANSMISSION TEMPERATURE GAUGE: This instrument shall indicate the temperature of the automatic transmission fluid in degrees Fahrenheit. The temperature shall be taken from the fluid leaving the transmission, prior to entering any cooler.

VOLT METER: This instrument shall indicate OEM electrical system voltage.

HOUR METER: This chassis shall display the engine hours meter and trip hours meters within the integral drivers display panel. The engine hours meter shall display the total number of hours the engine has run in it's lifetime.
Bidder Complies YES_____ NO_____

CAB STEREO: An OEM AM/FM radio shall be included in the OEM location in dash.
Bidder Complies YES_____ NO_____

CAB SEATS: Sears Atlas 70 series, high back, heavy duty mordurae covered bucket type seats shall be provided in the cab. The seats shall adjust forward and aft as well as recline. A mechanical lumber support shall be built into the back rest of each seat.
Bidder Complies YES_____ NO_____

ARM RESTS: The driver seat shall have arm rests on both sides of the seat. The passenger's seat shall have an arm rest on the inboard (left) side of the seat.
Bidder Complies YES_____ NO_____

CAB SEAT BELTS: The driver and passenger seat shall have OEM 3-point seat belts. The belts shall meet FMVS. 209 and 210. The seat belts shall simultaneously restrain the occupant's waist and their outer shoulder. The entire harness shall couple with one quick attach buckle located on the inboard side of the seat at waist level. The lap belt attachment points shall be connected to the seat base frame and the seat base frame shall be tethered to the cab floor with the same seat belt webbing as the webbing used on the main harness. The tethers shall not restrict the air ride seat base movement.
Bidder Complies YES_____ NO_____

CAB SEAT BASES: Each seat base shall be suspended on a rubber air bag to enhance driver and passenger ride quality. The air pressure shall be infinitely adjustable via a mechanical valve. The air supply shall be the OEM engine driven compressed air system.
Bidder Complies YES_____ NO_____

STEERING WHEEL: The steering wheel shall be mounted on a tilt and telescoping adjustable steering column supplied and installed by the OEM.
Bidder Complies YES_____ NO_____

CAB WINDOWS: The cab windows shall operate by way of a switch on the cab interior doors. The driver's door shall have two (2), one (1) for each window and the passenger door shall have one (1) switch just for its door. They shall be electrically operated at each door with an OEM motor installed by the chassis manufacturer.
Bidder Complies YES_____ NO_____

WINDSHIELD WIPERS: The cab windshield wipers shall be electric and supplied by the chassis manufacturer. They shall include an intermittent setting all on the OEM control.
Bidder Complies YES_____ NO_____

REPLACEMENT RADIO: There shall be a radio installed to replace the OEM radio on the chassis. The manufacturer shall have installed a Pioneer AVIC-6000NEX radio with extensive features. The radio is a double din size that features a 6.1" WVGA touch screen receiver. Additional features:

- built in navigation and (Navteq traffic-paid service)
- iPhone 5 video support
- back-up camera input port
- microSD/micro SDHC card slot
-

The ambulance manufacturer is responsible for the initial install only. The radio is warranted separately by the radio manufacturer. Future replacement of the radio for warranty purposes is the responsibility of the purchasing agency.
Bidder Complies YES_____ NO_____

TIRE VALVE EXTENDERS: One pair of tire valve extenders shall supplied and installed for each inside rear wheel. The tire valve extenders shall permit the user to check tire pressure and fill the 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.
Bidder Complies YES_____ NO_____

MODULE CONSTRUCTION - GENERAL

SERVICE INTENT: The ambulance body shall be all aluminum. The body sheet shall be reinforced with structural members designed to resist deflection and hold up to extreme ambulance service per the latest revision of federal specification KKK-A-1822F.

BODY MEMBER ALLOY: The side, front and rear sheet shall be derived from .125", 5052-H32 aluminum sheet. The roof sheet shall be one (1) piece, .090", from roof rail to roof rail. The side structure and structural shapes shall be extruded of 6105-T6 aluminum.

STRUCTURAL INTEGRITY: The body shall be capable of providing impact, deformation and penetration resistance in the event of a collision. The body structure shall be capable of passing a standalone static load test on a type-tested body. The test shall be conducted in accordance to AMD-001 **except the test weight shall be a minimum of 55,000 pounds**. The same unit shall be subjected to the same test with the body turned on its side. A complete copy of the testing documents with photos must be supplied upon bid review if requested by this agency. Non-compliant bids will be rejected.

WELD QUALITY: All welds within the modular body shall meet American Welding Society codes for structural and sheet welding.

CREVICE PREPARATION: All skin and extrusion surfaces destine to be mated together, shall be primed with epoxy, etching primer prior to assembly. All over lapping extrusion to skin surfaces shall be bedded with a two-part acrylic high strength bonding adhesive.

SIDE STRUCTURAL MEMBERS: The sheet edges will be fit into slots designed within a proprietary, double hollow, corner post extrusion in addition to the two-part acrylic bonding agent. The sheet will be MIG welded and structurally bonded to the extrusion. Double-hollow designed corner post extrusions shall be used to weld side and end assemblies together. Horizontally oriented, adjoining structural box tubes shall be welded to the corner post with a minimum 50% surface weld. The intermediate structural members of the side grid shall be two by two inch 6105-T6 aluminum, architectural box tubing. All entry and compartment door adjacent members shall be one quarter inch, two by two-inch proprietary extruded shape. The main structure shall surround the compartment openings and provide intermediate skin support. The intermediate structure spacing shall have a nominal dimension of twelve inches. All grid structure shall be welded together with a minimum of 75% of available mating surface. The side skin shall be bonded to the structural grid using 1.75 inch-wide, VHB (Very High Bond) adhesive tape. The edges of the tube that touch the skin will be sealed with Bostik Brand, Simson ISR 70-03 Construction Adhesive.

SIDE IMPACT RAILS: There shall be four side impact rails, located in the upper and lower sections of the side walls. They shall consist of 6105-T6 aluminum, that is a solid one-half inch thick by four-inch plate on the curbside and one-half by four inch plates on the streetside that are continuously MIG welded or Huck structurally fastened to the structural grid. Since this is a safety item, no exceptions will be accepted.
Bidder Complies YES_____ NO_____

SEAT BELT ANCHORAGE: Occupant seat belts shall be drilled and tapped through one-half by four inch plate on the curbside and one-half by four-inch plates on the streetside that are continuously MIG welded to the structural grid. Since this is a safety item, no exceptions will be accepted.
Bidder Complies YES_____ NO_____

SIDE SHEET: The side sheet shall be .125 thick, 5052-H32 aluminum. The side sheet compartment opening cut outs shall be cut with CNC controlled, gantry mounted plasma or high-speed routing equipment. The door opening shall be cut to allow for the skin to be molded into the jamb opening to create a crevice free jamb with a smooth paint finish. The machine formed skin shall return into the body at least 3/4" to meet the jamb extrusion. This method will encourage square openings to receive the door assemblies and maintain critical structural locations. The door jamb shall have a full structure frame behind the jamb skin return. It shall not rely strictly on the skin for the compartment jamb. Pre-determined ventilation louvers shall be ***formed*** into the body sheet, where specified. Bodies that do not incorporate formed louvers have the potential for additional corrosion points and are not preferred by this agency.
Bidder Complies YES_____ NO_____

SEAMLESS DOOR JAMBS: The door jambs of the module shall be seamless. A seamless door jamb exterior is required to minimize corrosion. Extruded type exposed door jambs do not meet this specification. The skin shall completely conceal the door-jamb from view. The only visible seams on the body sheet shall be at the corner posts. The skin shall extend .688 inch below the skirt rail extrusion to a drip edge to keep moisture from collecting underneath where the skin meets the skirt rail extrusion.
Bidder Complies YES_____ NO_____

CORNER POST EXTRUSION: The corners of the modular body shall be made from an extruded aluminum structure that has an alloy of 6105-T6. The corner post extrusion shall be 3.25 x 3.25-inch with a 2-inch- radius on the outer corner. The corner post extrusion shall have an internal web member that runs on a 45-degree angle to the front and side of the modular body. Where the internal web meets the exterior extrusion wall the internal web shall flair into a .125-inch radius giving a .25-inch wall thickness at the exterior wall of the extrusion. There shall be a .75-inch flange on each side of the corner post extrusion that is a side skin receiver. The side skin receiver shall be funnel shaped to allow the exterior side skin to fully seat into the corner post extrusion. The interior walls of the corner post extrusion shall be .125-inch thick, and they shall incorporate a 45-degree weld bevel on the interior corners.
Bidder Complies YES_____ NO_____

REAR SILL EXTRUSIONS: The rear body and floor substructure shall be constructed of a dual proprietary aluminum extrusion with mating joints. The lower floor extrusion is a combination continuous extrusion with an incorporated L mating surface. The lower door extrusion is a multi-chamber construction with matching radius corner and surfaces to the floor sill. This combination of extrusion and joint structure provides for strong joint strengths, and continuous contact surface between the floor sill and the outer-body door extrusion.
Bidder Complies YES_____ NO_____

FRONT AND SIDE WALL GUSSET PLATES: The front wall and side wall structural members shall have additional support with a fully welded gusset system that shall be made of 5052-H32 aluminum plate, .25-inch-thick by four by four-inch.
Bidder Complies YES_____ NO_____

REAR AND SIDE WALL GUSSET PLATES: The rear wall and side wall structural members shall have additional support with a fully welded gusset system that shall be made of 5052-H32 aluminum plate, one quarter inch thick by four by four inch.
Bidder Complies YES_____ NO_____

ROOF RAIL EXTRUSIONS: The roof corners of the modular body shall be made from an extruded aluminum structure that has an alloy of 6105-T6. The roof rail extrusion shall be 4.55 x 3.5 inch with a 2-inch radius on the outer corner. A full-length drip rail shall be incorporated into the roof rail corner post extrusion, drip rails at the top of the modular body that are not inclusive of the roof rail extrusion do not meet the intent of the specification and are deemed non-compliant to this specification. The roof rail extrusion shall have an internal web member that runs on a 45-degree angle to the front and side of the modular body. Where the internal web meets the exterior extrusion wall the internal web shall flair into a .125-inch radius giving a .25-inch wall thickness at the exterior wall of the extrusion. There shall be a .75-inch-flange on the lower side of the roof rail extrusion that is a side skin receiver. The side skin receiver shall be funnel shaped to allow the exterior side skin to fully seat into the roof rail extrusion. There shall be a .75 x .125-inch recess into the roof side of the extrusion for locating the roof sheeting. This recess shall have a 45-degree weld bevel. The interior wall of the roof rail extrusion that is in-board of the side skin funnel shall be 2-inch-wide so that they line up with the exterior side wall. The interior wall of the roof rail extrusion that is in-board of the roof sheeting recess shall be 2.25-inch-wide so that they line up with the 2.25-inch roof bows. The interior walls of the roof rail extrusion shall be .125-inch-thick, and they shall incorporate a 45-degree weld bevel on the interior corners.
Bidder Complies YES_____ NO_____

ROOF SHEET: The four (4) edges of the sheet shall be continuously welded to the roof rail extrusion to prevent leaks. All perimeter welds shall be ground smooth and worked smooth prior to the overall body paint and finish. Non-fully welded roof sheets to the roof rail extrusions do not meet the intent of this specification and are deems non-compliance to this specification.
Bidder Complies YES_____ NO_____

ROOF BOWS: The roof sheet shall be supported by full width .125-inch-thick x 2 x 2.25-inch architectural box tubing. The roof bows shall be located on twelve-inch centers. The roof bows shall be MIG welded to the roof rail extrusions with no less than four and one-half inches of continuous weld per end. The roof sheet shall be bonded to the roof bows with VHB (Very High Bond) adhesive tape.
Bidder Complies YES_____ NO_____

LATERAL ROOF SUPPORTS: If this agency requires ducted ceiling HVAC, additional structural support will be added as a result of the 2 inch ducted heat and A/C delivery system .2 x 2-inch three-sided extruded channel with two sides being .125-inch-thick and the bottom surface for fastener acceptance to be .160-inch shall be full length of the body.
Bidder Complies YES_____ NO_____

ROOF CORNERS: The roof rail extrusions shall be welded together along the roof bow mating walls at the corners. In addition, the outer surfaces of the roof rail extrusions shall be 100% continuously TIG welded to cast aluminum corner castings. The castings shall have internal mating flanges that extend horizontally inside the upper roof rail extrusion and vertically down the corner post extrusions. The corner roof castings shall have accommodations for number six nylon inserts to retain corner cap marker combination warning lights when they are specified. The nylon inserts shall provide isolation of the retaining screw of the light from the casting materials.
Bidder Complies YES_____ NO_____

FLOOR MEMBERS: Floor structures shall be 6105-T6 aluminum, 2.000 by 2.500-inch proprietary hollow section architectural box tubing aluminum. This proprietary shape tubing allows for half-inch plate to be recess to which floor mounted items can be securely connected. Each member shall have a defined bevel built into the extrusion die to allow for full weld penetration on the edge of the extrusions.
Bidder Complies YES_____ NO_____

FLOOR HORIZONTAL GUSSET PLATES: The floor member to side wall fully welded horizontal gusset system shall be made of 5052-H32 aluminum plate, four (4) by four (4) inch triangles. A minimum of 12 gussets shall be located horizontally connecting cross members to longitudinal main center members at each main cross member site.
Bidder Complies YES_____ NO_____

FULL WIDTH CROSS MEMBERS: The module floor shall provide core support for the side assemblies and shall incorporate a minimum of four (4) full body width floor members. The full width floor members shall connect to and support the side wall assemblies. Each member shall be made of 6105-T6 aluminum. The front floor tube is to be a minimum of 3.000 x 2.000 x .250 inch-thick 6105-T6 aluminum tube which is fully MIG welded into the front corner post at each side of the vehicle. On top of the tube is to be a minimum .188 thick 5052 aluminum front sill running full width of the body. One of the members located just forward and/or rear of the rear wheel housing shall be 2.000 by 2.500-inch proprietary hollow section architectural box tubing. The last floor cross-member shall be a 2.375 x 3.188 6105-T6 aluminum proprietary shape proof tube on the rear wall which is fully MIG welded into the rear corner posts at each side of the vehicle. This tube is butted up and welded to a 2.000 x 1.000 x .125 inch-thick 6105-T6 tube which is also fully MIG welded to the rear corner post. A minimum of eight (8) total 6-inch vertical gussets, (1/4) inch thick will be installed to reinforce two (2) at each cross member and sidewall tubes directly fore and aft of the axle.
Bidder Complies YES_____ NO_____

FLOOR SYSTEM CANTILEVER BEAMS: There shall be cantilever floor beams used at intermittent body points running from the opposite main interior wall beam to the opposite exterior wall at the location between exterior compartments. The use of cantilever beams increases the strength of the overall floor system and support to the compartments.
Bidder Complies YES_____ NO_____

WHEELWELLS: There shall be formed wheel well housings installed into the module body to provide sufficient clearance for the rear axle movement based on the chassis jounce study and suspension choice selected. The wheel well shall be formed of smooth aluminum and secured to the floor tube structure system. The wheel well shape shall be multi-angular with vertical riser and flat top to provide the most efficient use of space inside of the module, while providing the required jounce clearance underneath for the chassis tire movement. Wheel wells that are radius shaped are not acceptable to this agency, as they are unnecessarily tall and inefficient in space usage.
Bidder Complies YES_____ NO_____

WATER TIGHT PATIENT CABIN: The sub floor shall be shielded from moisture. A forty (40) mil thick aluminum sub sheet shall be sealed to the floor structure with silicone sealant. Additional aluminum plates shall be intermittent welded between compartments, wheel well liners, step wells and fuel filler housings. All of the areas shall be thoroughly sealed from one to the other, creating a sealed patient cabin from the outside. Extrusion hollows shall be filled with expandable foam sealant to prevent fumes and moisture from entering.
Bidder Complies YES_____ NO_____

DOOR CONSTRUCTION

DOOR SKIN: No welded seams are allowed, only one piece formed corners. The door skin shall be .090 inch-thick, 5052-H32 aluminum sheet formed on all four sides utilizing an ACF Multi-flex Corner Former Model MF 25 to create a crevice free surface for best paint adhesion and corrosion resistance. The formed edges shall not have elongation cracks due to forming and shall maintain material thickness uniformly over the entire sheet. The formed edges uniformly round off seamless for better paint adhesion and aesthetic appeal that does not require cutting and welding in the corners.
Bidder Complies YES_____ NO_____

DOOR FRAMING: The door frame shall reinforce the perimeter of the skin pan. The extrusion shall incorporate a T-slot to receive an extruded, hollow, dual durometer closed cell UV protected TPV gaskets with relief holes for even compression for a proper and complete seal from the door to the door jamb. The gasket corners shall be welded without using adhesives for bonding. The door frame extrusion shall also add torsion resistance to the door assembly. The door jamb extrusion and frame extrusion shall be cut 45 degree on each corner. Each of the four corners shall incorporate a key way and spline that is designed to drive into each corner and maintain a perfect 90-degree angle prior to welding. The door castings shall include gusset plates for additional support for the door construction. The door frame shall also incorporate a clearance way for UNF threaded blind fasteners for the door panels. The door panel shall not rest on the body of the blind fasteners.
Bidder Complies YES_____ NO_____

FINAL DOOR ASSEMBLY: The door skin shall be bonded to the frame assembly with an adhesive sealant in addition to intermittent welding. For entry doors additional horizontal structure shall be added to maintain door skin flatness as well as penetration resistance in the event of a collision. The horizontal members are extruded J-channel, 0.150 inch-thick. A minimum of two horizontal members shall be welded in. A vertically oriented 0.150 inch-thick formed hat-channel shall be welded to the webs of both horizontal channels for additional buckling resistance. Compartment doors shall have a reinforcement system of horizontal or horizontal/vertical structure added to maintain skin flatness and impact resistance.

ENTRY DOOR WINDOW(S) OPENINGS: The entry door(s) shall incorporate recessed areas that are stamped into the outer door skin to allow for a flush window appearance and shall not protrude with a lip on the outer door skin of the modular body.

DOOR PANELS: The inside entry door panels shall be made of .080 inch-thick aluminum plate and shall be finished per these specifications later in this document. The center panel shall be removable for easy lock service/lubrication. The inside of the compartment door panels shall be made of .080 inch-thick polished aluminum diamond plate. The edges of the door panel shall be recessed into the door frame extrusion. The panels shall be fastened to the door frame with stainless steel, #10-32 UNF machine screws threaded into aircraft quality blind fasteners. Each fastener shall have an internal tooth lock washer to preclude loosening.
Bidder Complies YES_____ NO_____

DOOR JAMB: The door jamb shall accommodate rigid fastening of compartment door hinges. The jamb shall include a hollow cell that shall conceal wiring for the non-mechanical door switch. The door jamb frame shall be cut 45 degree on each corner from the door edge corner, each of the four corners shall consist of a key way and spline that is designed to drive into each corner and maintain a perfect 90-degree angle prior to welding. Additionally, the jamb shall be continuously MIG welded on the inside and the outside corners. *A seamless door jamb exterior is required to minimize corrosion - extruded type door jambs do not meet this specification. The skin shall completely conceal the door-jamb from view. "No Exterior Door Extrusions Allowed".*
Bidder Complies YES_____ NO_____

HINGE: All doors shall have stainless steel, continuous, piano hinge. The pin diameter shall be .250 and staked into place to prevent drifting out of the hinge leaf. The knuckle lengths shall be one inch.

DOOR HINGE BOLTS: The hinge attachment bolts shall be one quarter inch diameter by one inch long stainless-steel type TT (Thread Rolling Screws) hex head bolts with SermaGard protective coatings. Each bolt shall be treated with the aluminum filled basecoat/resin-bonded fluoropolymer topcoat system. The SermaGard 1105/1280 protective coated bolt system is designed to provide outstanding salt and dissimilar metal corrosion protection versus bolts treated with pastes and liquids. The SermaGard coating provides UV weathering resistance while protecting the aluminum tube structures and stainless-steel hinges from dissimilar metal contacts. The SermaGard provides a sacrificial corrosion protection. Body manufacturers that do not use bolts treated with SermaGard 1105/1280 are providing substandard protection from corrosion and are not acceptable. Thread cutting screws to attach exterior compartment doors or hinges to the body are not acceptable.
Bidder Complies YES_____ NO_____

LATCHES: The latches shall meet FMVSS 206. All latches shall be two-stage, rotary- type. The latches shall be through bolted to the door frame extrusion. All entry doors shall have two rotary latches per door. To assure uniform latch timing and functional door reliability, only straight, one-quarter (1/4) inch diameter rods shall connect the latches to the handle. All double hung compartment doors shall have two rotary latches per door.
Bidder Complies YES_____ NO_____

NADER PINS: All nader pins shall be headed to prevent the door(s) from opening under impact. They shall be hex headed Grade-8 fully adjustable with a 5/16” thick knurled stainless-steel retainer plate to keep the nader pin from moving out of setting after adjusted. The opening in the door jamb extrusion shall be large enough to allow full adjustment with the nader pin washer covering the hole. Manufacturers that use nader pins without knurled retainers are not acceptable to this agency as they will require more frequent readjustment.
Bidder Complies YES_____ NO_____

MOUNTING

MOUNTING SYSTEM: The outside dimension, across the frame rails on this chassis is thirty four (34) inches. Twelve (12), one quarter (1/4) inch thick steel out riggers, designed specifically to through bolt to the frame rail web, shall be supplied and installed. Each out rigger shall be through bolted to the frame utilizing three (3), five eights (5/8) inch diameter, UNC, grade eight, Flanged Hex head bolts and corresponding grade eight, flanged, locking hex nut.

Each out rigger shall incorporate a dual neoprene vibration isolator system and support for the body's mounting sill. The system shall consist of a top locking nut, the one inch aluminum flat bar, an upper stainless steel bushing, a pre-loaded neoprene upper vibration isolator, the steel outrigger, then a lower pre-loaded neoprene isolator, a stainless lower washer and finally the bolt head that passes through the assembly. The flanged outer edge outriggers shall not protrude more than four (4) and three-eight's (3/8) inches measuring from the frame's web to the outer tip of the out rigger deck. All mounting sills shall be made of one inch thick by three inch wide solid aluminum flat bar. A grade eight half-inch diameter by four inch long hex-head bolt shall be used to bolt the sill down at each isolator site. The lower neoprene isolator shall be 21% less in firmness than the upper isolator to provide a dynamic separation of road vibration from the chassis frame into the modular body. Body mounting systems using only a single mounting isolator shall not be acceptable as they provide inferior mounting vibration isolation.
Bidder Complies YES_____ NO_____

MODULE CONFIGURATION

OVER ALL LENGTH: The over all length of the vehicle shall not exceed twenty three (23) feet, nine (9) inches. The departure angle and length shall meet or exceed the current revision of Federal Specification KKK-A-1822.
Bidder Complies YES_____ NO_____

MODULE LENGTH: The module length shall be at least one hundred seventy-two (172) inches.
Bidder Complies YES_____ NO_____

MODULE WIDTH: The module width shall comply with the current revision of Federal Specification KKK-A-1822. The module shall be ninety-five (95) inches wide, excluding lights and accessories.
Bidder Complies YES_____ NO_____

MODULE HEAD ROOM: The module shall not be less than seventy-two (72) inches actual measured headroom. The measurement shall be taken from the patient compartment floor to the ceiling panels.
Bidder Complies YES_____ NO_____

MODULE EXTERIOR HINGES: There shall be installed stainless steel hinges with standard mill finish for all exterior compartments and entry doors on the module. These hinges shall feature slots for mounting and adjustment of the doors. The finished module paint and special mounting mounting bolts with Serpa coatings shall assist in detering the stainless steel hinges from dissimilar metal corrosion.
Bidder Complies YES_____ NO_____

COMPARTMENT CONSTRUCTION

MATERIALS: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate. All compartment floors shall be formed of .125 aluminum sheet. Compartments for generators, oxygen, and backboards will have .250 compartment floors. All compartment ceilings shall be formed of .090 aluminum sheet. The ceilings and floors shall form around the sides and back to provide an overlapping joint. The floor and ceiling surfaces shall be double action (DA) sanded to 180 grit. The floors and ceilings are bonded to the walls and back and intermittent welded on six (6) inch centers.
Bidder Complies YES_____ NO_____

DRAIN HOLES: Drain holes shall be provided on the bottom of the compartments. Each hole shall be baffled to prevent splash water from entering the compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR CONFIGURATION: This compartment floor shall be a sweep out type floor. The compartment floor shall be flush with the lower door jamb to facilitate compartment floor cleaning. The edge of the compartment floor shall be continuously welded to the lower door jamb. Heat generated from welding shall not distort the straightness or flatness of the jamb or compartment floor. The weld quality must be aesthetically uniform.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR THICNESS: The compartment floor shall be .125 inch thick aluminum of single layer.
Bidder Complies YES_____ NO_____

VENTILATION: There shall be a hole in the compartment below floor line approximately 5-3/8"wide x 2-9/32"tall that will accept a specially designed baffled vent. The baffles shall have a stainless steel spring that allow for only one way operation. They allow air to escape out of the compartment when the door is closed, but not for air to come back into the compartment to keep dirt and dust out of the compartment interior. Engineering shall determine the amount of these vents required by the volume of space in the compartment.
Bidder Complies YES_____ NO_____

TALK THROUGH: Talk through access from the module to the cab shall be provided. The talk through opening shall be at least 19" inches wide and 13" inches high. The cab shall NOT be rigidly fastened to the modular body. A flexible, Accordion shaped, closed cell rubber bellows, custom made for the opening shall be provided to tie the cab to the module. One joint in the bellows is acceptable and shall be located on the bottom of the opening. The joint shall be completely vulcanized.
Bidder Complies YES_____ NO_____

BODY DROP: The Curbside of the modular body ahead of the rear wheels skirt shall be 6" lower than the streetside and behind the rear wheels. This body drop will allow the curbside entry step to be lower to ground level making it easier to enter the curbside entry door and meet the requirement of KKK-A-1822 latest revision.
Bidder Complies YES_____ NO_____

CURBSIDE ACCESS DOOR: The curbside side access door shall be at least 82.812" high by 31" wide measured at the door jamb opening.
Bidder Complies YES_____ NO_____

JAMB PROTECTION: At the curbside side, module entry door, a full width, formed, stainless steel jamb protection plate shall be provided to prevent heavy traffic from chipping the paint.
Bidder Complies YES_____ NO_____

DOOR CHECK: The compartment door(s) in excess of 13" pass through width shall be equipped with a door check (hold open) device. All vertically hinged doors in excess of 13" pass through width shall have a gas operated bi-directional spring shock door check. Door check brackets shall be drilled and tapped through a minimum of 3/8" material to preclude coming loose.
Bidder Complies YES_____ NO_____

DOOR SWING: The compartment door checks shall be installed to allow the door to open ninety to 100 degrees (90 up to 100) from the fully closed position.
Bidder Complies YES_____ NO_____

STEP WELL: A two-step diamond plate step well shall be provided at the curb side access door. Each step tread dimension shall not be less than 10 inches. Both steps in the step well shall be illuminated, per current Federal Specification KKK-A-1822.
Bidder Complies YES_____ NO_____

STEP WELL ILLUMINATION: A 3" clear interior light shall illuminate the curbside step well per the current revision of Federal specification KKK-A-1822.
Bidder Complies YES_____ NO_____

LEFT FRONT COMPARTMENT (M-1): This compartment shall be located in the left front corner of the modular body. The minimum compartment dimensions shall be 84.8" High x 18.8" Wide x 20.5" deep.
Bidder Complies YES_____ NO_____

SPLASH GUARD: A deflector plate shall be welded between the left front and left front middle compartments. The shield shall be specifically designed to shield water splash from the compartment vents.
Bidder Complies YES_____ NO_____

COMPARTMENT CONSTRUCTION

MATERIALS: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate. All compartment floors shall be formed of .125 aluminum sheet. Compartments for generators, oxygen, and backboards will have .250 compartment floors. All compartment ceilings shall be formed of .090 aluminum sheet. The ceilings and floors shall form around the sides and back to provide an overlapping joint. The floor and ceiling surfaces shall be double action (DA) sanded to 180 grit. The floors and ceilings are bonded to the walls and back and intermittent welded on six (6) inch centers.
Bidder Complies YES_____ NO_____

DRAIN HOLES: Drain holes shall be provided on the bottom of the compartment. Each hole shall be baffled to prevent splash water from entering the compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR PANEL: The inside door panel of this compartment shall be diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT FINISH: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate.
Bidder Complies YES_____ NO_____

VENTILATION: There shall be three sets of six louver punches on the outside and inside door panel to properly ventilate the electrical components located in the above mentioned compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR CONFIGURATION**:** This compartment floor shall be a sweep out type floor. The compartment floor shall be flush with the lower door jamb to facilitate compartment floor cleaning. The edge of the compartment floor shall be continuously welded to the lower door jamb. Heat generated from welding shall not distort the straightness or flatness of the jamb or compartment floor. The weld quality must be aesthetically uniform.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR THICKNESS: The compartment floor shall be .125 inch thick aluminum of single layer.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR: A single, forward hinged, compartment door shall be set for this compartment. The door shall have a single handle and two rotary latches.
Bidder Complies YES_____ NO_____

DOOR CHECK: The compartment door(s) in excess of 13" pass through width shall be equipped with a door check (hold open) device. All vertically hinged doors in excess of 13" pass through width shall have a gas operated bi-directional spring shock door check. Door check brackets shall be drilled and tapped through a minimum of 3/8" material to preclude coming loose.
Bidder Complies YES_____ NO_____

DOOR SWING: The compartment door checks shall be installed to allow the door to open ninety to 100 degrees (90 up to 100) from the fully closed position.
Bidder Complies YES_____ NO_____

COMPARTMENT LIGHT: One (1) Vista Brand 12V powered White LED 3/8 inch flat top Rope light, Model #FSW1F, shall be mounted in the compartment, per customer specified location.
Bidder Complies YES_____ NO_____

COMPARTMENT BACK WALL BUILD OUT: The back wall of the compartment shall be built to reduce the depth of the compartment to 14" deep.
Bidder Complies YES_____ NO_____

LEFT FRONT MIDDLE COMPARTMENT (M-2): This compartment is located adjacent and rearward to the left front compartment. The minimum compartment dimensions shall be 36.7" High x 44.8" Wide x 20.5" Deep.
Bidder Complies YES_____ NO_____

COMPARTMENT CONSTRUCTION

MATERIALS: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate. All compartment floors shall be formed of .125 aluminum sheet. Compartments for generators, oxygen, and backboards will have .250 compartment floors. All compartment ceilings shall be formed of .090 aluminum sheet. The ceilings and floors shall form around the sides and back to provide an overlapping joint. The floor and ceiling surfaces shall be double action (DA) sanded to 180 grit. The floors and ceilings are bonded to the walls and back and intermittent welded on six (6) inch centers.
Bidder Complies YES_____ NO_____

DRAIN HOLES: Drain holes shall be provided on the bottom of the compartment. Each hole shall be baffled to prevent splash water from entering the compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR PANEL: The inside door panel of this compartment shall be diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT FINISH: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR THICKNESS: The compartment floor shall be .125 inch thick aluminum of single layer.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR CONFIGURATION**:** This compartment floor shall be a sweep out type floor. The compartment floor shall be flush with the lower door jamb to facilitate compartment floor cleaning. The edge of the compartment floor shall be continuously welded to the lower door jamb. Heat generated from welding shall not distort the straightness or flatness of the jamb or compartment floor. The weld quality must be aesthetically uniform.
Bidder Complies YES_____ NO_____

COMPARTMENT DOORS: A set of double hinged compartment doors shall be set for this compartment. Each door shall have a single handle and two rotary latches.
Bidder Complies YES_____ NO_____

DOOR CHECK: The compartment door(s) in excess of 13" pass through width shall be equipped with a door check (hold open) device. All vertically hinged doors in excess of 13" pass through width shall have a gas operated bi-directional spring shock door check. Door check brackets shall be drilled and tapped through a minimum of 3/8" material to preclude coming loose.
Bidder Complies YES_____ NO_____

DOOR SWING: The compartment door checks shall be installed to allow the door to open ninety to 100 degrees (90 up to 100) from the fully closed position.
Bidder Complies YES_____ NO_____

ADJUSTABLE SHELF: A standard duty aluminum adjustable shelf shall be provided. The shelf shall be formed of .125 (1/8") thick aluminum, with 2 inch upward turned lips on all four sides. The shelf shall be mounted on Unistrut infinitely adjustable, aluminum extruded, heavy duty shelf track. Incrementally adjustable, non-aluminum shelf track is not acceptable.
Bidder Complies YES_____ NO_____

SHELF BRACKET: Each above exterior adjustable shelf shall include four (4) self gusseted .157" thick shelf brackets that will allow for easy adjustment up and down for each shelf. Each bracket shall be secured to the shelf by carriage head bolts on the top of the shelf and hex head bolts to secure them to the shelf tracking material in the compartments. This will guard against shelf deformation in the compartments when the shelves are secured in place.
Bidder Complies YES_____ NO_____

COMPARTMENT LIGHT: One (1) Vista Brand 12V powered White LED 3/8 inch flat top Rope light, Model #FSW1F, shall be mounted in the compartment, per customer specified location.
Bidder Complies YES_____ NO_____

AUXILIARY CONDENSER: The module HVAC system shall employ a separate condenser for enhancement of the patient environmental cooling system. The condenser shall be through bolted to brackets that are bolted to the bottom of the M-2 compartment. Two electric cooling fans shall be mounted to the core assembly and move air thru the double stacked condenser coils making for a compact unit. The condenser fans shall come on when either the cab or the patient cabin A/C unit is turned on.

Fan blades shall be protected by a high impact resistant grille work that is molded into the fan body. All fan wiring shall be routed, secured and protected from road hazards. The condenser body shall not fall within the vehicles maximum ramp break over angle. The condenser shall have minimum ratings of 67,000 BTU/hr with 1,200 cfm with a maximum amp draw of 11.5 amps.
Bidder Complies YES_____ NO_____

CONDUIT No 1: An empty one and one half inch diameter conduit expressly designed to add wires after vehicle delivery by the end user or his/her authorized agent shall be supplied and installed. The conduit shall be have semi-rigid, non conductive liner that is free of inside ridges that can bind on the wire harness being pulled through the conduit. The outer jacket shall be a non-conductive, spiraled rigid coil designed to maintain the original shape of the liner, throughout the length of the conduit run.
ORIGINATION POINT: The aforementioned conduit shall originate in the left front middle (M-2), exterior compartment.
TERMINATION POINT: The aforementioned conduit shall terminate in the patient cabin behind the main action area control panel.
Bidder Complies YES_____ NO_____

LEFT REAR COMPARTMENT (M-3): This compartment shall be located in the left rear corner of the body. The minimum compartment dimensions shall be 63.5" High x 43.125" Wide x 20.5" deep.
Bidder Complies YES_____ NO_____

COMPARTMENT CONSTRUCTION

MATERIALS: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate. All compartment floors shall be formed of .125 aluminum sheet. Compartments for generators, oxygen, and backboards will have .250 compartment floors. All compartment ceilings shall be formed of .090 aluminum sheet. The ceilings and floors shall form around the sides and back to provide an overlapping joint. The floor and ceiling surfaces shall be double action (DA) sanded to 180 grit. The floors and ceilings are bonded to the walls and back and intermittent welded on six (6) inch centers.
Bidder Complies YES_____ NO_____

DRAIN HOLES: Drain holes shall be provided on the bottom of the compartment. Each hole shall be baffled to prevent splash water from entering the compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR PANEL: The inside door panel of this compartment shall be diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT FINISH: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate.
Bidder Complies YES_____ NO_____

CEILING VENTILATION: Specified compartments shall have a hat channel at the ceiling level. The hat channel shall run to no closer than 1" from the compartment side walls to allow for air exchange. Hidden from view, shall be two to three, (4") holes above the hat channel to exhaust the compartment air when the door is closed to allow it to close with minimal effort.
Bidder Complies YES_____ NO_____

VENTILATION: There shall be three sets of six louver punches on the outside and inside door panel to properly ventilate the electrical components located in the above mentioned compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR CONFIGURATION**:** This compartment floor shall be a sweep out type floor. The compartment floor shall be flush with the lower door jamb to facilitate compartment floor cleaning. The edge of the compartment floor shall be continuously welded to the lower door jamb. Heat generated from welding shall not distort the straightness or flatness of the jamb or compartment floor. The weld quality must be aesthetically uniform.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR THICKNESS: The compartment floor shall be .125 inch thick aluminum of single layer.
Bidder Complies YES_____ NO_____

COMPARTMENT DOORS OPTION: A set of double hinged compartment doors shall be set for this special request compartment. Each door shall have a single handle and two rotary latches. Doors shall comply with aforementioned construction techniques.
Bidder Complies YES_____ NO_____

DOOR CHECK: The compartment door(s) in excess of 13" pass through width shall be equipped with a door check (hold open) device. All vertically hinged doors in excess of 13" pass through width shall have a gas operated bi-directional spring shock door check. Door check brackets shall be drilled and tapped through a minimum of 3/8" material to preclude coming loose.
Bidder Complies YES_____ NO_____

DOOR SWING: The compartment door checks shall be installed to allow the door to open ninety to 100 degrees (90 up to 100) from the fully closed position.
Bidder Complies YES_____ NO_____

ADJUSTABLE SHELVES: Two (2) standard duty aluminum adjustable shelves shall be provided. The shelves shall be formed of .125 (1/8") thick aluminum, with 2 inch upward turned lips on all four sides of each shelf. The shelves shall be mounted on Unistrut infinitely adjustable, aluminum extruded, heavy duty shelf track. Incrementally adjustable, non-aluminum shelf track is not acceptable.
Bidder Complies YES_____ NO_____

SHELF BRACKET: Each above exterior adjustable shelf shall include four (4) self gusseted .157” thick shelf brackets that will allow for easy adjustment up and down for each shelf. Each bracket shall be secured to the shelf by carriage head bolts on the top of the shelf and hex head bolts to secure them to the shelf tracking material in the compartments. This will guard against shelf deformation in the compartments when the shelves are secured in place.
Bidder Complies YES_____ NO_____

COMPARTMENT LIGHT: One (1) Vista Brand 12V powered White LED 3/8 inch flat top Rope light, Model #FSW1F, shall be mounted in the compartment, per customer specified location.
Bidder Complies YES_____ NO_____

RIGHT REAR COMPARTMENT (M-5): This compartment shall be located in the right rear corner of the body. The minimum compartment dimensions shall be 84 1/2" High x 23 5/16" Wide x 21" Deep.
Bidder Complies YES_____ NO_____

SPECIAL COMPARTMENT CONSTRUCTION (M-5): The aforementioned compartment shall be made of the following materials:

MATERIALS: All exterior compartment walls and back shall be constructed .125 aluminum sheet. The aluminum alloy, for all compartment parts shall be 5052-H32. All compartment floors shall be formed from .125 aluminum sheet. All compartment ceilings shall be formed from .090 aluminum sheet. The ceilings and floors shall form around the sides and back to provide an overlapping joint. All interior surfaces shall be double action (DA) sanded to 180 grit. The floors and ceilings are bonded to the walls and back and intermittent welded on six (6) inch centers. Continuous welds around the compartment seams are not acceptable due to cracking, in time, located just outside the welded heat effected zone
Bidder Complies YES_____ NO_____

VENTILATION: All compartments, made from aluminum sheet, shall have at least eight louvers of ventilation to the outside. Oxygen cylinder compartments shall be louvered through the door with at least 9 square inches of free-vented area.
Bidder Complies YES_____ NO_____

DRAIN HOLES: Drain holes shall be provided on the bottom of the compartment. Each hole shall be baffled to prevent splash water from entering the compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR PANEL: The inside door panel of this compartment shall be diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT INTERIOR FINISH: The M-5 compartment is a high use stowage area that will require a high strength, abrasion and chemical resistant finish. This compartment shall have a BLACK colored, high build polyurethane coating with a minimum thickness of 60 mils. The coating shall be a spray-on, abrasion resistant, textured coating that can withstand a harsh working environment without peeling, chipping or discoloring. The surfaces for the coating shall be mechanically and chemically prepared for maximum adhesion to the aluminum. The chemical adhesion promoter shall leave a moisture free surface for the etching primer to adhere to. The polyurethane coating shall not be applied over untreated aluminum.
Bidder Complies YES_____ NO_____

COMPARTMENT COMPONENT FINISH: The shelf(vs), tray(s) and/or divider(s) will require a high strength, abrasion and chemical resistant finish. This compartment shall have the same polyurethane coating as the compartment inner surface.
Bidder Complies YES_____ NO_____

CEILING VENTILATION: Specified compartments shall have a hat channel at the ceiling level. The hat channel shall run to no closer than 1" from the compartment side walls to allow for air exchange. Hidden from view, shall be two to three, (4") holes above the hat channel to exhaust the compartment air when the door is closed to allow it to close with minimal effort.
Bidder Complies YES_____ NO_____

VENTILATION: There shall be three sets of six louver punches on the outside and inside door panel to properly ventilate the electrical components located in the above mentioned compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR CONFIGURATION**:** This compartment floor shall be a sweep out type floor. The compartment floor shall be flush with the lower door jamb to facilitate compartment floor cleaning. The edge of the compartment floor shall be continuously welded to the lower door jamb. Heat generated from welding shall not distort the straightness or flatness of the jamb or compartment floor. The weld quality must be aesthetically uniform.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR THICKNESS: The compartment floor shall be .125 inch thick aluminum of single layer.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR: A single, forward hinged, compartment door shall be set for this compartment. The door shall have a single handle and two rotary latches.
Bidder Complies YES_____ NO_____

DOOR CHECK: The compartment door(s) in excess of 13" pass through width shall be equipped with a door check (hold open) device. All vertically hinged doors in excess of 13" pass through width shall have a gas operated bi-directional spring shock door check. Door check brackets shall be drilled and tapped through a minimum of 3/8" material to preclude coming loose.
Bidder Complies YES_____ NO_____

DOOR SWING: The compartment door checks shall be installed to allow the door to open ninety to 100 degrees (90 up to 100) from the fully closed position.
Bidder Complies YES_____ NO_____

ADJUSTABLE DIVIDERS: Two semi-rigid adjustable dividers shall be formed of 5052-H32 aluminum sheet. Each divider shall be thirty inches (30") high by fourteen inches (14") deep: measured from the track: and have a two inch return flange formed along the thirty inch edge for mounting. All corners on the dividers shall be rounded or chamfered. The exposed edges shall be covered with automotive edge trim. Two full width, horizontally oriented, Unistrut C-channel tracks shall be fastened to the back wall of the aforementioned compartment.
Bidder Complies YES_____ NO_____

DIVIDER MATERIAL: The aforementioned dividers shall be made of 0.125 thick 5052-H32 aluminum sheet.
Bidder Complies YES_____ NO_____

RETAINER STRAP: (1) two inch wide webbed restraint strap shall be supplied in the compartment. The strap shall employ a metal buckle system with a push button release. The strap is to be fastened to the compartment walls with a two inch footman's loop. The fastener is not to be fastened through the webbing material.
Bidder Complies YES_____ NO_____

STOWAGE LABEL:A label shall be applied near the seatbelt material strap restraint with seatbelt buckle with footman metal brackets that are installed into the substrate indicating it's ability to restrain 20 pounds. These straps were tested to SAE J3058 standards to 20 pounds and found passing. The operator should not exceed the 20 pound weight rating. This item is compliant to section 3.11.3 of KKK-A-1822F dated July 1, 2017.
Bidder Complies YES_____ NO_____

RETAINER BAR: There is to be a tube, approximately 1" diameter installed in the selected compartment to help protect from back boards falling out of the compartment when the door is opened.
Bidder Complies YES_____ NO_____

COMPARTMENT LIGHT: One (1) Vista Brand 12V powered White LED 3/8 inch flat top Rope light, Model #FSW1F, shall be mounted in the compartment, per customer specified location.
Bidder Complies YES_____ NO_____

RIGHT REAR FORWARD COMPARTMENT (M-6): This compartment shall be located just forward of the right rear compartment aft of the rear wheel opening. The minimum compartment dimensions shall be 20 3/4" High x 14 1/16" Wide x 20 1/2" deep.
Bidder Complies YES_____ NO_____

COMPARTMENT CONSTRUCTION

MATERIALS: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate. All compartment floors shall be formed of .125 aluminum sheet. Compartments for generators, oxygen, and backboards will have .250 compartment floors. All compartment ceilings shall be formed of .090 aluminum sheet. The ceilings and floors shall form around the sides and back to provide an overlapping joint. The floor and ceiling surfaces shall be double action (DA) sanded to 180 grit. The floors and ceilings are bonded to the walls and back and intermittent welded on six (6) inch centers.
Bidder Complies YES_____ NO_____

DRAIN HOLES: Drain holes shall be provided on the bottom of the compartment. Each hole shall be baffled to prevent splash water from entering the compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR PANEL: The inside door panel of this compartment shall be diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT FINISH: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR CONFIGURATION**:** This compartment floor shall be a sweep out type floor. The compartment floor shall be flush with the lower door jamb to facilitate compartment floor cleaning. The edge of the compartment floor shall be continuously welded to the lower door jamb. Heat generated from welding shall not distort the straightness or flatness of the jamb or compartment floor. The weld quality must be aesthetically uniform.
Bidder Complies YES_____ NO_____

COMPARTMENT FLOOR THICKNESS: The compartment floor shall be .125 inch thick aluminum of single layer.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR: A single, forward hinged, compartment door shall be set for this compartment. The door shall have a single handle and one rotary latch.
Bidder Complies YES_____ NO_____

DOOR CHECK: The compartment door(s) in excess of 13" pass through width shall be equipped with a door check (hold open) device. All vertically hinged doors in excess of 13" pass through width shall have a gas operated bi-directional spring shock door check. Door check brackets shall be drilled and tapped through a minimum of 3/8" material to preclude coming loose.
Bidder Complies YES_____ NO_____

DOOR SWING: The compartment door checks shall be installed to allow the door to open ninety to 100 degrees (90 up to 100) from the fully closed position.
Bidder Complies YES_____ NO_____

COMPARTMENT LIGHT: One (1) Vista Brand 12V powered White LED 3/8 inch flat top Rope light, Model #FSW1F, shall be mounted in the compartment, per customer specified location.
Bidder Complies YES_____ NO_____

RIGHT FRONT COMPARTMENT (M-7): This compartment shall be located in the right front corner of the module body. The minimum compartment dimensions shall be 40" High by 25.25" Wide. The compartment door shall provide direct outside access into the right front advanced life support equipment storage area.
Bidder Complies YES_____ NO_____

VENTILATION: There shall be three sets of six louver punches on the outside and inside door panel to properly ventilate the electrical components located in the above mentioned compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR: A single, forward hinged, compartment door shall be set for this compartment. The door shall have a single handle and one rotary latch.
Bidder Complies YES_____ NO_____

DOOR CHECK: The compartment door(s) in excess of 13" pass through width shall be equipped with a door check (hold open) device. All vertically hinged doors in excess of 13" pass through width shall have a gas operated bi-directional spring shock door check. Door check brackets shall be drilled and tapped through a minimum of 3/8" material to preclude coming loose.
Bidder Complies YES_____ NO_____

DOOR SWING: The compartment door checks shall be installed to allow the door to open ninety to 100 degrees (90 up to 100) from the fully closed position.
Bidder Complies YES_____ NO_____

COMPARTMENT LIGHT: One (1) Vista Brand 12V LED rope light, Model #FSW1F, shall be mounted in the compartment, per customer specified location.
Bidder Complies YES_____ NO_____

RIGHT FRONT BATTERY COMPARTMENT (M-8): This compartment shall be located in the lower right front corner of the module body. The minimum jamb pass through dimensions shall be 17.25" High x 25.25" Wide x 23" Deep. The 4-battery tray shall accommodate four group 31 series batteries and be mounted on full extension slides with a 250 pound per pair rating.
Bidder Complies YES_____ NO_____

COMPARTMENT CONSTRUCTION

MATERIALS: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate. All compartment floors shall be formed of .125 aluminum sheet. Compartments for generators, oxygen, and backboards will have .250 compartment floors. All compartment ceilings shall be formed of .090 aluminum sheet. The ceilings and floors shall form around the sides and back to provide an overlapping joint. The floor and ceiling surfaces shall be double action (DA) sanded to 180 grit. The floors and ceilings are bonded to the walls and back and intermittent welded on six (6) inch centers.
Bidder Complies YES_____ NO_____

DRAIN HOLES: Drain holes shall be provided on the bottom of the compartment. Each hole shall be baffled to prevent splash water from entering the compartment.
Bidder Complies YES_____ NO_____

COMPARTMENT DOOR PANEL: The inside door panel of this compartment shall be diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT FINISH: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate.
Bidder Complies YES_____ NO_____

COMPARTMENT DRAWER FRONT (M-8): A single non-hinged compartment door shall be bolted to the rollout tray. The door construction shall utilize the same construction techniques and materials that are used for the other hinged doors found on the unit body compartments. This front shall have two striker pins, one on each end of the door. The tray front shall support the door squarely with the jamb. The door shall roll out with the tray as a drawer front configuration.
Bidder Complies YES_____ NO_____

REAR ACCESS DOORS: The rear of the module shall be equipped with double, hinged patient compartment access doors. The doors shall be centered on the body and align with the patient compartment aisle space. The doors shall measure 46-3/4 inches wide by 60-5/8" high, jamb to jamb.
Bidder Complies YES_____ NO_____

REAR ACCESS DOOR JAMB: At the rear access doors, a full width, formed, stainless steel jamb protection plate shall be provided to prevent the cot frames from chipping the paint. The stainless steel protection package shall start from under the kick plate and follow the contour of the jamb extrusion, cover the end of the sub-floor and cover the last four inches of the vinyl floor covering.
Bidder Complies YES_____ NO_____

BODY PROTECTION AND BRIGHT WORK

WIRE/HOSE COVER: The area between the back of the cab and the front of the module shall have a .100 aluminum diamond plate cover, attached to the frame rails, to protect any hoses and/ or wires routed in that location. The cover shall be mounted to close-off the area with a finished appearance.
Bidder Complies YES_____ NO_____

RIGHT SIDE COVER: The OEM Exhaust Treatment System shall be concealed from view with a custom cover. The polished aluminum diamond plate cover shall be formed to contour match the system. The cover shall originate from the top of the primary (Bottom) step, run vertically and form around the top corner and across the top of the system. The ends of the cover shall be continuously TIG Welded to the formed front and top. The cover shall be fastened securely against the OEM bracket system. All fastening devices shall be secured to the tank support brackets. The cover shall be rattle free and the installation shall be tested for vibrations with the engine running, placed in gear and the vehicle held at a complete stop.

PRIMARY STEP: The OEM primary step shall be replaced with an aluminum "Diamond Back" or expanded metal extrusion that protrudes beyond the face of the fuel tank cover by at least five inches. This step shall be through bolted to both OEM Fuel tank support brackets.
Bidder Complies YES_____ NO_____

SECONDARY STEP: A twenty-six inch by seven inch deep step made primarily of aluminum "Diamond Back" or expanded metal extrusion shall be welded onto the fuel tank cover. The step shall be positioned to the outside of the lower door jamb on the passenger's side door. The outer portion of the step shall be supported by the entire twenty-six inch length of the step extrusion. The top surface of this step shall be level to aid the passenger in and out of the cab.
Bidder Complies YES_____ NO_____

DEF TANK COVER; There shall be a polished aluminum diamond plate cover over the body of the DEF tank located just rearward of the primary cover under the left driver's side of the primary cab. This tank cover shall not interfere with the fill neck of the DEF tank. It shall attach securely to the OEM mounting structure of the DEF tank. The rectangular shape of the cover shall blend to the main tank cover.
Bidder Complies YES_____ NO_____

PRIMARY STEP: The OEM primary step shall be replaced with an aluminum "Diamond Back" or expanded metal extrusion that protrudes beyond the face of the fuel tank cover by at least seven inches. This step shall be through bolted to both OEM Step/air tank support brackets.
Bidder Complies YES_____ NO_____

SECONDARY STEP: A twenty-six inch by seven inch deep step made primarily of aluminum "Diamond Back" or expanded metal extrusion shall be welded onto the fuel tank cover. The step shall be positioned to the outside of the lower door jamb on the passenger's side door. The outer portion of the step shall be supported by the entire twenty-six inch length of the step extrusion. The top surface of this step shall be level to aid the passenger in and out of the cab.
Bidder Complies YES_____ NO_____

FRAMING: The rear step bumper shall exceed the current revision of KKK-A-1822. The bumper shall be framed in with ¼ x 2 x 4 6063-T6 aluminum rectangular tubing. The bumper shall be through bolted directly to the chassis frame.

OUTER PONTOONS: The outer bumper ends (pontoons) shall be covered in .100 polished aluminum diamond plate. The outer corners shall be rounded. Each pontoon cover shall be through bolted to the bumper frame with stainless steel, pan-head, Phillips head, ¼-20 bolts and Nylock nuts.

DEPTH OF BUMPER: The rear bumper shall protrude from the rear surface of the module body to the rearward most metal surface by at least thirteen and one half inches (13 1/2") and not more than fourteen inches (14").
Bidder Complies YES_____ NO_____

CENTER STEP: A flip up step shall be provided to allow closer access to the patient cabin floor. The step shall be as wide as the rear access door jamb. The step shall have aggressive traction. The step shall have a red/white reflexite reflective strip across the flip up step. A stainless steel piano hinge shall have a staked in, ¼" diameter pin, one inch knuckles and one Type-F ¼" through bolt every four inches.
Bidder Complies YES_____ NO_____

DOCKING BUMPERS: The rear bumper shall be equipped with natural, black rubber dock bumpers. The bumpers shall measure 2 ¼ inches high by 8 inches long by 2 inches thick. The bumpers shall be through bolted to each pontoon with two (2) 3/8 diameter, grade 8 bolts. The bolts shall be counter bored into each dock bumper. Each mounting hole shall be reinforced with a counter bore diameter, thick flat washer. Each bolt shall be threaded into a spiral lock flanged nut or approved equal.
Bidder Complies YES_____ NO_____

FENDERS: The rear fender shall be bright aluminum. The fender shall be isolated and mounted to the wheel opening with thin membrane, double side tape. In addition to the tape, 100% nylon bolt and nuts shall hold the fender to the body.
Bidder Complies YES_____ NO_____

SKIRT RAILS: The entire skirt-line of the body, forward and aft on the rear wheels shall have formed .188" diamond plate skirt rails to protect the body. Each skirt rail shall meet current Federal Specification KKK-A-1822. Each rail shall be chamfered 45 degrees at both ends. The rails shall be fastened through the bottom of the rail into the bottom of the modular body. The rails shall not cut into the paint. They shall be mounted through nylon isolators in such a manner that they are spaced off the body.
Bidder Complies YES_____ NO_____

BODY CORNER POST PROTECTION: The lowest twenty-four inches (24") of the corner post extrusions shall be protected against stones and road debris. The corner post guards shall be formed of .080 thick polished aluminum diamond plate, contour fit to the corner post extrusions and riveted into place. A bead of silver colored, silicone sealant shall be applied across the top edge of the guards. The bottom of edge of the guard shall be left unsealed to promote moisture drainage.
Bidder Complies YES_____ NO_____

FRONT OF BODY: The front of the body shall have skirt-line protection plates made of .080 aluminum diamond plate. The corner posts shall have form fit diamond plate protection height matched to the frontal plates. The height of the protection is twenty-four inches up from the body skirt line.
Bidder Complies YES_____ NO_____

REAR KICK PLATE: The rear kick plate shall be made of 0.100 inch thick polished aluminum diamond plate and run from corner post to corner post. The height shall be from the skirt-line of the body to the bottom door jamb on the rear access doors.
Bidder Complies YES_____ NO_____

RECOVERY EYES: Two vertically oriented, heavy-duty cast-iron tow eyes with a one inch threaded stud shall be through bolted to a one half inch thick steel plate that is continuously welded to the end of the OEM Frame. The recovery eyes shall be recessed into the kick panel so that the tangency of the eyes are co-planer with or set back up to one inch. The recovery (tow) eyes shall not be trip hazard to personnel entering and leaving the rear access doors.

ACCESS HOLES: Access to the recovery eyes shall be made through a finished access hole through the Diamond plate "Kick panel" under the rear doors. The access holes shall be at least five inches in diameter and the edges of the holes shall be covered in automotive edge trim. The trim must be bonded to the kick plate in addition to the clamp on ribbing that shall be built into the trim.
Bidder Complies YES_____ NO_____

RECESSED TAG AREA: The kick plate shall feature a centered and illuminated recessed area to mount a standard U.S. six-inch-high by twelve inch wide license plate. The recessed area must be located as specified below and aesthetically TIG Welded around the perimeter of the opening. Threaded inserts and bolts to install the tag shall be installed and provided.
RECESSED TAG AREA LOCATION: The tag area shall be centered in the kick plate.
TAG LIGHT: The tag area shall be LED illuminated with the park light circuit.
Bidder Complies YES_____ NO_____

COURTESY STEP LIGHTS: There shall be a pair of courtesy step lights consisting of a Whelen style T0CACCCR 2" light, mounted to the front of the modular body on the lower body diamond plate stone guards. The lights shall be illuminated with the door ajar circuit for the cab doors.
Bidder Complies YES_____ NO_____

REAR KICK PLATE: The rear kick plate shall be made of 0.100 inch thick polished aluminum diamond plate and run from corner post to corner post. The height shall be from the skirt-line of the body to the bottom door jamb on the rear access doors.
Bidder Complies YES_____ NO_____

REAR ACCESS DOOR CHECKS: Rear access doors shall open at least 150 degrees. The door checks shall be 2 piece, heavy duty, cast aluminum, grabber type with gaskets. The door shall have a ½ round stock loop that plunges into a positive rubber/cast socket.
Bidder Complies YES_____ NO_____

REAR MUD FLAPS: Mud flaps behind both sets of rear tires shall be supplied and installed. The mud flaps shall be 1/4" thick natural rubber material. Each mud flap shall be sandwiched between the wheel well liner and a torque distribution plate. The torque distribution plate shall be at least .100 thick aluminum plate. Each mud flap shall be through bolted to the wheel well liner with at least three (3) one-quarter inch (1/4") diameter stainless steel bolt.
Bidder Complies YES_____ NO_____

CORROSION: The anti-electrolysis procedure for any holes that are drilled for application of materials is to be as follows, After the hole is drilled, the opening(s) are to be treated with Tactile 517 prior to installation of any fasteners to guard against any future corrosion.

EXTERIOR FASTENERS: All screw sites require a replaceable nylon insert for the fastener to thread into to isolate the dissimilar metals. Each hole shall be treated with an Electrolysis Corrosion Control compound (Tactile 517) prior to installation of the nylon inserts. All exterior screws shall be stainless steel.
Bidder Complies YES_____ NO_____

TURN SIGNAL LIGHT: There shall be additional set of turn signal light fixtures on the front of the body, they shall be Whelen Brand series 600, Light Emitting Diode to operate as left and right turn signal lights and shall be amber arrow when illuminated.
LOCATION: The aforementioned turn signal lights shall be positioned on the module front.
FLANGES: The above lights shall have Whelen's optional bright trim bezel (Flange), to embellish the light head.
Bidder Complies YES_____ NO_____

ADDITIONAL WARNING LIGHTS: There shall be a pair of Code 3 Oscilaser Lights: Halogen Red Lights, located under outer ends of light bar.
Bidder Complies YES_____ NO_____

BODY CORNER CAPS: The front and rear upper body corners shall include a cavity built into the aluminum body that shall not sacrifice the body integrity.
Bidder Complies YES_____ NO_____

FRONT CORNER ICC LIGHTS: The front body corner caps shall include DOT approved compliant light fixtures with clear lenses. The lenses shall house ICC fixtures that include amber LED's to be mounted to the front and front corners. There shall also be additional LED lights that alternate red and clear within the light to act as additional warning lights.
Bidder Complies YES_____ NO_____

FRONT ICC LIGHTS: Clearance lights shall be provided per FMVSS 108. The lights shall illuminate the height of the vehicle, define the vehicle center line. Three (amber) lights shall be provided on the front of the module and be populated with at least two LED's.
Bidder Complies YES_____ NO_____

REAR CORNER ICC LIGHTS: The rear body corner caps shall include DOT approved compliant light fixtures with clear lenses. The lenses shall house ICC fixtures that include red LED's to the rear and rear corners. There shall also be additional LED lights that alternate red and amber within the light to act as additional warning lights.
Bidder Complies YES_____ NO_____

REAR ICC LIGHTS: Clearance lights shall be provided per FMVSS 108. The lights shall illuminate the height of the vehicle, and define the vehicle centerline. Three red lights shall be provided on the rear of the module and be populated with at least two LED's.
Bidder Complies YES_____ NO_____

CORNER CAP WARNING LIGHT SWITCHING: The above-mentioned corner cap LED lights shall be wired to activate in Primary Only.
Bidder Complies YES_____ NO_____

PATIENT ON BOARD LIGHTING: There shall be installed lighting that is activated when the vehicle is actively carrying a patient as selected by the driver of the unit. These lights shall be placed at locations designated by the purchasing agency. Hereafter, "Patient On Board" lighting will be referred to as "POB".
Bidder Complies YES_____ NO_____

POB LIGHT: There shall be a small LED red/white light installed on the ambulance. The light shall flash white alternate to red when powered. Final location shall be determined by this department and noted on the final build order at confirmation.
Bidder Complies YES_____ NO_____

SIDE MARKER LIGHTS: Side marker lights shall be Kinequip Model 112401RD (Red) and shall flash alternately with the rear turn lights. All lights shall be LED.
Bidder Complies YES_____ NO_____

Whelen 600 Series, Tail Lights

BRIGHT CHROME-LIKE FLANGES: The 600 series tail light group shall be embellished by bright trim flanges.
Bidder Complies YES_____ NO_____

STOP/TAIL LIGHT: The stop/tail light fixtures on the rear of the body shall be Whelen Brand series 600 Fully Populated Light Emitting Diode. The lights shall operate as both tail and stop modes and shall be red when illuminated.
Bidder Complies YES_____ NO_____

TURN SIGNAL LIGHT: The turn signal light fixtures on the rear of the body shall be Whelen Brand series 600, Light Emitting Diode. The lights shall operate as left and right turn signal lights and shall be amber arrow when illuminated.
Bidder Complies YES_____ NO_____

BACK UP SIGNAL LIGHT: The backup signal light fixtures on the rear of the body shall be Whelen Brand series 600, halogen light to operate as left and right back up signal lights and shall be clear when illuminated.
Bidder Complies YES_____ NO_____

THIRD BRAKE LIGHT: A third brake light shall be located centered above the rear access doors. The light/lens shall measure at least 15 square inches. The light is to be a Kinequip, model KFL-3BLO1 fixture.
THIRD BRAKE LIGHT: When the brake is applied the light will steady burn.
Bidder Complies YES_____ NO_____

EXTERIOR FLOOD and LOAD LIGHTING:

LEFT SCENE LIGHTS: Two scene lights shall be provided on the left side of the module. The lights shall be Whelen LED-24, 900 series. The scene light group shall meet or exceed the present revision of the Federal specification KKK-A-1822.
Bidder Complies YES_____ NO_____

RIGHT SCENE LIGHTS: Two scene lights shall be provided on the right side of the module. The lights shall be Whelen LED-24, 900 series. The scene light group shall meet or exceed current revision of the Federal specification KKK-A-1822.
Bidder Complies YES_____ NO_____

SCENE LIGHT SWITCHING: The scene lights shall come on with two separate rocker switches labeled Right Flood and Left Flood, located in the center cab console controlled by the master switch. The right (curb side) scene lights shall also come on when the side entry door is opened.
Bidder Complies YES_____ NO_____

REAR LOAD LIGHTS: Two rear load lights shall be provided on the rear of the module, above the rear access doors. The lights shall be Whelen LED-24, 900 series. The scene light group shall meet or exceed current Federal specification KKK-A-1822.
Bidder Complies YES_____ NO_____

REAR LOAD LIGHT SWITCHING: The rear load lights shall come on with a separate rocker switch located in the cab console controlled by a master switch. The switch shall be labeled "Rear Flood" and shall control both rear load lights on the rear of the body and above the rear access doors. The rear load lights will come on when rear doors are opened.
Bidder Complies YES_____ NO_____

INTAKE AND EXHAUST SYSTEM: There shall be two twelve-volt DC powered fans for air circulation in the patient area. One four inch in diameter marine style fan with internal impeller shall be installed in the forward section of the patient area. A dedicated interior vent shall be provided for the powered intake ventilation. One four-inch in diameter marine style fan with internal impeller shall be installed in the rearward section of the patient area as dictated by the cabinet design. The exhaust fan shall also have a dedicated movable vent over the intake. Both fans shall be connected to the same switching source at the patient area and labeled as "EXHAUST FAN" or similar. The patient exhaust shall have one speed.05ha
Bidder Complies YES_____ NO_____

PATIENT CABIN - AIR CONDITIONING SYSTEM: The air conditioning system specified herein shall be completely separate from the cab HVAC system. ALL components of the A/C (HVAC) system shall be match selected and source from one air conditioning vendor.
Bidder Complies YES_____ NO_____

AIR CONDITIONING COMPRESSOR: There shall be installed an additional compressor onto the chassis to support the HVAC needs of the ambulance section.
Bidder Complies YES_____ NO_____

RETURN AIR PLENUM: A stamped powder coated steel vent will be provided in walk-thru area. This will allow constant fresh air for the HVAC unit. The plenum will run from the floor, on the left side of the cabinet, to the HVAC unit in the ALS Cabinet.
Bidder Complies YES_____ NO_____

RETURN AIR GRILLE: Installed around the Heat/AC unit shall be a perforated 13 gauge steel grille. The grille shall allow 156 inches of return air flow to the Heat/AC unit. The grille shall provide complete access to the Heat/AC unit. The grille to have a black powder coat finish. There shall be two quarter turn locks supplied and installed on the grille. The locks shall have a black powder coated finish. Lock pawl activation shall be enabled with a round bitted key.
Bidder Complies YES_____ NO_____

REAR AIR CONDITIONING EVAPORATOR: The module shall have an additional, self-contained A/C unit complete with an evaporator coil, heater core and a 12-volt blower. The fan shall be three speed and shall deliver 580 cubic feet of air per minute on high.

The unit shall be rated at least 32,000 British Thermal Units (BTU) in A/C Mode and 43,300 BTU in Heater Mode. The Vehicle A/C and Heat system must meet or exceed current Federal specification KKK-A-1822. The A/C and Heat unit will be located mounted horizontally over the ALS right front cabinet.
Bidder Complies YES_____ NO_____

CONDENSATION DRAIN PAN: A condensation pan shall be provided to collect water condensation from the evaporator coil. The drain pan shall be formed from 1/8 ABS plastic sheet and shall be listed (tilted) toward the drain fitting. The Evaporator unit shall be mounted so that the weight of the coil, case and blower assembly does not rest on the pan. Additionally, the entire evaporator shall list toward the condensation drain fitting to enhance water flow to the drain hose. The drain hose shall be ½ I. D., collapse resistant and fiber reinforced poly-tubing. The hose shall be routed from the condensation pan to the street.
Bidder Complies YES_____ NO_____

HEATER HOSES: Heater hoses for the cab shall remain OEM. 5/8 inside diameter, EPDM Nomex rubber hoses shall route from the OEM tie in point to the rear heater core.
Bidder Complies YES_____ NO_____

AIR CONDITIONING HOSES: All A/C Hoses shall meet Society of Automotive Engineers (SAE) J-2064. The discharge (High side) hoses shall not be less than 5/16 inside diameter (Size 6). The suction (Low side) hoses shall not be less than ½ inside diameter (Size 10). All hoses shall be A.S.T.M. Type D, with a thermoplastic inner liner (Nylon) that is protected by two textile reinforced braided electrometric outer jacket. The hose shall be qualified for use with R-134A, R-404 and R-407. The hose specified herein shall be subjected to a battery of tests per A.S.T.M. D-380. The results shall be supplied by the hose manufacturer.
Bidder Complies YES_____ NO_____

PRE-CARBON FILTER: The return air grille shall be supplied with a pre carbon filter that is designed to fit the slot within the grille. It shall be installed and shall not rattle. The filter shall be replaceable and/or cleanable by this department's fleet maintenance in the field.
Bidder Complies YES_____ NO_____

ADDITIONAL HEPA FILTER: An additional HEPA filter that is designed to fit the slot within the grille shall be shipped loose with the ambulance upon final delivery.
Bidder Complies YES_____ NO_____

DUCTED AIR CONDITIONING DELIVERY: One duct shall route over the primary patient and attendant, and one shall run over the top area of the squad bench. Each duct shall contain four spherical and adjustable registers, evenly spaced. Two registers are located directly behind the attendant seat.
Bidder Complies YES_____ NO_____

DUAL AC CONTROL / THERMOSTAT: The air conditioning and heat for the patient cabin shall be controlled by a set of controls in the action area with a multiplexed temperature probe for the patient area. Controls in the front chassis cab through the multiplexed system shall also be installed. A digital display shall indicate the patient cabin temperature on both displays.
Bidder Complies YES_____ NO_____

LINER PANELS: The patient cabin head liner substrate material shall be one quarter inch thick, composite metal with powder coated finish laminated to center plastic material. An upholstered center panels shall provide access to ceiling wiring and be covered in the same upholstery type as the seat and back rest pads found on the squad bench and/or CPR seat.
Bidder Complies YES_____ NO_____

PATIENT CABIN DOME LIGHTS: The patient cabin shall have eight dual intensity, Kinequip LED dome lights in the ceiling. The domes centers shall be aligned along two, four light banks. The left bank shall provide light directly over the patient: the right bank shall provide light directly over the aisle/squad bench. The dome lights and configuration shall meet current Federal Specifications KKK-A-1822.
Bidder Complies YES_____ NO_____

CHECK OUT LIGHT SWITCH: There shall be a switch installed designed to defeat/enable power to prescribed interior dome lighting. The location of the switch shall be noted in the shop order after determination at the pre-build conference.
Bidder Complies YES_____ NO_____

INTERIOR CHECKOUT TIMER: A programmable timer circuit shall be included as part of the AEV LX1 Multiplexed electrical system. It shall be activated with the opening of either the Curbside or Rear Access Doors. The circuit shall be constant hot and only operate with the Battery Switch in the off position.
Bidder Complies YES_____ NO_____

INTERIOR CHECKOUT TIME FRAME: The light circuit shall stay on for a period of 15 minutes.
Bidder Complies YES_____ NO_____

LIGHTS POWERED BY TIMER: The aforementioned timer shall power the street side (Left side) bank of dome lights on the high intensity setting. The duration of the light shall vary with the setting of the timer.
Bidder Complies YES_____ NO_____

I. V. BAG HANGING HARDWARE, No 1: One self-contained recessed I. V. Hook assembly shall be installed in the ceiling. The I. V. Hook assembly shall fold and stow recessed in a cast aluminum housing. The hooks are to be spiral shaped to preclude I. V. Bag from falling off with push button release for each fluid bag. The I. V. Hook assembly shall hold (2) two bags of fluid. A rubber with Velcro anti-sway device shall be included for IV retention, without depending on adjacent cabinetry.
LOCATION: Located of the Primary patient, in the close proximity to the Head/Chest area of the patient.
Bidder Complies YES_____ NO_____

I. V. BAG HANGING HARDWARE, No 2: One self-contained recessed I. V. Hook assembly shall be installed in the ceiling. The I. V. Hook assembly shall fold and stow recessed in a cast aluminum housing. The hooks are to be spiral shaped to preclude I. V. Bag from falling off with push button release for each fluid bag. The I. V. Hook assembly shall hold (2) two bags of fluid. A rubber with Velcro anti-sway device shall be included for I. V. retention, without depending on adjacent cabinetry.
LOCATION: Located of the Secondary patient, in the close proximity to the Knee/Waist area of the patient.
Bidder Complies YES_____ NO_____

IV HOOK No 3: One chrome plated, surface mounted IV hook, with a spring-loaded retention gate, shall be supplied in the ceiling of the patient cabin. The hook shall feature an anti-swing strap next to the hook.
LOCATION: Located of the Primary patient, in the close proximity to the Knee/Waist area of the patient.
Bidder Complies YES_____ NO_____

IV HOOK No 4: One chrome plated, surface mounted IV hook, with a spring-loaded retention gate, shall be supplied in the ceiling of the patient cabin. The hook shall feature an anti-swing strap next to the hook.
LOCATION: Located of the Secondary patient, in the close proximity to the Knee/Waist area of the patient.
Bidder Complies YES_____ NO_____

RECESSED CURB SIDE OVER HEAD ASSIST RAIL: The rail shall exceed the current revision of current Federal specification KKK-A-1822. The rail shall be 1 ¼ diameter, 100% stainless steel with gray anti-microbial coating and 72 inches long. All rail fittings shall be TIG welded to the main rail. The rail shall be recessed in an ABS pan 1.5", located curbside of center pad.
Bidder Complies YES_____ NO_____

MODULE INSULATION: The module insulation, except the under the floor shall consist of material having the following characteristics, 8mm thick nonabsorbent, reflective and shall have an air cell core. The air cell core shall consist of one layer of polyethylene bubble film that is sandwiched between one (1) layer of 99 percent pure aluminum foil and white colored polyethylene film. The insulation shall be installed with at least ½ air space from exterior skins, exposed to direct sun light. The insulation thermal rate testing shall be conducted in accordance with A.S.T.M. E84-89A, ANSI 2.5, NFPA 255, UBC 42-1, and U. L. 723. The walls shall not be less than R-15.0 down, R-7.31 Horizontally and R5.4 up. The insulation shall have a NFPA Class A and a UBC Class 1 fire rating with a flame spread index of 20 and a smoke developed index of 30. The application shall include a single layer of the insulation on all four walls, doors, compartments, ceiling and floor.
Bidder Complies YES_____ NO_____

SOUND BLOCK: There is to be Sound Block, sound deadening installed prior to the 1/2" subfloor. It shall be adhered directly to the vapor barrier and shall also include the interior of the body over the wheel well housings for a complete floor sound block. The material shall be less than 1/4" thick so as not to impede on the interior headroom. This sound deadening material has an additional insulation value of R-3 measured vertically. This DBMAX material in combination with other mounted substrates can produce a decibel reduction on average of 47 decibels for frequencies 250 - 5000 HZ.
Bidder Complies YES_____ NO_____

FRONT LIGHTBAR: There shall be installed on the front of the module a Whelen 4500 series light bar of 86" in length. This light bar shall contain all LED light heads. The configuration shall be Red/Clear/Red/Red/Clear/Clear/Red/Red/Clear/Red with all clear lenses.
Bidder Complies YES_____ NO_____

WARNING LIGHT FLASHER: There is not to be an external flasher unit. The LED warning lights shall each flash independently of each other. There shall be no preset flash pattern and it will not comply with the present revision of KKK-A-1822. This agency chooses to have this flash pattern as we feel that it is as effective as the required flash pattern incorporated within the verbiage of the present revision of KKK-A-1822.
Bidder Complies YES_____ NO_____

PRIMARY / SECONDARY SWITCH: The warning light system shall be controlled with a switch(es) located in the cab console. The switch(es) shall allow for "Off" position, "Primary" position, and "Secondary" position. Each output of the switch shall be indicated with a small red lamp, integrated in the switch legend area. The switch shall have an engraved, illuminated legend that clearly defines the function of the switch.
Bidder Complies YES_____ NO_____

GRILLE LIGHTS: There shall be four, Whelen 700 series Super LED lights with chrome flanges, installed on the OEM grille to warn oncoming traffic. The lights shall not block significant air flow to the radiator. All four lights shall be Super LED. Two to have Red LED’s and Two shall have White LED’s. All with Clear lenses.
Bidder Complies YES_____ NO_____

FRONT INTERSECTION LIGHTS: There shall be two Whelen 700 series Super LED lights with chrome flanges and Red LED Diodes installed on the chassis front fender to warn oncoming intersection traffic. They shall have clear lenses.
Bidder Complies YES_____ NO_____

MODULE SIDE WARNING LIGHTS: There shall be four Whelen 900 series Super LED lights with chrome flanges and RED LED Diodes installed, one in each upper outermost positions on both left and right side of the ambulance. They shall have clear lenses.
Bidder Complies YES_____ NO_____

REAR INTERSECTION LIGHTS: There shall be additional warning lights installed on the mid side of the ambulance module toward the rear, one over each wheelwell. They shall be two Whelen 700 series Super LED lights with chrome flanges and RED LED's.
Bidder Complies YES_____ NO_____

REAR UPPER WARNING LIGHT ZONE: There shall be two pair of Whelen 900 series Super LED lights with chrome flanges and RED LED Diodes installed. One pair shall be in the upper outer most corners and one pair centered to show through the rear door windows when the doors are open. They shall have clear lenses.
Bidder Complies YES_____ NO_____

REAR UPPER ZONE CENTER WARNING LIGHT: There shall be one 600 series Super LED light with chrome flange and AMBER LED Diodes installed. It shall have a clear lense.
Bidder Complies YES_____ NO_____

PROGRAM SWITCH WIRING CIRCUITS: The emergency lighting harness shall include cabling for light program changing from the circuit board. Each light head location shall have a cable routed from the light head location to the circuit board area. The cable shall be minimum shielded, 18 awg, cable with a polyvinyl chloride (PVC) jacket. There shall be two separate circuits. Layout to be determined at prebuild meeting.

All aforementioned cables shall have six inch service loop on each end to allow for future connections.
Bidder Complies YES_____ NO_____

Headlight Flasher: The manufacturer shall ensure that the chassis programming is activated for headlight flashing when triggered by the installed conversion electrical system. This headlight flasher is a warning device for emergency usage. The corresponding switch or icon shall activate this activity. The chassis program shall engage when the headlights are turned on.
Bidder Complies YES_____ NO_____

SPOT LIGHT: A hand held 140,000 candle power, 100 watt halogen spot light shall be provided in the cab. The housing shall be an impact resistant, one piece Unibody UV treated black colored neoprene. The light shall feature a momentary rocker switch to prevent the light from burning while not in the user's hand. This light shall feature a coil type cord that is at least three feet long retracted and fifteen feet extended. The weight of this light shall not exceed three pounds.
HANDHELD SPOTLIGHT LOCATION: The aforementioned spot light shall be hard wired to the center console. The light shall be enabled through the battery switch.
Bidder Complies YES_____ NO_____

BATTERY SWITCH: A conversion disconnect switch shall be supplied. Constant battery power shall be supplied for device memories. None of the chassis functions shall be affected by this switch per Fords Qualified Vehicle Modifiers program, bulletin No 63. An indicator light shall illuminate on the cab console panel.
Bidder Complies YES_____ NO_____

POWER MODULE DOOR LOCKS: Each compartment and/or entry doors listed below shall Lock or Unlock with a single depression of a momentary switch. Each door shall be fitted with a bidirectional, momentary electric solenoid designed to operate a mechanical rod in a linear fashion. The rod shall mechanically interface with the door lock mechanism inside the door. All rod connections shall be designed for high cycle operation without mechanical disconnection. The battery compartment shall NOT have the power lock/unlock feature. This compartment shall remain key operated.
Bidder Complies YES_____ NO_____

DOOR LOCK SWITCH: The aforementioned door lock(s), shall be wired to activate with the OEM cab door locks and their switches in the cab.
Bidder Complies YES_____ NO_____

KEY FOB OPTION: The aforementioned door lock(s), shall be wired to activate with the OEM cab door locks and their switches in the cab as well as the remote key fob activator.
Bidder Complies YES_____ NO_____

DOOR LOCK SWITCHES: The module entry doors shall have internal integrated electric door lock activation switches.
Bidder Complies YES_____ NO_____
ONLY the following doors shall have power door locks:

POWER DOOR LOCK: There shall be installed an electric solenoid powered actuator for the compartment door lock on the following doors:

- Left Front
- Left Middle
- Left Rear
- Rear Entry Doors
- Right Rear
- Right Rear Forward
- Curbside Entry Door
- Right Front ALS

Bidder Complies YES_____ NO_____

HIDDEN DOOR LOCK SWITCH: A weather proof momentary switch shall be installed, concealed from view. Installation of Remote Door Lock Switch feature may increase likelihood of unauthorized entry into vehicle.
LOCATION: The switch shall be located under the shorelines.
Bidder Complies YES_____ NO_____

BACK UP ALARM: There shall be a Backup Warning alarm to alert driver of objects behind unit installed.
Bidder Complies YES_____ NO_____

BACK UP ALARM: The apparatus shall include a 97 to 107 decibel back up alarm, activated by shifting into reverse. There shall be a manual momentary cancel switch/Icon in the main electrical system for the temporary cancelation by the driver of this alarm.

CUT-OFF SWITCH, BACK UP ALARM: The back up alarm shall include a momentary type cut off switch to silence the alarm. The alarm enable circuit shall automatically reset when the transmission is shifted out of REVERSE, hence the back up alarm will sound when the vehicle is placed in REVERSE again.
Bidder Complies YES_____ NO_____

MAIN ELECTRICAL DISTRIBUTION:

Electrical System:
The electrical system shall be a custom made LX1 system utilizing Class 1 Inc. ES-Key™ technology and UltraView™ displays. The minimum system components include an UltraView™ 700 display, an UltraView 450 display, a Super node II™ with integrated climate control capability, and other ES-Key™ components as necessary.
UltraView™ 700 display:
The UltraView™ 700 display (UV700) is a custom programmed, 7 inch, full color LCD ES-Key display. It is a 14 button, touch screen capable display. The LCD is bonded for direct sunlight view ability. The UV700 is sealed to IP67 and allows for flexible mounting options (flush, pedestal or rear). The UV700 has 3 J1939 CAN Bus connections and 3 NTSC/PAL Video inputs.

The UV700 is switches are configured to allow for the control of emergency master and non-emergency master functions and are completely configurable VIA the ES-Key™ Professional software. Switches may be set to act as momentary, maintained or 3 way switches without any physical hardware change. All switches and or indicators may be configured as touch screen inputs into the ES-Key™ system. The 14 buttons are LED backlit. The UV700 display contains ES-Key™ diagnostics, allows viewing of vehicle voltage, current draw, oxygen remaining, date and time, climate control status, temperature and control, elapsed time counter, and warning messages.
UltraView™ 450:
The UltraView™ 450 display (UV450) is a custom programmed, 4.3 inch, full color LCD ES-Key display. It is a 8 button, touch screen capable display. The LCD is bonded for direct sunlight view ability. The UV450 is sealed to IP67 and allows for flexible mounting options (flush, pedestal or rear). The UV450 has 2 J1939 CAN Bus connections and 2 NTSC/PAL Video inputs.
The UV450 switches are configured to allow for the control of emergency master and non-emergency master functions and are completely configurable VIA the ES-Key™ Professional software. Switches may be set to act as momentary, maintained or 3 way switches without any physical hardware change. All switches and or indicators may be configured as touch screen inputs into the ES-Key™ system. The 8 buttons are LED backlit. The UV450 display contains ES-Key™ diagnostics, allows viewing of vehicle voltage, current draw, oxygen remaining, date and time, climate control status, temperature and control, elapsed time counter, and warning messages.
Super node II™:
The Super node II™ is a high density input output node that is part of the Class 1 Inc. ES-Key™ system. The Super node II™ has 24 inputs (8 positive/8 negative), 24 outputs, a Universal System Manager, a Data logger, programmable special utilities, and select J1939 engine and drive train message reception with ES-Key™ I/O association.
There are 18 positive and 6 negative outputs in the Super node™. Each positive output is capable of 13 amps continuous duty. The negative outputs are capable of 2 amps continuous duty. There is an LED associated with

each input and output to indicate the inputs and outputs are physically on. Super node II™ outputs contain features such as digital circuit breaker, flash capability, PWM capability and open load detection.
Each positive output has a digital circuit breaker feature. The "digital circuit breaker" feature will automatically turn OFF an output within 0.5 seconds when the source current exceeds 14 Amps. The Super node II™ will attempt to reconnect the output to the load twice more at 5 second intervals, if the output is still overloaded the Super Node will maintain the output OFF. Outputs 0 7 have a “digital circuit breaker - slow blow” which dynamically adjusts the time frame the output stays active when the load exceeds 13 Amps. This feature synthesizes the opening of a standard fuse when reacting to overload conditions. A load of 13.5 Amps will automatically turn off after approximately 12 seconds, and a load of 26 Amps will automatically turn off after approximately 3 seconds. The "digital circuit breaker" feature can be reset (or reinitialized) by de-activating the output through the ES-Key TM network. When the output is turned back ON, the over current tests will be initiated. When an output switch is in an over current situation, a fault is logged to the USM and data logger functions of the Super Node.
Outputs 0 through 17 are flash capable at 2 different rates and pulses (allowing for alternating synchronized flash patterns). Additionally any output in the ES-Key™ network may be flashed at intervals of .25 seconds utilizing Super node™ special utility functions.
Outputs 10 through 17 may be pulse width modulated (PWM) to control loads at a reduced power. PWM may be used as a light dimming feature. An output set to its PWM state will drive its load at 60% duty cycle at 400HZ.
Outputs 0 through 9 have open load detection circuitry. When an open load is detected a network message is generated. This message may be utilized as a diagnostic feature or to display a message in the information center in the front switch panel.
The Super node II™ special utility functions that include timers (delay on/off and one shot), counters, bi-stable switches, and select J1939 broadcast messages.
The Super node II™ has an integrated USB port. The USB port allows for direct connection to the ES-Key system without additional interface devices.
The Super node II™ has an integrated Load Manager: An integrated sequential switching of lamp loads is extremely important on this vehicle. An "Emergency Master" switch that simultaneously energizes a large number of lights can momentarily reduce the vehicle's voltage. Similarly the simultaneous removal of these loads can cause high alternator output voltage transients which may damage sensitive electronic equipment. The LOAD MANAGER sequencer assures that loads are applied and removed gradually, thus eliminating the possibility of inducing failures in the vehicle's equipment.

The load manager shall be a precision, solid state controller which sequentially switches "ON" multiple circuits at 1/2 second intervals. Individual switches shall enable the user (Driver) to select output "ON or "OFF" status, at any time. The sequencer shall be initiated by the "Emergency Master" switch. The sequencer priority shall be set at the pre-build conference.

The aforementioned LOAD MANAGER shall monitor the vehicles battery voltage. When the electrical loads have exceeded the charging system output, the voltage falls. When the voltage falls to 11.5 volts, the LOAD MANAGER will begin to shed up to five loads. The load shed priority shall be set by the circuit significance, followed closely by circuit draw. The LOAD MANAGER will shed loads until the voltage level begins to rise.
CAB CONSOLE: A ergonomically designed console with a A-A plywood substrate shall be contour matched to the cab floor. The console shall be a parallel wall design with a twelve and one half inch over all width. End panels and center console bulkhead panels shall add rigidity and square to the console. The substrate shall be laminated per the following finish specification.

The Super node II™ has an integrated Climate Control Module that controls the vehicles air conditioning clutch, heating valve, and fan motor speed with high current digital outputs based upon received J1939 CAN commands from the UV700 or UV450 displays. The Climate Control Module has two modes of operation: automatic and manual.
Bidder Complies YES_____ NO_____

VOLTAGE MONITOR: A voltage monitor shall be built into the LX1 electrical system. It shall activate a warning light in the cab console, UV700 or UV450 display when the alternator output voltage falls below 11.5 volts. The warning light shall be a red back lighted, engraved legend stating Low Voltage.
Bidder Complies YES_____ NO_____

CAMERA #1: There shall be a camera mounted on the rear of ambulance body to allow the driver to view as they are backing up. Unless otherwise specified, the camera shall be mounted over the rear doors as close to the centerline of the vehicle a possible. The system shall include all the necessary cables and adapters to connect the system together with power as needed. The monitor shall automatically be tied in so that when the vehicle is placed in reverse, it will automatically illuminate the monitor and through the monitor controls shall allow for the monitor to be illuminated when the vehicle is in any gear.
Bidder Complies YES_____ NO_____

FIELD EFFECT TRANSISTORS: All conversion related circuits shall be protected with field effect transistors. The value of the threshold for each circuit shall not exceed 75% of the rated capacity of the weakest component in the circuit. The system shall try to reset three times before shutting down until the system is reset.
Bidder Complies YES_____ NO_____

FRONT LX1 CONTROL PANEL: The manufacturer shall install the forward control panel for the multiplex key1 LX1 electrical system in the chassis cab. The control panel shall be connected to the main electrical system. The control panel shall feature touch screen controls along with tactile buttons on the perimeter. The install location shall be according to the following options.
Bidder Complies YES_____ NO_____

CAB SWITCH PANEL LOCATION: The front control panel shall be located in the chassis cab console.
Bidder Complies YES_____ NO_____

PATIENT AREA CONTROL PANEL LOCATION: Streetside Action Area panel.
Bidder Complies YES_____ NO_____

SWITCH PANEL MOUNTING: The Patient area monitor shall be mounted flat to the action wall.
Bidder Complies YES_____ NO_____

LOAD MANAGER: An integrated sequential switching of lamp loads is extremely important on this vehicle. An "Emergency Master" switch that simultaneously energizes a large number of lights can momentarily reduce the vehicle's voltage. Similarly the simultaneous removal of these loads can cause high alternator output voltage transients which may damage sensitive electronic equipment. The LOAD MANAGER sequencer assures that loads are applied and removed gradually, thus eliminating the possibility of inducing failures in the vehicle's equipment.

The load manager shall be a precision, solid state controller which sequentially switches "ON" multiple circuits at 1/2 second intervals. Individual switches shall enable the user (Driver) to select output "ON or "OFF" status, at any time. The sequencer shall be initiated by the "Emergency Master" switch. The sequencer priority shall be set at the pre-build conference.

The aforementioned LOAD MANAGER shall monitor the vehicles battery voltage. When the electrical loads have exceeded the charging system output, the voltage falls. When the voltage falls to 11.5 volts, the LOAD MANAGER will begin to shed up to five loads. The load shed priority shall be set by the circuit significance, followed closely by circuit draw. The LOAD MANAGER will shed loads until the voltage level begins to rise.

Bidder Complies YES_____ NO_____

CAB CONSOLE: A ergonomically designed console with a A-A plywood substrate shall be contour matched to the cab floor. The console shall be a parallel wall design with a twelve and one half inches over all width. End panels and center console bulkhead panels shall add rigidity and square to the console. The substrate shall be laminated per the following finish specification.

Bidder Complies YES_____ NO_____

BATTERY MONITORING SYSTEM: This multiplexed electrical system shall include a digital display incorporated in the cab and action area switch panel displays. The digits on the meter shall be fully visible in bright daylight. The VOLTAGE measurement range shall be 0.5 to 20.0 volts. The AMPERAGE measurement range shall be -200.0 Amperes to +200.0 Amperes. The system shall be accurate to within one tenth of one volt and within one ampere. The display shall simultaneously show the amperage and the voltage.

Bidder Complies YES_____ NO_____

AUXILIARY CAB CONSOLE: A ergonomically designed extension console shall be contour matched to the Main ambulance conversion console. The console shall be a tapered design with a fourteen and one half inch width at the front of the console and a twelve inch width at the rear of the console. The height shall not exceed the height of the engine cover console measured at the rear. The length of the console, measured at the center, shall be at least twenty-one inches. The console is to include one drop in lid with Echovision system to be hidden inside. There is to be a pocket designed as part of the console to house the spotlight.

Bidder Complies YES_____ NO_____

NOTE BOOK SLOT: The aforementioned extension console shall feature a six inch by full width slot specifically designed to hold note books and/or clipboards. The inside finish of the slot shall be of the same material as the outside laminate. The slot shall be located in the rearward most end of the extension console.

Bidder Complies YES_____ NO_____

The aforementioned "note book slot" shall feature two removable dividers that are evenly spaced in the slot. Extruded C-channels fastened to the sides shall be employed to secure the dividers into place.

Bidder Complies YES_____ NO_____

GLOVE STORAGE: There shall be glove storage on the rear wall of the cab. It shall be designed to hold (3) three boxes of gloves standing on end for easy access.
Bidder Complies YES_____ NO_____

CAB CONSOLE FINISH: The console body shall be finished with a 20 mil Easy Grip film. The Easy Grip shall be a self adhesive as well as bonded to the substrate with high bond contact adhesive. All joints shall be inconspicuous and bonded along the edges.
Bidder Complies YES_____ NO_____

GROUND STRAPS: Four (4) 7/8" wide by 1/8" thick, fine strand, woven straps shall provide a ground path from the module body to the chassis frame. Woven straps filter out RFI noise originating from alternators, strobe power supplies and other devices, that may find their way into intercom, stereo and two-way communication radios. Each end of the ground straps shall be through bolted with 3/8" diameter, grade 5 or 8, hex head bolts and lock nuts. Each connection site shall be cleaned to the bare metal prior to fastening the strap. The connections shall have a di-electric anti corrosion spray applied.
Bidder Complies YES_____ NO_____

12 VOLT POWER INVERTER: A highly reliable Vanner 1050CUL electronic power conversion unit that utilizes MOSFET power semiconductors and a microprocessor controller shall be supplied, installed and wired to the outlets specified herein. A Built in 30A automatic transfer switch shall transfer all loads from the inverter to the shore line, when the shore line cord is plugged into 125 vac shoreline power. The device shall convert 12 volt DC battery power into 1,050 watts of precisely regulated modified sine wave 125 volt AC power. The device shall hold output power between 114 volts and 126 volts AT a frequency of 59.9 to 60.1 Hertz.

The device shall not consume more than 105 amperes at 12 volts direct current (DC). The device shall be certified by Underwriters Laboratories to the present revision of the Federal Specification KKK-A-1822. The location of the inverter is specified below.
POWER SOURCE FOR PORTABLE EQUIPMENT No 1: Power sources are located and included with a purchased inverter.
LOCATIONS: The power sources shall be located with one in the chassis cab console and one behind the patient action area panel.
POWER SOURCE: The aforementioned power provision shall be fed off of the output of the ignition switch or when the battery charger/conditioner is connected to the shoreline.
BATTERY CHARGER/CONDITIONER: When the system is connected to shore/utility power, the battery charger (built into the aforementioned inverter) will automatically charge the batteries, then keep them fully charged. The system's microprocessor controls the charging sequence, starting with the high charger (55 Amp) mode. When the batteries are fully charged, it switches to the ready/maintenance mode to keep the battery "topped up". The battery charger shall be designed to charge either lead acid flooded (wet) or gel type batteries.
BUILT-IN BATTERY CHARGER: The aforementioned built in battery charger shall be wired to the vehicle batteries to allow charging/conditioning when the shoreline is energized.
LOCATION: The power inverter shall reside in the left front middle compartment.
Bidder Complies YES_____ NO_____

COVER: There shall be a Lexan Cover over the inverter for protection.
Bidder Complies YES_____ NO_____

LOW VOLTAGE BUZZER: There will be a buzzer located in the cab console giving an alert warning in addition to the Indicator light.
Bidder Complies YES_____ NO_____

COMMUNICATIONS RADIO(S) RELATED:

RADIO POWER

POWER SOURCE FOR COMMUNICATION RADIO(S) No 1: Positive and Negative polarity ten gauge wires shall be supplied and installed for subsequent installation of communications radio(s). The wires shall be barreled off and protected by a thirty (30) ampere automatic reset circuit breaker.
POWER SOURCE: The power provision shall be fed off of the output of the conversion main power (Battery) switch.
LOCATION: The aforementioned power source shall be located in the center console, in the cab.
Bidder Complies YES_____ NO_____

POWER SOURCE FOR COMMUNICATION RADIO(S) No 2: Positive and Negative polarity ten gauge wires shall be supplied and installed for subsequent installation of communications radio(s). The wires shall be barreled off and protected by a thirty (30) ampere automatic reset circuit breaker.
POWER SOURCE: The power provision shall be fed off of the output of the conversion main power (Battery) switch.
LOCATION: The power source shall be located behind the Action area control panel in the patient cabin.
Bidder Complies YES_____ NO_____

ANTENNA LEADS

COMMUNICATIONS RADIO ANTENNA PRE-COAX No 1: This coaxial cable shall be RG58-U type. There shall be an 18 inch service loop at the mod roof and a 36 inch tail at the interior termination point. A tag shall specify the other termination point for each coax provided.
ORIGINATION POINT: The Coaxial cable shall originate on the module roof. The port location shall be centered side to side and approximately 36" back from the front edge of the module roof.
TERMINATION POINT: The Coaxial cable shall terminate in the cab / drivers' cabin in the center console.
Bidder Complies YES_____ NO_____

125V SHORE LINE AND OUTLETS

SHORE LINE INLET No 1: The primary 125 Volt shore line inlet, rated at 20 Amperes shall be supplied. The plug style shall be a straight blade (NEMA 5-20P) style with a U-shaped ground. The inlet shall automatically eject the shore line connector when the vehicle ignition switch is placed in the START position. The shore line inlet shall employ a novel internal switch that closes and opens the 125 Volt circuit after the mating connector is inserted and before the connector is removed to eliminate arcing at the connector contacts. This will prolong the life of the inlet and the shore line connector. The inlet shall be protected with a weather proof cover.
INLET LOCATION: Front of modular body, by the driver's door in color keyed angled housing.
Bidder Complies YES_____ NO_____

SHORELINE INDICATOR LIGHT: There shall be a green indicator light to power to the shoreline system within the ambulance body. The light shall be an LED 130v light fixture that is shock and vibration proof. The light fixture shall have a 100,000 hour life for long lasting service in the field. Being LED technology, the fixture shall have a very low heat generation. The LED indicator light fixture shall be located above the shoreline inlet.
Bidder Complies YES_____ NO_____

SHORE LINE COVER: The shoreline inlet shall be protected with a Yellow weather proof cover.
Bidder Complies YES_____ NO_____

SHORELINE EJECT TIMER: The shoreline timer shall be an Inpower VCM-05-01SF to allow the auto eject to be wired to the ignition switch ILO splicing into the OEM starter circuit
Bidder Complies YES_____ NO_____

SHORE LINE INLET No 2: A second 125 Volt shore line inlet, rated at 20 Amperes shall be supplied. The plug style shall be a straight blade (NEMA 5-20P) style with a U-shaped ground. The inlet shall automatically eject the shore line connector when the vehicle ignition switch is placed in the START position. The shore line inlet shall employ a novel internal switch that closes and opens the 125 Volt circuit after the mating connector is inserted and before the connector is removed to eliminate arcing at the connector contacts. This will prolong the life of the inlet and the shore line connector. The inlet shall be protected with a weather proof cover.
SECONDARY SHORE LINE INLET LOCATION: Front of modular body, by the driver's door in same angled housing as 1st shoreline.
Bidder Complies YES_____ NO_____

SHORELINE INDICATOR LIGHT: There shall be a green indicator light to power to the shoreline system within the ambulance body. The light shall be an LED 130v light fixture that is shock and vibration proof. The light fixture shall have a 100,000 hour life for long lasting service in the field. Being LED technology, the fixture shall have a very low heat generation. The LED indicator light fixture shall be located above the shoreline inlet.
Bidder Complies YES_____ NO_____

SHORE LINE COVER: The shoreline inlet shall be protected with a Yellow weather proof cover.
Bidder Complies YES_____ NO_____

125 VAC OUTLETS

125 VAC OUTLET No. 1: The following outlets shall be UL listed, 125 Volt, Hospital grade, Straight blade NEMA 5-15R outlets. Each outlet shall be installed in a UL listed, recessed, fiberglass back box with a minimum of one and three quarter inch of box depth. The outlet cover shall be stainless steel. The outlet must be grounded and protected by a GFI (Ground Fault Interrupted) Breaker. Each outlet body must illuminate when power is applied to the outlet. Each Outlet shall be clearly labeled with a permanent RED colored decal defining the outlet voltage.
OUTLET LOCATION: This 125 Volt outlet shall be located in the patient cabin's, main "Action Area", with location as shown on the approval drawings.
Bidder Complies YES_____ NO_____

125 VAC OUTLET No. 2:
OUTLET LOCATION: This 125 Volt outlet shall be located inside of the right front ALS Cabinet. The outlet shall be mounted on the back wall of the cabinet (related to inside access) in the upper right corner. The location of the outlet shall be defined on the proposal drawings.
Bidder Complies YES_____ NO_____

125 VAC OUTLET No. 3:
OUTLET LOCATION: This 125 Volt outlet shall be located in the patient cabin's, telemetry area that is located just aft of the street side CPR side seat. The outlet shall be mounted on the back wall so that the depth of the back box does not protrude into adjacent cabinets.
The location of the outlet shall be defined on the proposal drawings.
Bidder Complies YES_____ NO_____

125 VAC OUTLET No. 4:
OUTLET LOCATION: This 125 Volt outlet shall be located in cabinet "E".
Bidder Complies YES_____ NO_____

125 VAC Outlet, No 5:
OUTLET LOCATION: in the cab console.
Bidder Complies YES_____ NO_____

INTERIOR 12 Volt Direct Current (DC) OUTLETS:

12 VOLT OUTLET No 1: This outlet shall be a, 12 volt, direct current, 20 Ampere, automotive "cigar" lighter size commercial outlet. This outlet shall be located and wired as specified below. The outlet shall be separately protected and shall be electrically isolated from other electrical functions on the vehicle. This outlet shall be wired per current Federal specification KKK-A-1822.
OUTLET LOCATION: This 12 Volt outlet shall be located in the patient cabin's, main "Action Area", on the back wall.
POWER SOURCE: The input for the outlet shall be wired to the output of the battery switch.
Bidder Complies YES_____ NO_____

12 VOLT OUTLET No 2: This outlet shall be wired the same as outlet #1.
OUTLET LOCATION: This 12 Volt outlet shall be located on teh bulkhead.
POWER SOURCE: The input for the outlet shall be wired exactly like outlet Number One.
Bidder Complies YES_____ NO_____

12 VOLT OUTLET No 3: This outlet shall be wired the same as outlet #1.
OUTLET LOCATION: This 12 Volt outlet shall be located inside of the right front ALS Cabinet. The outlet shall be mounted on the back wall of the cabinet (related to inside access) in the upper right corner. The location of the outlet shall be defined on the proposal drawings.
POWER SOURCE: The input for the outlet shall be wired exactly like outlet Number One.
Bidder Complies YES_____ NO_____

SIREN: There shall be installed a Federal PA 300 012 MSC siren in the ambulance front location as described in the work order and approved by the agency. The features of the Siren shall be the most current available from the siren vendor.
Bidder Complies YES_____ NO_____

ADDITIONAL ELECTRONIC SIREN: There shall be an additional siren, it shall be an electronic siren provided herein shall be a precision built, efficient and full featured siren of advanced design. The internal design of the siren shall utilize integrated circuits and silicon output transformers. The Federal Electronic EQ2B siren shall provide the tones as specified in their specifications.
Bidder Complies YES_____ NO_____

SIREN SPEAKERS: There shall be (2) two 200 Watt siren speakers installed in the front bumper outer wings, model Federal BP200 EF. The cast horns to bumper fit shall be tight and aesthetically pleasing. The edges of each hole, in the bumper, shall be clean and shall have rust preventative treatment, prior to final installation of the speakers. The siren and speakers shall meet or exceed current Federal KKK-A-1822.
Bidder Complies YES_____ NO_____

SIREN OR HORN SELECTOR SWITCH: The OEM horn ring shall control the OEM electric horn and the siren's manual momentary input controls. A switch shall connect the horn ring to either the OEM HORN or to the SIREN. The switch shall be located in the cab console's switch panel. The switch legend, that clearly defines the switch function shall be engraved in the switch panel. The legend shall be illuminated when the head light switch is on.
Bidder Complies YES_____ NO_____

GENERAL CABINET CONSTRUCTION

SUBSTRATES: The interior cabinets and components shall be constructed of exterior water boil proof resin (WBP). The glue line between layers shall be of similar chemical makeup as the phenolic resin used in marine Grade plywood, as designated by the APA (American Plywood Association). Phenolic resins are designed to eliminate formaldehyde off gassing often associated with most hardwood plywood. The exposed layers of the substrate shall be hard wood on both sides of the sheet, these layers shall be 99% void free. Cabinet cases are to be made from at least 12mm thick, minimum 5 ply. Bench Lids and Doors shall be made from at least 18 mm thick, minimum 7 ply.
CABINET INTERIOR FINISH: Cabinet interior shall be laminated with white colored, high impact, abrasion resistant laminate. The contact adhesive shall be a high bond contact adhesive, specifically designed to bond plywood to laminate. The laminate shall be at least 28 mills thick.
LAMINATE: A high impact, phenolic backed, high impact, and abrasion resistant laminate shall be used. The laminate shall be at least 45 mills thick. This material as well as all interior components shall meet or exceed FMVSS #302 (Burn rate of interior components). Color selection shall be specified at the pre-build conference.
CABINET ASSEMBLY: To maximize fastener bite, cabinet substrate parts shall be stapled with pneumatic fired equipment. The length of the fastener shall be at least 2.25 times the thickness of the material being pierced through. In addition to staples, the entire cabinet assembly must be screwed together with a minimum #8 screw size and a length not less than 2.25 times the thickness of the pierced substrate. Screw heads shall be countersink type and driven flush. Reinforcement cleats shall be bonded to the inside corners where the backside of the face of the cabinet meets the case of the cabinet. The glue used shall be, yellow colored water proof resin type.
CABINET TRIM: All trim through out the interior conversion shall be anodized aluminum or formed stainless steel**.** All exposed corners within the patient compartment shall have padded or rounded corners. Rounded corners shall be at least .250 inch radius. Rounded corners shall not compromise maximum cabinet assembly strength. The trim shall be bonded with a high strength adhesive.
FIT AND FINISH: Mitered joints through out the interior conversion shall have a gap-less, hairline fit. Sliding polycarbonate door assemblies shall be scratch free and all edges shall be smooth and free of saw marks and

sharp edges. Cabinet to cabinet joints shall not require more than 7/32 diameter welting to created a finished/well-fit look. Cabinets shall fit tightly against the ceiling as well.
FUNCTION: Doors and drawers shall fit the opening. When specified, flush fitting doors shall have even door to opening gaps. All doors shall open and close bind free. Drawers shall slide in and out freely, without drag. All drawers shall be mounted on side mounted, full extension drawer slides, rated no less than 75 pounds per pair. All hinged wood core doors shall have positive latches. High traffic, high cycle doors shall have adjustable tension, brass bodied catches. All hinged polycarbonate doors shall have adjustable tension, brass bodied catches.
Bidder Complies YES_____ NO_____

CABINET DOORS

SLIDING POLYCARBONATE DOORS: Polycarbonate shall hereinafter be identified as Lexan. Unless specified otherwise, all cabinets along the street and curb side of the vehicle shall have a mitered framed, sliding transparent Lexan door assembly. The polycarbonate shall be at least 3/16 inch thick. 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 flocked natural rubber track insert to prevent the doors from sliding free during transit. The corners of the assembly shall have drive-in corner spline. Each spline shall be riveted into place. All extrusions shall be anodized.
HINGED POLYCARBONATE DOORS: Polycarbonate shall hereinafter be identified as Lexan. The polycarbonate shall be at least 3/16 inch thick. The desired thickness shall be noted within this specification at each door location. The door orientation, hinge style and latch shall also be noted at each door location as well. The door edges shall be rounded and smooth since it will be the finished edge that will be visible.
SOLID HINGED DOOR: When a solid door is specified, a 3/4" (19mm) thick door shall be supplied on the cabinet. The substrate shall be 7-ply, A-A (Cabinet grade), hardwood plywood. The door shall be flush fitted to the opening and have uniform gap spacing around the perimeter of the door. The door shall be hung on a continuous, stainless steel piano hinge with mounting screws, spaced every two inches along the full length of the pre-punched hinge. The door shall be finished on both sides with white cabinet liner laminate on the inside and the same colored mica as the cabinet fascia on the outside.
Bidder Complies YES_____ NO_____

MICA COLORS: The mica color selection shall be two tone. The upper two thirds of the cabinetry shall be Light Gray with a Matte finish. The lower third of the cabinetry shall be genuine stainless steel with a brushed finish. The parting line between colors shall be straight, tight and clean. Mica edge shall be router clean, back filed and dry fitted prior to final lamination to the cabinet face. Seam quality showing evidence of using the "Factory Edge" shall be rejected. A sample of the subject mica color and stainless-steel finish shall be supplied at the post award conference.
Bidder Complies YES_____ NO_____

STAINLESS STEEL APPLICATION: The lower section of the squad bench face under the lid shall be applied with the stainless steel laminate as well as the same height on the rear filler panel between the squad bench and the rear doors.
Bidder Complies YES_____ NO_____

STAINLESS STEEL APPLICATION: The lower section of the wall cabinet face at approximately the same height as the attendant seat cushion.
Bidder Complies YES_____ NO_____

POLYCARBONATE COLOR: The polycarbonate throughout the vehicle shall be transparent and without tint. All doors shall be at least one quarter of one inch thick (1/4"), shatter proof and scratch resistant. The edges of the doors shall be worked and burned smooth. The material shall be flexible enough to be cold formed (Bent) at ninety degrees, without fracturing the material. Brittle material is not acceptable.
Bidder Complies YES_____ NO_____

HANDLES, LEXAN WINDOW DOORS: Full height, anodized aluminum, extruded drive on handles shall be supplied on each 3/16" door. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on.
Bidder Complies YES_____ NO_____

ATTENDANT SEAT: There shall be a high back captain's seat mounted in the patient area. The seat shall have an integrated child safety seat with a pull down backrest and concealed 4-point child restraint. The seat shall be mounted per the requirements in the latest revision of KKK-A-1822. The seatbelt on the main part of the seat shall be an integrated, 4-point that is supplied and tested by the seat manufacturer as a complete package. The color of the seat shall be Dove.
SEAT BASE: There shall be a powder coated metal seat that is tested to be utilized with the WISE seat picked. The metal base shall be mounted to the ambulance floor and secured to modular body sub-structure according to the manufacturer's guidelines.
Bidder Complies YES_____ NO_____

AIR CONDITIONING EVAPORATOR CABINET: The patient cabin shall be equipped with a rear air conditioning and heat unit. AC Unit is to be located at the top of the right front ALS cabinet stack. The design shall provide adequate air return to meet or exceed the current revision of the Federal specification KKK-A-1822.
Bidder Complies YES_____ NO_____

CABINET J: The cabinet will be installed on Bulkhead Wall, under Talk Thru window. This cabinet shall meet current Federal specification KKK-A-1822.
Bidder Complies YES_____ NO_____

CABINET: Under Electrical storage area to be dedicated for Mermaid Cabinet stated later in this specification.
Bidder Complies YES_____ NO_____

BULKHEAD UPPER AND CIRCUIT BOARD CABINET: This cabinet shall be located behind the seated attendant. Access to the main circuit board shall be provided through the cabinet back. The access door shall be hinged along the bottom with a non-locking lever type latch at the top. The door shall be hung on a continuous, stainless steel piano hinge with mounting screws, spaced every two inches along the full length of the pre-punched hinge. The door shall be finished on both sides with white cabinet liner on the inside and with the same colored mica as the cabinet face on the outside of the door. The door shall open without interference with other cabinet doors or hardware. Screw on panels over the main circuit board is not acceptable.
Bidder Complies YES_____ NO_____

BULKHEAD UPPER CABINET: This cabinet shall be located behind and over the seated attendant. The access door shall be hinged along the top with a "C" shaped handle at the bottom. The hinges to be reel torque style and there shall be an adjustable roller ball grabber catch to hold the door in the closed and latched position.
Bidder Complies YES_____ NO_____

Cabinet "J": To be located above the talk through window.

SINGLE FLIP UP POLYCARBONATE DOOR: A Single 3/8" (0.375 in) thick, overlay flip up door shall be supplied on the cabinet.
NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.
STOWAGE LABEL: A label shall be applied for any door, drawer, or other stowage area secured by a Round Southco latch, indicating its ability to restrain 10 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.
SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.

ADJUSTABLE SHELF: A shelf shall be supplied in the cabinet. The shelf shall be finished in white colored laminate. Upper, lower and aisle side surfaces of the shelf shall be laminated. The shelf shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.
Bidder Complies YES_____ NO_____

CURBSIDE UPPER CABINET: The curbside upper cabinet is located on the curbside (right side) of the patient cabin, over the squad bench. The cabinet length shall be maximized and start within two inches of the curbside entry door opening and mate against the rear wall of the patient cabin. A four box glove dispenser shall be built into the head end of this cabinet with a fixed partition between each box of gloves. The gloves shall dispense through oblong slots cut into the 3/8-inch thick Lexan door. One door shall cover all four glove box bays, hinge across the top and feature a brass bodied, roller bearing type catch at the bottom.
Bidder Complies YES_____ NO_____

CABINET "K": An interior cabinet shall be provided above the squad bench, on the curb side of the vehicle. This multipurpose cabinet interior shall be finished in high impact, white colored mica that is impervious to disinfectants and cleaners. The cabinet shall have a single opening and one fixed divider, set back for door operation.
SINGLE FLIP UP POLYCARBONATE DOOR: A Single 3/8" (0.375 in) thick, overlay flip up door shall be supplied on the cabinet.
NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.
Bidder Complies YES_____ NO_____
STOWAGE LABEL;A label shall be applied for any door, drawer, or other stowage area secured by a Round Southco latch, indicating its ability to restrain 10 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.
Bidder Complies YES_____ NO_____

CABINET "L": Cabinet "L" shall accommodate four (4) disposable glove boxes. The cabinet shall feature two fixed set back dividers to keep the glove boxes in position during transit. The dispenser shall be located at the forward end of the aforementioned "Curb side Upper". The dispense through door shall be 3/8" Lexan with machined oblong slotted holes designed and aligned specifically to remove gloves without having to open the door.

HINGED POLYCARBONATE DOOR: A 3/8" (0.375 in) thick, overlay hinged door with three oblong, dispense through holes shall be supplied on the aforementioned cabinet. The outer door edges and the oblong hole edges in the door shall be router semi-round and burned smooth. Each oblong hole shall align with the center of each divided cabinet cell. The design intent for the oblong holes is to be capable of dispensing gloves through the door, directly from the box.
NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.
Bidder Complies YES_____ NO_____
STOWAGE LABEL;A label shall be applied for any door, drawer, or other stowage area secured by a Round Southco latch, indicating its ability to restrain 10 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.
Bidder Complies YES_____ NO_____

LEFT FRONT CABINET, CABINET"H": Cabinet "H" is the electrical cabinet behind the attendant seat. This cabinet will house the modular electrical components to include two air vents in the door. The door is to open facing the rear entry doors.
PLASTIC VENT: A fifteen square inch free air flow ventilation hole he cut into the above door. The edges of the cut out shall be banded. The hole shall be covered with an aesthetically appealing, molded plastic louver cover. The louver cover shall be black in color and secured with at least one No 8 screw in each corner.
SOLID HINGED DOOR: A 3/4" (19mm) thick door shall be supplied on the aforementioned cabinet. The door shall be flush fitted to the opening and have uniform gap spacing around the perimeter of the door. The door shall be hung on a continuous, stainless steel piano hinge with mounting screws, spaced every two inches along the full length of the pre-punched hinge. The door shall be finished with white cabinet liner laminate on the inside and the same colored mica as the cabinet face on the outside.
DOOR EDGE FINISH: The edges of the aforementioned door(s) shall be covered with anodized aluminum, U-shaped trim. The trim shall be miter cut and wrapped around the perimeter of the door (On ALL four sides), including the hinged side. The trim shall be bonded to the door edge and clamped. No screws or other mechanical fastener shall be used to fasten the trim work to the door(s). The corners of the doors shall be broken (rounded) after application. Vinyl "Iron on" or mica edge banding is not acceptable.
Bidder Complies YES_____ NO_____
HINGE ORIENTATION: The aforementioned door shall be hinged along the right edge of the door.
NON-LOCKING LATCH: A black positive latch shall be supplied and installed on the cabinet door. A small "preload" on the latch shall be imposed to prevent the door from rattling.
Bidder Complies YES_____ NO_____

RIGHT FRONT CABINET: The right-front cabinet is hereinafter known as ALS cabinet. All fixed and adjustable shelf surfaces shall be covered in Easy Grip material. All fixed and adjustable shelf lips shall be covered with anodized aluminum trim. All shelves shall have a ¾ lip.
Bidder Complies YES_____ NO_____

CABINET I-1: This area located on the top section of the right front patient area to be dedicated for the HVAC System.

MK18 Mermaid Cabinets: to be located in the right front ALS cabinet.
Bidder Complies YES_____ NO_____

CABINET I-2: The middle section of the ALS (cabinet I) shall be nearly 40" or greater in height dependent upon 72" of headroom and I-3 and M-7 remaining standard height. Final height of I-2 shall be reflected on the sales approval drawings.
Bidder Complies YES_____ NO_____

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.
Bidder Complies YES_____ NO_____

CABINET I-3: The lower section shall be approximately 25% of the over all cabinet height.
DOUBLE SOLID HINGED DOORS WITH POLYCARBONATE INSERT: Two oppositely hinged, 3/4" (19mm) thick door frames, with a 3/16" (0.188) thick transparent inserts shall be supplied on the aforementioned cabinet. The door frames shall be drop cut from one piece of material, laminated on both sides and mated to the polycarbonate inserts secured on the backside of the door. The doors shall be flush fitted to the opening and have uniform gap spacing around the perimeter of the doors. Each door shall be finished with white cabinet liner laminate on the inside and the same colored mica as the cabinet face on the outside.
HINGE ORIENTATION: The doors shall be hinged along the outside edge of each door.
LOCKING LATCH: A positive latch shall be supplied and installed on the aforementioned cabinet door. The latch shall be powder coated black and be near flush when in the "Closed" position. The latch shall be fitted with a cylinder type lock that prevents door latch activation, when locked. Door latch activation shall be triggered by depressing a flush fitted release button that unlatches a lever. The spring loaded lever shall rotate about an axis near the surface of the door panel and extended a rotating pawl behind the latch side door frame. The depth of the pawl shall be adjustable to the latch side door frame. A small "preload" on the latch shall be imposed to prevent the door from rattling.
Bidder Complies YES_____ NO_____
STOWAGE LABEL;A label shall be applied for any door, drawer, or other stowage area secured by a black lever latch, indicating its ability to restrain 8 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.
Bidder Complies YES_____ NO_____

RIGHT FRONT CABINET OUTSIDE ACCESS: The right front cabinet of the module shall have outside access through the right front (M-7) compartment door.
Bidder Complies YES_____ NO_____

RIGHT REAR COMPARTMENT COVER: All exposed surfaces of this patient area side of the M5 compartment shall be fully laminated with color keyed laminate. The vertical outer corner shall feature a radius anodized aluminum trim. The trim shall originate from the top of the mated squad bench and terminate into the ceiling. An upholstered pad covering the entire forward facing wall, over the squad bench shall be provided to protect occupants sitting on the squad bench. The pad shall include at least 1/2" thick foam padding covered in the same heavy duty vinyl covering specified for the squad bench cushions and the remaining upholstery package.
Bidder Complies YES_____ NO_____

SQUAD BENCH: A squad bench shall be installed on the curbside of the patient compartment. The number of seating locations shall be installed as described in the options following this general heading specification. All seat belts and anchorage shall comply with FMVSS. 209 and 210. The Squad Bench shall comply with current KKK-A-1822. A back and head rest shall be supplied for all seated personnel along the squad bench. The face of the squad bench to have 6" recess for feet recessed into the lower part of the squad bench.
BIO-WASTE RECEPTACLE: A biological waste receptacle shall be supplied and installed in the squad bench. The receptacle shall accommodate a sharps container and a solid waste container per the following paragraphs. Both the sharps and the solid waste containers shall be enclosed and secured in a molded enclosure, free of crevices. The molded enclosure shall be covered with a red Lexan hinged door, inset a molded in perimeter rim. The door pull shall be full length. A white colored "Bio-waste" symbol and legend shall be applied to the door.
UNDER LID STOWAGE: The squad bench shall provide storage under the access lids. This multipurpose storage area shall be finished in high impact, white colored laminate. Must meet current Federal specification current KKK-A-1822.
SQUAD BENCH LIDS: Two (Split) squad bench lids shall be supplied over the squad bench storage area.
HINGE, SQUAD BENCH LID(S): All squad bench lids shall be installed with butt style, hinges. The hinges shall be through bolted for longevity of the vehicle. There shall be a minimum of two hinges per lid.
LID CHECKS: Each squad bench lid shall have a bi-directional gas spring lid check (Hold open). The force value selected and ball stud locations shall provide lift assistance after twenty degrees of bench lid lift angle. The ball stud mounts shall be at least 10 millimeter.
LID LATCH: One latch to hold each lid down shall be supplied. The lid latch shall be stamped stainless steel construction and latches automatically by simply closing the bench lid. There shall be a slot milled into the underside of the bench lid to accept an manufactured keeper that will prevent the lid from pulling away from the latch. The paddle latch will be through bolted to the keeper with the retaining nuts on the backside of the keeper as a complete assembly. This assembly has been tested to SAE J3058 standards and passed with the ability to contain 80 pounds in the entire area of the squad bench. A label shall be affixed to the squad bench area.
STOWAGE LABEL: A label shall be applied near the squad bench exterior indicating the lids to the squad bench are restrained with a compliant latch. The latch assembly of the squad bench were tested to SAE J3058 standards to 80 pounds and found passing. The operator should not exceed the 80 pound weight rating for the entire squad bench storage area . This item is compliant to section 3.11.3 of KKK-A-128F dated July 1, 2017.
EDGE TRIM: The edge of the squad bench lid shall be finished with aluminum anodized "J" trim. The trim is to be supplied with countersunk holes to allow for screws to be installed flush so the screw head does not catch anything.
Bidder Complies YES_____ NO_____

RESTRAINT NET: A detachable net shall be installed at the head of the squad bench. In the event of sudden stop or frontal accident, the design intent of the net is to minimize injuries to unbelted personnel seated on the squad bench. The net is a safety barrier between the occupant/personnel and the bulkhead cabinetry. The net shall be a grid of 2 wide safety web, spaced on maximum centers of 8 inches.

The net shall be secured at six points. All points must be secured to 0.250 inch thick Aluminum tapping plates: or body structure with wall thickness of 0.250 inch: or through bolted to cabinet interface reinforcement brackets that are bolted to 0.250 thick welded body structure. The net shall be tightly stretched and attached to the following surfaces:

One point on the ambulance floor on the aisle side of the squad bench.
One point at the top of the squad bench near the curb side wall.
Two points at the curb side wall, near the side entry door.
Three points in the ceiling.

All Restraint Net attachment devices shall be aviation quality and pull strength tested. Tested to 2,000 pound force applied in shear (Horizontally). Detachment of the net shall be done without the need for a removal or installation tool(s). Each device shall feature a cadmium plated steel attachment ring that is forged in one continuous ring, without a split or seam. Each device shall be sewn onto the net webbing with a 1 3/4 inch square shaped thread path and diagonal X-shaped thread path to assure web to ring security.
Bidder Complies YES_____ NO_____

TOP CABINETS, - Med Std

CABINET "A": An upper, interior cabinet shall be provided directly over the rearward section of the Base wall cabinet. This cabinet shall accommodate a power air exhaust blower with a removable service panel. This multipurpose cabinet interior shall be finished in high impact, white colored laminate. Must meet current Federal specification KKK-A-1822.
RESTOCKING FEATURE: The uppermost cabinets, shall have sliding polycarbonate doors. The entire framed assembly shall hinge upward 90 degrees to provide 100% access for the purpose of restocking the cabinet. The assembly shall be supported by a gas piston spring on each side and latched with two positive, slam action latches that are blind mounted behind each end of the window frame. The use of plywood in this assembly is not acceptable, due to lost access area.

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.
Bidder Complies YES_____ NO_____
SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.
ADJUSTABLE SHELF: A shelf shall be supplied in the cabinet. The shelf shall be finished in white colored laminate. Upper, lower and aisle side surfaces of the shelf shall be laminated. The shelf shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.
Bidder Complies YES_____ NO_____

CABINET "B": An upper, interior cabinet shall be provided directly over the "Action Area". This multipurpose cabinet interior shall be finished in high impact, white colored laminate. Must meet current Federal specification KKK-A-1822.
SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.
ADJUSTABLE SHELF: A shelf shall be supplied in the cabinet. The shelf shall be finished in white colored laminate. Upper, lower and aisle side surfaces of the shelf shall be laminated. The shelf shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.
Bidder Complies YES_____ NO_____
SLIDING SECURE LATCH WINDOW: There shall be a sliding SECURE LATCH window installed at the location indicated. This window features several advanced safety features allowing it to meet the new SAE J3058 safety standard. This slider window features a full length spring loaded low-profile bar latch at both ends

of the slider window that lock into an aluminum extrusion when the window is closed. The center of the window has aluminum inter-locking stiffeners of panel to distribute outward impact loads across both panels. The window shall be able to be opened with one motion and with one hand. To close the user can push the window and slam -latch to closing. This window has been tested to SAEJ3058 testing methods in a third party testing facility and found to contain 40 pounds of contents. Windows that do not meet the SAEJ3058 safety requirements are not acceptable to this agency.
Bidder Complies YES_____ NO_____

STOWAGE LABEL;A label shall be applied for any Secure Latch Sliding Window system indicating its ability to restrain 40 pounds of contents within the stowage area. This secure latch sliding window system has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.
Bidder Complies YES_____ NO_____

CABINET "CPR": An upper, interior cabinet shall be provided directly over the CPR side seat in the Base wall cabinet. This multipurpose cabinet interior shall be finished in high impact, white colored mica that is impervious to disinfectants and cleaners.
SINGLE FLIP UP POLYCARBONATE DOOR: A Single 3/8" (0.375 in) thick, overlay flip up door shall be supplied on the cabinet.
NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.
Bidder Complies YES_____ NO_____

STOWAGE LABEL;A label shall be applied for any door, drawer, or other stowage area secured by a Round Southco latch, indicating its ability to restrain 10 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.
Bidder Complies YES_____ NO_____

BASE WALL CABINET: The base wall cabinet is located on the Street side (Left side) of the patient cabin. The over all height of the Base Wall Cabinet shall be approximately 75% of the over all head room. This cabinet shall be built in ONE piece. The laminate along the face shall be ONE piece on single color laminate selections. A CPR Side Seat shall be provided on the street side aligned with the primary patient abdomen.
Bidder Complies YES_____ NO_____

ACTION AREA: The action area is a work surface located on the forward end of the Base Wall Cabinet and adjacent to the attendant seat. The work surface shall be at least 5.5 square feet. The work area height shall be 24 inches to 29 inches. The work surface shall have a three quarter inch (3/4") high lip.
Bidder Complies YES_____ NO_____

BIO-WASTE RECEPTACLE: A biological waste receptacle shall be supplied and installed in the action area. The receptacle shall accommodate a sharps container and a solid waste container per the following paragraphs. Both the sharps and the solid waste containers shall be enclosed and secured in a molded enclosure, free of crevices. The molded enclosure shall be covered with a red Lexan hinged door, inset a molded in perimeter rim. The door pull shall be full length. A white colored "Bio-waste" symbol and legend shall be applied to the door.
Bidder Complies YES_____ NO_____

WASTE CONTAINER: One eight 1/8 quart (462 cubic inch), rimmed plastic waste container shall be supplied and fitted to the aforementioned "Bio-waste" enclosure. The waste container shall accommodate solid waste into disposable, red colored "Biological waste" liners. The "waste" and the "Sharp object disposal (Sharps)" containers shall be two separate receptacles, located adjacent to the other. The waste containers' material shall withstand strong disinfectant cleaners.
Bidder Complies YES_____ NO_____

SHARPS CONTAINER: A puncture proof, disposable sharps container located at the head of the squad bench with a 3.3 gallon capacity shall be supplied for safe disposal of used/contaminated syringes. .
Bidder Complies YES_____ NO_____

ACTION AREA BOARD: There shall be a single board containing the basic electrical and oxygen control systems of the patient area. This board shall be covered in black secure grip material. Proper spacing shall be maintained between electrical and oxygen connections. The board shall be hinged by dual action concelead hinges and secured by quarter turn captive head bolts. The use of hinges and bolts allows for inspection of the connections during routine maintenance procedures.
Bidder Complies YES_____ NO_____

CABINET "C": An interior cabinet shall be provided at the rear end of the base cabinet on the street side. This cabinet interior shall be finished in high impact, white colored laminate. Must meet current Federal specification KKK-A-1822.
RESTOCKING FEATURE: The uppermost cabinets, shall have sliding polycarbonate doors. The entire framed assembly shall hinge upward 90 degrees to provide 100% access for the purpose of restocking the cabinet. The assembly shall be supported by a gas piston spring on each side and latched with two positive, slam action latches that are blind mounted behind each end of the window frame. The use of plywood in this assembly is not acceptable, due to lost access area.
HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.
COMPARTMENT INTERIOR ACCESS: The compartment shall not be accessible through the INSIDE of the module.
Bidder Complies YES_____ NO_____

CABINET "D": An interior cabinet shall be provided directly over the rearward "Telemetry Area just aft of the CPR side seat within the base cabinet on the street side. This multipurpose cabinet interior shall be finished in high impact, white colored laminate. Must meet current Federal specification KKK-A-1822.
SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.
ADJUSTABLE SHELF: A shelf shall be supplied in the cabinet. The shelf shall be finished in white colored laminate. Upper, lower and aisle side surfaces of the shelf shall be laminated. The shelf shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.
RESTOCKING FEATURE: The uppermost cabinets, shall have sliding polycarbonate doors. The entire framed assembly shall hinge upward 90 degrees to provide 100% access for the purpose of restocking the cabinet. The assembly shall be supported by a gas piston spring on each side and latched with two positive, slam action latches that are blind mounted behind each end of the window frame. The use of plywood in this assembly is not acceptable, due to lost access area.

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.
Bidder Complies YES_____ NO_____

CABINET "E": An interior access opening, leading into the left rear compartment shall be provided low and at the rear of base cabinet on the street side. This multipurpose interior access opening shall be least 2.3 square feet.
SLIDING POLYCARBONATE DOORS: The cabinet shall be equipped with two sliding 3/16" polycarbonate doors within a closed anodized aluminum track/frame. The sliding polycarbonate door track shall be an extruded, anodized aluminum shape designed to accommodate a flocked, felt type track for the doors to slide in and lightly resist movement. The mitered corners shall be spline together and riveted. The extrusion shape shall cover one half of one inch of cabinet fascia around the perimeter of the track frame.
HANDLES, LEXAN WINDOW DOORS: Full height, anodized aluminum, extruded drive on handles shall be supplied on each 3/16" door. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on.
HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.
Bidder Complies YES_____ NO_____

DRAWER "F-1" AND "F-2": A pair of interior drawers shall be provided directly below the rearward "Telemetry" Area just aft of the CPR side seat within the base cabinet on the street side. These multipurpose drawers interior shall be finished in high impact, white colored mica that is impervious to disinfectants and cleaners. The cabinets shall add at least 2.0 cubic feet of interior stowage accommodations described in Federal specification KKK-A-1822E 3.11.1.
CABINET - DRAWER: The aforementioned cabinet shall be fitted with a rollout drawer. The drawer body shall be constructed of 12mm (1/2") thick A-A cabinet grade plywood. This includes both sides back and bottom. The drawer body shall be laminated on ALL surfaces inside, outside and on all edges. (Including the bottom). The laminate shall be 28 mil white colored mica. The laminate shall be bonded to the drawer body with high bond contact adhesive specifically formulated for this application. The drawer body shall maximize the interior cabinet volume. The drawer body height shall be the height of the cabinet opening less one and one-half (1 1/2").

Vinyl or pressed particle board drawer bodies are unacceptable due to weight and durability constraints.
DRAWER FRONT: A 3/4" (19mm) thick drawer front shall be fitted on the aforementioned drawer. The drawer front shall be flush fitted to the opening and have uniform gap spacing around the perimeter. The drawer front shall be finished with white cabinet liner laminate on the inside and the same colored mica as the cabinet face on the outside.
DOOR EDGE FINISH: The edges of the aforementioned door(s) shall be covered with anodized aluminum, U-shaped trim. The trim shall be miter cut and wrapped around the perimeter of the door (On ALL four sides), including the hinged side. The trim shall be bonded to the door edge and clamped. No screws or other mechanical fastener shall be used to fasten the trim work to the door(s). The corners of the doors shall be broken (rounded) after application. Vinyl "Iron on" or mica edge banding is not acceptable.

LOCKING LATCH: A positive latch shall be supplied and installed on the aforementioned cabinet door. The latch shall be powder coated black and be near flush when in the "Closed" position. The latch shall be fitted with a cylinder type lock that prevents door latch activation, when locked. Door latch activation shall be triggered by depressing a flush fitted release button that unlatches a lever. The spring loaded lever shall rotate about an axis near the surface of the door panel and extended a rotating pawl behind the latch side door frame. The depth of the pawl shall be adjustable to the latch side door frame. A small "preload" on the latch shall be imposed to prevent the door from rattling.
Bidder Complies YES_____ NO_____

STOWAGE LABEL;A label shall be applied for any door, drawer, or other stowage area secured by a black lever latch, indicating its ability to restrain 8 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.

DRAWER SLIDES: The aforementioned drawer shall be equipped with ball bearing, full extension drawer slides rated at one hundred and thirty pounds at an eighteen inch length, per pair. The length of the slide shall be at least the length of the drawer body and shall travel at least the length of the slide plus one inch over travel. The slides shall be mounted to the side of the drawer body and cabinet case. The slide sectional envelope shall not exceed one half inch wide by two and three eighth inches high. In order to thoroughly clean the drawer and the case, the drawer slides shall feature a quick detach lever in each slide, to allow the drawer to be removed from the case without tools.
Bidder Complies YES_____ NO_____

CABINET O1: This cabinet shall be located in the forward action area for storage of medical tubing, air ways, ventilation face masks, and/or miscellaneous items. Must meet current Federal specification KKK-A-1822.
SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.
ADJUSTABLE SHELVES: Two shelves shall be supplied in the cabinet, One shelf on each side of the center divider in cabinet. The shelf shall be made of 1/2" thick substrate and finished in white colored laminate. Both sides of the shelves shall be laminated. The shelves shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.
O1 CABINET SINGLE HINGED POLYCARBONATE DOOR: A 3/8" (0.375 in) thick, overlay hinged door shall be supplied on the aforementioned cabinet. The edges of the door shall be router semi-round and burned smooth.
C-HANDLES: The door shall be fitted with a four inch wire pull with a brushed chrome finish.
DOOR CATCH: An opposing ball bearing catch shall be supplied and installed on the cabinet door. The catch body shall be made of brass with Built in tension adjustment to relax or intensify the "grip" on the door.
Bidder Complies YES_____ NO_____

CPR SEAT: A left side "CPR" side seat shall be provided on the street side and aligned with the primary patient's abdomen. The seat shall be at least twenty four (24") inches wide and normal squad bench seat height. Upholstered seat pads shall be located within the seat area for the seat, back, both arms and hips. The CPR seat area shall have rounded corners. The cabinet configuration and dimensions shall comply with the drawings attached in appendix A. The face of the CPR seat area is to have a 6" recess for feet recessed into the lower part of the cabinet.

CPR SEAT STOWAGE: The under CPR seat stowage cabinet shall add at least 1.5 cubic feet of interior stowage accommodations described in Federal specification KKK-A-1822E 3.11.1. An access lid from the top shall provide entry into the cabinet with a recessed paddle latch.

HINGE, LID(S): The lid shall be installed with butt style, hinges. The hinges shall be through bolted for longevity of the vehicle. There shall be a minimum of two hinges per lid.
BACK REST: The CPR side seat shall feature a padded, fixed back rest with chamfered upper corners.
Bidder Complies YES_____ NO_____

TELEMETRY AREA SURFACE TYPE: The "Telemetry area" shall be finished with the primary color laminate.
Bidder Complies YES_____ NO_____

RESTRAINT SYSTEM(S): There shall be installed a REV Per4Max restraint system harness at each seating location declared. This seating harness system shall incorporate a four point harness of two shoulder belts with retractors and two stationary lap belts that intersect to a single high function ergonomic latch. The harness shoulder belts shall incorporate innovative technology through patent pending controlled deceleration technology which softens the impact of a crash on the EMSP user. The seat belt harness also incorporates an indicator that alerts the operator when it requires replacement. The color of the seat belt system shall be black. This seat belt system shall meet current FMVSS safety standards.
Bidder Complies YES_____ NO_____

The REV Per4MaxOY Seat Belt System(s) shall be in the following locations:

RESTRAINT SYSTEM(S): The rear seating locations shall consist of the Per4Max 4-Point restraint system. The Per4Max Advanced Restraint System is a "Vehicle mounted" 4-Point restraint system dispersing loads to 4 points of reinforced structure within the vehicle as opposed to concentrating loads on the seat frame. It promotes a seated position with a wide range of mobility. The seated position in conjunction with the seat system, has been proven to be safer than isolated standing positions in a moving vehicle. As well it is easy to use encouraging greater use in the field than more cumbersome systems involving additional latches, levers, and cables. The seatbelt harness shall incorporate an indicator of contrasting color when the seatbelt has been involved in a high impact condition to indicate need for replacement. These seatbelts are FMVSS applicable tested and approved to AEV configurations.
There shall be two Per4Max restraints on the Squad Bench and one Per4Max restraints on the CPR Side Seat.
Bidder Complies YES_____ NO_____

SECONDARY PATIENT RESTRAINT SYSTEM: There shall be a location for a secondary patient on top of the squad bench located on the curbside interior of the patient area of the ambulance. To secure the patient there shall be three inertia style retractable straps that match up to three 9" sleeved buckles on the face of the squad bench and 5" sleeved retractors by the squad bench lid hinge. The straps and buckles shall be mounted to comply with the pull test requirements in the present revision of KKK-A-1822.
Bidder Complies YES_____ NO_____

FLOOR AND SUBSTRATE: The floor of the module shall be (3/4) thick 7-Ply, Formaldehyde free, exterior grade, A-C plywood. The glue line between the layers shall be phenolic based. The glue shall be of similar chemical make up to the phenolic glue used in Marine grade plywood, as designated by the A.P.A. (American Plywood Association).
Bidder Complies YES_____ NO_____

FLOOR COVERING: The floor substrate shall be free of dents, voids and moisture prior to application of the floor covering. The plywood substrate shall be 3/4" (19mm) 7-ply exterior grade plywood. The substrate sheet shall be cut from a 60 inch wide by 144 inch long oversized sheet. No substrate seams are allowed in high foot traffic areas. This means NO SEAMS are permitted within 132" of the rear access doors or near the side access door.

On longer bodies, the only ONE seam is permitted as long as the full length of the seam is located directly over the center of a 0.250 x 2 x 3 box tube floor member AND the seam does not fall in the aforementioned "High Traffic" areas.

The floor covering shall be one piece through out the patient cabin regardless of the body length. The flooring material shall be commercial grade sheet floor with diamond plate like impression on the surface. The floor covering shall be Lonseal Lonplate II No 424 "Gun Metal" (Dark Gray).
Bidder Complies YES_____ NO_____

FLOORING MAIN EDGE: The one-piece patient cabin floor covering material shall run the full with of the aisle space plus roll up (3") three inches along the Base wall cabinet, squad bench and the right rear cabinet (when applicable). Both roll-up areas shall be recessed approximately 1/2" into the face of the cabinets.
Bidder Complies YES_____ NO_____

REAR THRESHOLD: The rear threshold shall be made of 16 gauge brushed stainless steel sheet. The threshold shall conceal the end of the vapor sheet, sub floor, and flooring The threshold shall mate to the top of the rear access door jamb and cover at least six inches of flooring. Installed over the stainless steel threshold shall be two 2.5" wide "nonskid" tape, strips applied. The color of the tape shall be safety yellow with black diagonal stripes.
Bidder Complies YES_____ NO_____

C/S THRESHOLD: The C/S threshold shall be made of .100 polished aluminum diamond plate.
Bidder Complies YES_____ NO_____

COT MOUNT HARDWARE

PRIMARY COT MOUNT: The main cot mount shall be a dual position, Stryker model No 6377. The mounts shall be set in the center of aisle and seven inches (7) left of center position.

COT FASTENER MOUNTING METHOD: All mounting bolts shall be 3/8" diameter, socket head cap screws with at least 16 threads per inch. All mounting blocks shall be supplied and manufactured by the cot mount manufacturer. The mounting blocks may protrude above the flooring surface by up to 3/16", as long as all of the edges are chamfered. The aforementioned cap screws shall not protrude above the upper surface of the mounting block.

All cap screws shall be through bolted through 1/2 (.500) inch thick, 6061-T-6 Aluminum plate structure. One and one half (1-1/2) inch x six (6) inch thick plates shall either be MIG welded or Chuck structurally fastened to the floor grid for both cot mount and attendant seat fastening locations. All fastening hardware shall be either through bolted or tapped depending on under floor clearances due to chassis installed components. Mounting bolts shall not point toward fuel filler or fuel vent hoses, in accordance with good engineering practices set forth by the Society of Automotive Engineers and Ford's Qualified Vehicle Modifiers' program.

Bidders shall meet or exceed mechanical strength described in the aforementioned minimum fastening method. Material thickness and/or through bolt criteria is mandatory even if the vendor has current certification to A.M.D. Standard 004 utilizing lesser materials.
Bidder Complies YES_____ NO_____

COT MOUNT COMPLIANCE: SPECIAL NOTE: The Litter Fastener/Anchorage you have selected for this order does not meet the performance requirements of the SAE J3027 Recommended Practice for Ambulance Litter Integrity, Retention and Patient Restraint.
Section 3.11.6 of KKK-A-1822F as revised July 1, 2017 (Change Notice 10), requires A complete litter fastener assembly shall be furnished. The installed litter fastener device for wheeled cots shall meet the performance requirements of SAE J3027. The litter fastener device shall be installed according to the litter fastener manufacturer's instructions. The ambulance floor and substructure shall be tested in accordance with the dynamic requirements of SAE J3102. Individual requirements for your State may also be applicable, and should be reviewed.

Based on your litter fastener selection, this ambulance will not be compliant with KKK-A-1822F in that specific respect.
Bidder Complies YES_____ NO_____

COT MOUNT COMPLIANCE: SPECIAL NOTE: The Litter Fastener/Anchorage you have selected for this order does not meet the performance requirements of the SAE J3027 Recommended Practice for Ambulance Litter Integrity, Retention and Patient Restraint.
Section C.11.6 of the CAAS GVS(Ground Vehicle Standards) V 1.0 as revised July 1, 2016, requires a complete litter fastener assembly shall be furnished.. The installed litter fastener device for wheeled cots shall meet the performance requirements of SAE J3027. The litter fastener device shall be installed according to the litter fastener manufacturer's instructions. The ambulance floor and substructure shall be tested in accordance with the dynamic requirements of SAE J3102. Individual requirements for your State may also be applicable, and should be reviewed.

Based on your litter fastener selection, this ambulance will not be compliant with CAAS GVS 1.0 C .11.6 in that specific respect.
Bidder Complies YES_____ NO_____

COT POSITION No 1: This cot position shall be set up for a primary wheeled cot set centered laterally (side to side) in the aisle. The longitudinal location shall be set 30 inches measured from the backrest of the attendant's seat (set all the way toward the front of the patient cabin) to the head of the primary cot frame, per current KKK-A-1822.
Bidder Complies YES_____ NO_____

COT LOCATION No 2: This cot position shall be set up for a primary wheeled cot set approximately eight inches left of center laterally (side to side) in the aisle or as close to the left side wall cabinet as practical. The longitudinal location shall be set 30 inches measured from the backrest of the attendant's seat (set all the way toward the front of the patient cabin) to the head of the primary cot frame, per current Federal KKK-A-1822.
Bidder Complies YES_____ NO_____

OXYGEN, AIR and VACUUM SYSTEMS

OXYGEN HOSES: All oxygen system service hoses, fittings and devices shall be made of nonferrous materials. Hoses used to pipe Medical Oxygen shall be electrically non-conductive, ¼ inside diameter with an abrasion resistant, green colored outer jacket. The hose manufacturers name, part number, inside dimension and working pressure rating shall be permanently marked along the entire length of the hose. All hoses shall have a working pressure rating of at least 250 pounds per square inch, withstand a system test pressure of 150 PSI / 1033 kPa test prescribed in current Federal specification KKK-A-1822. Each ambulance shall be tested.
Bidder Complies YES_____ NO_____

OXYGEN OUTLETS - GENERAL: Each outlet shall be comprised of an "*Inlet Box*" and a "*Latch Plate*" as defined herein. The "*inlet box*" shall be a universal inlet service box with a 165 mm type "K" (3/8") OD Copper inlet pipe stub which is silver brazed to a brass, one piece, (1 5/16") inlet body. The "*inlet box*" shall be designed specifically for positive pressure gas service and feature a primary and secondary check valve. Each check valve shall be rated at 1,379 kPa (200psi).

The "*Latch Plate*" shall insert into the universal "*Inlet Box*". The "*Latch Plate*" is comprised of the outer cover plate and latching mechanism that will define the adapter type/Brand that will ultimately connect the patient to the oxygen system. The outlet cover shall be color coded GREEN in addition to having a clear permanent legend that identifies the gas type. Dual gas specific safety pins shall be integrated in the face of the outlet "*Latch Plate*" for safety.

Outlet adapter types shall be easily changed by simply removing the "*Latch plate*" specifically designed for brand "A" to brand "B" without any further plumbing changes.

As with all medical gas outlets specified herein, all outlets shall be hydrostatically tested and cleaned for oxygen service. All medical gas outlets specified herein shall be UL (Underwriters Laboratory) listed and CSA approved. All outlets will be subject to a line pressure of 50 PSI And shall be leak tested at 150 PSI Per Federal specification KKK-A-1822. Pressure drop across the outlet shall be less than 2.0 PSI At normal working pressure.
Bidder Complies YES_____ NO_____

OXYGEN OUTLET No 1: This outlet latch shall be designed to accept (Ohio) style, quarter turn / quick release adapters. This Oxygen outlet shall be provided where specified below.
LOCATION: The Oxygen outlet shall be located in the primary action area switch and outlet console.
Bidder Complies YES_____ NO_____

OXYGEN OUTLET No 2: This outlet latch shall be designed to accept (Ohio) style, quarter turn / quick release adapters. This Oxygen outlet shall be provided where specified below.
LOCATION: The aforementioned Oxygen outlet shall be located in ceiling panel over the primary patients' head/chest area. Access to the outlet shall be free of obstructions created by surrounding appliances.
Bidder Complies YES_____ NO_____

OXYGEN OUTLET No 3: This outlet latch shall be designed to accept (Ohio) style, quarter turn / quick release adapters. This Oxygen outlet shall be provided where specified below.
LOCATION: The Oxygen outlet shall be located in curb side wall, over the squad bench and near the curbside entry door.
Bidder Complies YES_____ NO_____

PORTABLE CYLINDER BRACKET: A crash worthy aluminum box shall be supplied and installed as described below. The box shall be open on one end and shall fit a single "D" size customer supplied cylinder. There shall be a retention system built in with a spring loaded release that is installed so it is user friendly to operate. The rack shall be through bolted to reinforced, structural members or brackets that tie in directly to structure within the ambulance.
Bidder Complies YES_____ NO_____

CYLINDER RACK/LIFT: The high pressure cylinder, for the gas specified below, shall be restrained in an exterior compartment. The cylinder restraint system shall meet or exceed the National Truck Equipment Association (N.T.E.A.) Ambulance Manufacturers Division testing as described in standard 003. The cylinder rack shall accommodate a "M" sized (3,000 liter) cylinder AND shall raise or lower the cylinder into place with an electric actuator that is rated no less than one thousand pounds. The lift capacity rating of the QR-OTS-SP-L/R lift shall be at least two hundred and five (205) pounds. Current draw of the device shall not exceed 14 amperes.

The compartment shall be sized to accommodate the operational/dimensional constraints set fourth by the cylinder lift manufacturer. The cylinder valve must remain in view AND accessible from the inside of the patient cabin per federal specification KKK-A-1822E 3.12.1. This Zico QR-OTS-XX retainer system was tested by Ziamatic to meet and exceed the static testing requirements of SAE J3053 Recommended practice to improve crashworthiness of emergency vehicles as of August 8, 2017.
ACTIVATION: The Zico Pendent controller unit with coil cord shall be provided and bracket mounted on the inside door panel in the same compartment as the Oxygen Lift.
HOSE RETRACTOR: There shall be a Hubbell Tool Balancer included in the compartment at the ceiling to move with the power lift system to keep the Oxygen Hose away from the moving parts of the lift.
Bidder Complies YES_____ NO_____

CYLINDER TYPE: This rack shall be for a MEDICAL OXYGEN cylinder. The oxygen system input hose shall be suspended over this rack. This input hose shall feature a nonferrous 9/16-18 RH bottle nut and regulator barb. This connection shall comply with the diameter index safety system (DISS) set forth by the Compressed Gas Association (CGA) for safety.
Bidder Complies YES_____ NO_____

CYLINDER RACK LOCATION: The main oxygen cylinder shall be stored in the left front compartment. The cylinder rack shall be through bolted in the corner of the compartment, against the back AND right wall. The cylinder neck shall be visible and accessible through the viewing window.
Bidder Complies YES_____ NO_____

OXYGEN REGULATOR: A fixed output medical regulator shall be supplied with the apparatus and installed at the time of the oxygen system pressure test. With the regulator set at 50 +/- 5PSI, a 100 LPM minimum flow rate shall be available at all oxygen outlets. The regulating valve with inlet filter shall have a line relief valve set at 200 PSI maximum. A manual guage shall be afixed to the regulator with scale graduated in not more than 100 PSI increments.The output of the regulator may vary as the tank pressure lowers or flow rate is changed. The regulator shall have a CGA 540 thread for the bottle and a 9/16- 18 tpi threaded male connector for the input hose to the system. This regulator shall perform as required at an inlet pressure range from 150 PSI to 2600 PSI tank pressure.
Bidder Complies YES_____ NO_____

REGULATOR WRENCH: There shall be a cast aluminum main oxygen cylinder wrench installed in the compartment with the main oxygen cylinder rack. The wrench shall include a cable lanyard that secures the wrench to the compartment wall allowing enough length of cable to loosen and tighten the regulator fitting on the customer installed main oxygen cylinder. The wrench shall be stored in place with either a hat channel bracket or Velcro to keep it secured while the vehicle is in motion.
Bidder Complies YES_____ NO_____

VACUUM (SUCTION) PANEL: A variable vacuum regulator and gauge panel shall be installed in the action area control panel. The vacuum regulator shall vary vacuum delivered to a 1200 cubic-centimeter collection jar specified below. The Vacuum gauge shall not be mounted on the collection jar itself.
Bidder Complies YES_____ NO_____

COLLECTION JAR: The suction system shall be equipped with a shatter proof, graduated, 1200cc, transparent collection container. The container shall be regulated through the Sscor panel and installed per manufacturers recommendations. The collection jar shall be retained by a SSCOR retention clip. The retention bracket when installed per directions is SAE J3043 retention testing compliant.
COLLECTION JAR PLUMBING: The collection jar shall be connected directly to the regulator panel in the action area console.
Bidder Complies YES_____ NO_____

SUCTION PUMP: The suction pump shall be installed in the left middle compartment, adjacent to the action area panel. The exhaust tube shall be routed to the outside of the vehicle. The pump shall be mounted on rubber vibration isolators to minimize any vibration noise emitted into the patient cabin. The pump shall provide a free air flow of at least 20 liters per minute and achieve a minimum of (11.81 in) Hg vacuum within four seconds after the suction tube is closed. This 49-state pump shall meet or exceed current Federal specification KKK-A-1822.
SUCTION PUMP LOCATION: The suction pump shall be installed in the left front middle compartment. The pump shall be mounted to the ceiling of this compartment on rubber vibration isolators.
Bidder Complies YES_____ NO_____

FIRE EXTINGUISHER: One (10) ten pound A-B-C type fire extinguisher shall be installed in the 2nd back streetside compartment on the floor.
Bidder Complies YES_____ NO_____

EXTERIOR ENTRY AND COMPARTMENT DOOR HANDLES: Large chrome plated, die cast paddle handles shall be provided to open all module doors. Blind fasteners shall be used to fasten the handles to the door from the backside. Blind Stabilizer pins shall be incorporated on the backside of the handle for alignment purposes. Every paddle handle shall have an isolation gasket between the paddle body and the door skin. All door skin surfaces shall be painted prior to installation of the handle hardware. All paddles, on single hung and leading double doors shall be locking type and keyed the same (unless specified otherwise). Trailing doors shall: have non-locking paddle handles, mounted on the outside of the door. The Handle shall have a bright chrome like finish mounted into the bright chrome dish. When the door is in the locked position, the handle shall extend when pulled like an automotive handle (free floating) to show the operator that the door is locked and needs to be unlocked to be opened. Systems that utilize a handle that does not free float shall not be accepted as it could bind up the inner hardware and shorten the life of the door operation and timing.

INTERIOR ENTRY AND COMPARTMENT DOOR HANDLES: The interior handle shall be lever type. A Lock/Unlock lever shall be installed below the inside lever handle and be clearly marked Lock/Unlock. The inner chrome plated handle shall have a black powder coated cast aluminum bezel for strength.
Bidder Complies YES_____ NO_____

EMERGENCY INTERIOR LATCH RELEASE: There shall be a red tipped lever to activate a rotary latch at both the top and bottom interior of each patient access door. These shall be used should the door rods become unattached from either the handle or latch assembly. The mechanisms shall be at the point of latching to the nader pin. An inserted Bezel shall be installed into the door panel around the release lever to provide an aesthetic trim to the opening.
Bidder Complies YES_____ NO_____

ASSIST RAIL: This rail shall be naturally accessible to assist persons entering the rear of the module in maintaining their balance. The rail shall be 1 ¼ diameter, 100% stainless steel with gray anti-microbial coating and 18" long. All rail fittings shall be TIG welded to the main rail. The rail shall be located prior to order confirmation. Grab rails that utilize separate, setscrew rail fittings are not reliable and not acceptable.
Bidder Complies YES_____ NO_____

ENTRY DOOR PANELS / WINDOWS / HARDWARE

INTERIOR GRAB HANDLE COLOR: The interior grab handles listed below will be powder coated with anti microbial, gray in color.
Bidder Complies YES_____ NO_____

CURB SIDE ENTRY DOOR GRAB HANDLES: The curbside side entry door shall be equipped with a three point, "L" Shaped 1 ¼ diameter, stainless steel with gray anti-microbial coating, handicap style grab handles to aid in door closure and entry assistance.

The grab handle shall run horizontally, directly above the inside door latch and bend Ninety five degrees downward to create a banister (handrail) to aid in vehicle egress. The door handle shall be fastened directly to the horizontal door structure that is welded to the door assembly.
Bidder Complies YES_____ NO_____

REAR ENTRY DOOR GRAB HANDLES: The rear entry doors shall be equipped with a three point, "L" Shaped 1 ¼ diameter, stainless steel with gray anti-microbial coating, handicap style grab handles to aid in door closure and entry assistance.

The grab handle shall run horizontally, directly above the inside door latch and bend Ninety degrees downward to create a banister (handrail) to aid in vehicle egress. The door handle shall be fastened directly to the horizontal door structure that is welded to the door assembly.
Bidder Complies YES_____ NO_____

ADDITIONAL ASSIST RAIL: This rail shall be naturally accessible to assist working attendants in maintaining their balance. The rail shall be 1 ¼ diameter, 100% stainless steel with gray anti-microbial coating and 12" long. All rail fittings shall be TIG welded to the main rail. The rail shall be located prior to order confirmation. Grab rails that utilize separate, setscrew rail fittings are not reliable and not acceptable. The assist rail shall be installed on the face of the right front ALS cabinet facia. It shall be through bolted in place.
Bidder Complies YES_____ NO_____

DOOR PANELS: The inside UPPER door panels shall be made of .080 aluminum diamond plate. The edges of the diamond plate shall be recessed into the door frame extrusion. The center panel shall be upholstery over a smooth aluminum substrate.
Bidder Complies YES_____ NO_____

CURBSIDE LOWER DOOR PANEL: The inside door panel shall be made of .080 aluminum diamond plate. The edges of the diamond plate shall be recessed into the door frame extrusion. The panels shall be fastened to the door frame with stainless steel, #10-32 UNF machine screws threaded into aircraft quality blind fasteners. Each screw shall have an neoprene lock washer.
Bidder Complies YES_____ NO_____

REAR ENTRY DOOR WINDOWS: The rear entry doors shall have an automotive style window. The window will be recessed in a factory stamped opening. The windows will be near flush. They will be in a fixed position. Each window will have a nominal area of 320 square inches.
Bidder Complies YES_____ NO_____

SIDE ENTRY DOOR WINDOW: The curb side (Right) entry door shall be equipped with an automotive style window. The window will be recessed in a factory stamped opening. The window will be near flush. Window will be fixed position. All glass shall be tinted safety glass.
Bidder Complies YES_____ NO_____

TALK THROUGH WINDOW: The talk through window specified herein shall comply with federal specification KKK-A-1822D 3.10.15.1. The window shall be sliding. There shall be a locking pin that can be set by the driver that will allow the window to lock so it cannot be opened by the patient side of the window.
Bidder Complies YES_____ NO_____

I. V. WARMER: A Smith Works Floor Mount model IV fluid warmer shall be supplied. This device shall be capable of heating and maintaining four liters of IV fluids at a comfortable body temperature of 98.6 degrees F. The device shall feature a pan type, stainless steel warming surface with a heating element fixed to the underside of the pan and wired through an electronic thermal controller. The controller shall be built into the base of the warming pan and installed as a single unit. This unit shall run on twelve volts, direct current.
IV WARMER LOCATION: The IV warmer shall be located under teh talkthrough window.
Bidder Complies YES_____ NO_____

TEMPERATURE CONTROLLED CABINETS: Two 1.8 cu ft stainless steel enclosure units shall be supplied and wired 12v to work off chassis batteries. There shall be a computer interface unit to allow the end user to down load the information as to temperature and date/time of open and closure of the units. They shall include a medical key lock for operation. The units shall heat and cool as needed to maintain a present temperature. The computer interface panels shall be included that allows for readout of temperature reading inside the cabinets and choice to desired temperature settings. It shall also include a USB port to allow this agency to download to an excel format the change in temperature readings and settings over a desired period of time with the software that is available on the vendors web site. The MK18 units shall be ordered with a drain system. A drain hose shall be installed to the exterior of the module for each unit.
Bidder Complies YES_____ NO_____

125 VAC to 12 VDC CONVERTER/BATTERY CHARGER No 1: A IOTA Engineering, LLC, Model DLS-45 Converter with a 45 ampere output capacity shall be supplied and installed. The device shall convert a 125 Volt, 60 Hertz Alternating current input into 13.4 to 13.6 Volt Direct current. The device shall provide clean, constant D.C. Power. When specified below this device shall be capable of serving as a battery charger that charges up to it's full output capacity and tapers back the output to a maintenance mode depending upon the need of the batteries.

This DLS series battery charger/power supply shall be designed with high quality components that have life span ratings of up to ten years of continuous use. This device shall feature self protection features including:

1) AC Input Protection: protects against damaging spikes (up to 190 Volts) AC That may come from the line or generator.

2) Reverse Battery Polarity Protection:protects against incorrect wiring hook up with fuses that can be easily replaced.

3) Brown Out Input Protection: protects against input spikes created by temporary or intermittent loss of input power.

4) Over Current Protection:protects against supplying too much output current

5) Over Temperature Protection: protects against thermal damage with a unique proportional fan control circuit that turns on a whisper quiet when the unit reaches 35 degrees Fahrenheit (35 degrees Celsius).

Warranty: The device shall be covered by the manufacturer for a period of two years against defects in materials or workmanship from the date of retail delivery.

An alternate charger/Converter may be supplied provided the alternate is equal in function, warranty and the alternate device has been approved by the agency prior to production.

CONVERTER TO POWER: The aforementioned converter/charger shall power the Mermaid Cabinets within these specifications when the shoreline is connected and the aforementioned converter/charger has 110vac power.

Bidder Complies YES_____ NO_____

TEMPERATURE CABINET DRAWERS: Install a Mermaid slide out drawer, one in each of the aforementioned Mermaid Cabinets.

LOCATION: one in each MK18 cabinet.

Bidder Complies YES_____ NO_____

ACCESSORY LOAD MANAGER: There shall be a Kussmaul 091-96-12 single input load manager installed specifically to control a single device. This shall be for either a temperature controlled cabinet or a refrigerator (if optioned). The function of this device will allow constant power to be applied to the component and if the chassis batteries fall below 10.7 volts and would put the starting of the chassis engine in jeopardy, power would be discontinued to the above mentioned device to allow chassis starting to override the component.

Bidder Complies YES_____ NO_____

LOCATION: The item shall be installed in the right front ALS area.

Bidder Complies YES_____ NO_____

TEMPERATURE CONTROLLED CABINET: A 2.0 cu ft stainless steel enclosure unit shall be supplied and wired 12v to work off chassis batteries. There shall be a computer interface unit to allow the end user to down load the information as to temperature and date/time of open and closure of the unit. It shall include a medical key lock for operation. The unit shall heat and cool as needed to maintain a present temperature. The computer interface panel shall be included that allows for readout of temperature reading inside the cabinet and choice to desired temperature settings. It shall also include a USB port to allow this agency to download to an excel format the change in temperature readings and settings over a desired period of time with the software that is available on the vendors web site.
Bidder Complies YES_____ NO_____
Location: Under the talk through window.
Bidder Complies YES_____ NO_____

ACCESSORY LOAD MANAGER: There shall be a Kussmaul 091-96-12 single input load manager installed specifically to control a single device. This shall be for either a temperature controlled cabinet or a refrigerator (if optioned). The function of this device will allow constant power to be applied to the component and if the chassis batteries fall below 10.7 volts and would put the starting of the chassis engine in jeopardy, power would be discontinued to the above mentioned device to allow chassis starting to override the component.
Bidder Complies YES_____ NO_____
ACTION AREA LIGHTING: A 12 volt LED light shall be provided directly over the forward, street side work surface. A 18 inch swivel fixture shall be provided. The light shall have an on/off rocker switch on the body of the light housing.
LOCATION: The light shall be mounted above the action area.
Bidder Complies YES_____ NO_____

UPHOLSTERY MATERIALS: All padding and upholstered seating shall be covered in 36 ounce vacuum form ready vinyl. Sewn seams in the seat covers and cushions shall be minimized. Upon request, the manufacturer shall be capable of supplying vacuum formed, seamless vinyl covered upholstery. The color shall be color keyed to the laminate color selections made.

SEAT / BACKREST CORE MATERIAL: The vinyl covered foam shall meet current Federal Specification KKK-A-1822. Seat cushions shall be ergonomically contoured. All core material shall be open cell, high resilience foam.
Bidder Complies YES_____ NO_____

UPHOLSTERY COLOR: All padding and upholstered seating shall be covered in 36 ounce vacuum form ready vinyl per the aforementioned specification. The color of the vinyl shall be Light Gray. A sample of the actual color shall be submitted with the bid for approval.
Bidder Complies YES_____ NO_____

TROUGH COVER: All upholstered pad that is built to cover the trough running down the center line of the vehicle separating the curbside and streetside of the patient compartment shall be manufactured of 1/4" luan non voided plywood with padding and covered with 36 ounce vinyl. The color of the vinyl shall be the same as the remainder of the upholstery in the patient area. The cover shall be fastened to the headliner using stainless steel screws with washers that will accept button covers that are color matched to the trough cover.
Bidder Complies YES_____ NO_____

UPHOLSTERY JOINERY TYPE: All padding and upholstered seating shall feature upholstery covered foam that eliminates sewn, visible seams. All cushion corners shall be vinyl wrapped. NO sewn seams are permitted, even at the corners. Seat cushion vinyl shall be pre-formed to the cushion shape to eliminate ALL visible seams. Seat cushions with welting/piping and sewn corner seams are not acceptable since blood and other liquid form biological discharge can penetrate the seam holes and reside in the foam. All vinyl surfaces shall be pulled tight against the foam, utilizing a hardwood plywood backing board. Loose fitting vinyl coverings are not acceptable.
Bidder Complies YES_____ NO_____

FULL CUSHIONS: The post and wheel cups normally placed on the squad bench for secondary stretchers shall be DELETED in favor of full seat cushions without cutouts. The seat cushions shall be the same size as the squad bench lid and WITHOUT cutouts. The user chooses to use a backboard in lieu of a stretcher for a secondary patient.
Bidder Complies YES_____ NO_____

HEAD PROTECTION - CURB SIDE ACCESS DOOR: A seamless pad specifically designed to protect the head during egress is required. The pad shall consist of a two-inch thick foam sheet over a hardwood plywood backing board and covered in seamless vinyl upholstery.
Bidder Complies YES_____ NO_____

HEAD PROTECTION - REAR ACCESS DOORS: A seamless pad specifically designed to protect the head during egress is required and shall comply with current Federal Specification KKK-A-1822. The pad shall consist of a two-inch thick foam sheet over a hardwood plywood backing board and covered in seamless vinyl upholstery.
Bidder Complies YES_____ NO_____

PAINT

100% PAINT FILM COVERAGE: All stages of primer and paint shall cover all surfaces. Hinge mating surfaces on the doors and jambs shall be painted. Bare aluminum and primer only preparation is not acceptable under door hinges. Doors shall be painted without actuation handles installed and doors removed from body. Paint film thickness to be no less than 4.1 mil thickness.

PAINT SYSTEM TYPE: The paint shall be Poly-Urethane type electrostatic application process without exception.

An electrostatic paint spray system is a highly efficient technology for the application of paint to specific work pieces. Negatively charged atomized paint particles and a grounded work piece create an electrostatic field that draws the paint particle to the work piece, minimizing over spray.

For this technology, an ionizing electrode, typically located at the paint gun atomizer tip, causes paint particles to pick up additional electrons and become negatively charged. As the coating is deposited on the work piece, the charge dissipates through the ground and returns to the power supply, completing the circuit. The electrostatic field influences the path of the paint particles. Because the charged particles are attracted to the grounded work piece, over spray is significantly reduced. Paint particles that pass a work piece can be attracted to and deposited on the back of the piece. This phenomenon is known as "wrap."

MECHANICAL ADHESION PROMOTER: The entire module shall be degreased. Degreaser shall be applied to manufacturers recommendations. The module body is to be inspected for flaws and imperfections, and to assure built to order specifications. All surfaces shall be initial sanded with 180 grit paper and all imperfections repaired.

CHEMICAL ADHESION PROMOTER: The module shall be hot-water washed at (140 degrees or greater). Then the aluminum Body shall be treated with Alumiprep 33 acid etching followed by a complete De-ionized body rinse. To ensure all surfaces are cleaned, this step shall be repeated a second time. The entire unit shall be wet coated with Alodine 5700 conversion coating and de ionized water mixed. The module body is baked at 160 degrees to dry.

PRIMER: The module shall then have 2 coats of epoxy primer. The unit is then baked at 140 degree metal temperature for one hour. The module body will then undergo any bodywork or filler that is required at transition(s). A third coat of epoxy primer is applied and cured. The module body will then be final sanded prior to Paint color application. Primer shall be sanded with 320 grit paper to assure flat, orange peel free surface.

TOP COAT (PAINT): Entire module shall be degreased. Degreaser shall be applied to manufactures recommendations. Two coats of BTLV High Solids color shall be applied.

CLEAR COAT: The clear coat shall be manufactured by the same company as the primer and base coat. Two coats of "clear coat" polyurethane shall be applied per the manufacturer's instructions.

3M POLISHING SYSTEM: Prior to 100% paint cure, the paint on the ambulance body shall be sanded to 1200 grit and polished flat per 3Ms Perfect-It product program for smooth finish.
Bidder Complies YES_____ NO_____

CORROSION: Anti-electrolysis procedures include but are not limited to the following.

1) Ensure all bare substrate is dry and free from contamination.

2) If bare substrate is showing signs of corrosion/oxidation, sand and remove. Use 180 grit until area is removed.

3) Thoroughly blow off areas to remove sand dust and metal shavings.

4) Thoroughly degrease to be pre-primed using the wipe-on, wipe-off method with clean white rags. (Use good quality automotive Degreaser)

5) Apply Wash primer CR using a brush to all mated surfaces. Allow to flash for 15 minutes at 70 deg Fah. Mix wash primer CR 1:1 with wash-hardner.

6) Apply Urethane caulk to all mated surfaces before assembly to reduce the possibility of corrosion.

EXTERIOR FASTENERS: All screw sites require a replaceable nylon insert for the fastener to thread into. This will isolate the dissimilar metals. Each hole shall be treated with an Electrolysis Corrosion Control compound prior to installation of the nylon inserts. All exterior screws shall be stainless steel.

PAINT WARRANTY: The conversion paint shall be warranted to the original owner for a period of 7 years, 70,000 miles. The color shift shall be no greater than Delta E of 4.0 with minimum gloss retention of 60 gloss units at twenty-degree angle. Warranty to include a 36-month Corrosion coverage with no exclusions.
Bidder Complies YES_____ NO_____

UNDERCOATING: The bottoms side of the module shall be undercoated, with an exception to any area affected by exhaust system direct heat. Application standards for the undercoating shall be achieved or exceeded as directed by QVM or governing standards.
Bidder Complies YES_____ NO_____

REFLECTIVE TAPE: The module door frames shall have a three-quarter inch (3/4") wide white reflective tape applied to the door frame interior. The tape shall reflect direct light at night to illuminate the outline shape of the door when the door is opened.
Bidder Complies YES_____ NO_____

COMPARTMENT FINISH: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate.
Bidder Complies YES_____ NO_____

PAINT AND GRAPHICS: The vehicles must match the existing fleet last new unit delivered on a 2018 Freightliner chassis. Please make arrangements to come take photos of paint and graphics layout to quote properly.
Bidder Complies YES_____ NO_____

REFLECTIVE / PRISMATIC TAPE: The aforementioned center step shall have a bright, conspicuous prismatic, reflective tape strip applied the rearward facing edge of the step. The tape shall have alternating colors (Red and White). The tape color shall begin and end in Red, and each segment shall measure between seven and nine inches.
Bidder Complies YES_____ NO_____

ROOF PAINT: Color match to sides, top finish to exceed industry standard of 5 plus mill thickness.
Bidder Complies YES_____ NO_____

DRIP RAILS: A bright drip rail shall be provided over each compartment. Full height compartments are exempt because the perimeter roof rail drip rails will cover these compartments.
Bidder Complies YES_____ NO_____

OWNER'S MANUAL: There shall be shipped loose with each completed unit a card with USB flash data file with pertinent information from the build of the vehicle.
Bidder Complies YES_____ NO_____

AMBULANCE MARKING PACKAGE: The vehicle shall be supplied with a lettering and "star of life" symbol decal package as described in current Federal specification KKK-A-1822. The "ambulance marking package" is to be shipped loose with the vehicle. The "star of life" symbols shall meet Figure 4 required by KKK-A-1822.
Bidder Complies YES_____ NO_____

AMBULANCE MARKING PACKAGE - ROOF STAR: A 32" roof star shall be included as a part of the lettering and "star of life" symbol decal package (as described in the current Federal specification KKK-A-1822).
Bidder Complies YES_____ NO_____

SAFETY PLACARDS: There shall be installed in the chassis cab and patient area descriptive placards in durable materials to remind occupants to fasten seatbelts and to refrain from smoking.
Bidder Complies YES_____ NO_____

MANUFACTURER LOGOS: There shall be self-adhesive logos provided and installed for the unit.
Bidder Complies YES_____ NO_____

REFLECTOR PACKAGE: Six reflectors shall be supplied on the outside of the module body. The reflectors shall be located at skirt line level and the area size shall be at least 3.75 square inches. Each side shall have one AMBER forward reflector and one RED rearward reflector. The rear of the body shall have one RED reflector per side, located just above the diamond plate kick plate.
Bidder Complies YES_____ NO_____

REGULATOR: A fixed output medical regulator shall be supplied with the apparatus. The output shall be fixed a 50 psi. The regulator shall have a CGA 540 thread for the bottle and a 9/16- 18 tpi threaded male connector for the input hose to the system.
Bidder Complies YES_____ NO_____

CONVERSION WARRANTY
7 Year, 70,000 mile Mechanical & Electrical including Workmanship.
Bidder Complies YES_____ NO_____

7 Year, 70,000 mile Standard Paint Warranty.
Bidder Complies YES_____ NO_____

36 Month Paint Coatings Corrosion Warranty.
Bidder Complies YES_____ NO_____

20 Year Body Structure Warranty.
Bidder Complies YES_____ NO_____