

BOSTON PUBLIC HEALTH COMMISSION

Boston Emergency Medical Services



REQUEST FOR QUOTES

for
Ambulances

September 14, 2021

Introduction

The Boston Public Health Commission (BPHC) is issuing a Request for Quotes (RFQ) from qualified respondents for ambulances.

DEADLINE

Monday, September 13, 2021	RFQ posted in the Boston Globe
Tuesday, September 14, 2021, by 5:00 PM ET	RFQ available online at www.bphc.org/RFP
Monday, September 20 th , by 5:00 PM ET	Deadline to submit questions about the RFQ via email to: Joe O'Hare Superintendent ohare@bostonems.org Subject Title: RFQ Questions – Ambulances
Wednesday, September 22 nd , by 5:00 PM ET	Responses to questions received posted at www.bphc.org/RFP
Friday, October 1 st , by 5:00 PM ET	Submit response via email to: Joe O'Hare Superintendent ohare@bostonems.org Subject Title: RFQ Submission – Ambulances

Background

The Boston Public Health Commission (BPHC) is the local public health department for the city of Boston. BPHC's mission is to protect, preserve, and promote the health and well-being of all Boston residents, particularly the most vulnerable populations. Boston Emergency Medical Services (Boston EMS), a Bureau of the Boston Public Health Commission, is the City's municipal 911 pre-hospital provider. Boston EMS has 399 full time uniformed employees who principally operate out of the department's dispatch operations and 27 frontline ambulances. Members of Boston EMS respond to approximately 125,000 clinical incidents annually. Operating an EMS department necessitates dependable ambulances to reliably respond to medical emergencies and transport patients to area hospitals. After much consideration and input from personnel, essential features for department ambulances have been identified and are outlined in this document. Boston EMS operates on a fiscal year, July 1 through June 30th, all orders will be placed and received in accordance with fiscal years.

The Boston Public Health Commission encourages Certified Underrepresented Business Enterprises (CUBEs) to respond to this RFQ. CUBEs are identified as: Disability-owned Business Enterprise (DOBE), Lesbian Gay Bisexual Transgender-owned Enterprise (LGBTBE), Minority-owned Business Enterprise (MBE), Small Local Businesses Enterprise (SLBE), Women-owned Business Enterprise (WBE), Veteran-owned Business Enterprise (VBE).

Scope of Work

BPHC/Boston EMS would like to enter into a one-year contract, with a BPHC option to extend this for four additional one-year periods, for up to 5 years total, for the annual purchase of type 1 ambulances. Boston EMS anticipates purchasing type 1 ambulances each year with similar features as our current fleet, including a white F-450 chassis. All ambulances are to be delivered to Boston EMS by June 30th, the end of each fiscal year that the vehicles are ordered in. Included in the proposal should be airfare and lodging costs for two members of Boston EMS to travel to the production location two times, including at the mid-point and pre-delivery, for each annual order. All ambulances must be delivered via flatbed truck to Boston EMS' fleet facility.

Outlined below are the features Boston EMS is seeking for ambulances. All bid responses must include this list with a Y (able to provide), or N (not able to provide) checked. Any deviations from the list below, including equivalent components, should be explained in the response submission.

Boston EMS cannot commit to a specific quantity of ambulances but anticipates ordering approximately seven (7) per year. The first (current) year, the department anticipates it will order seven ambulances. Future year orders will be placed at the start of each fiscal year (July 1), with desired delivery by the end of the fiscal year (June 30). With uncertainty of prices, responding vendor must include at minimum confirmed pricing for year one, fiscal year 2022, which will run from the start of the contract to the end of June 2022. Pricing may be provided for future years at the beginning of each fiscal year. Should the pricing exceed what BPHC/Boston EMS determines to be fair market value, BPHC/Boston EMS reserves the option to terminate/not extend the contract period.

1. SAFETY & COMPLIANCE

1.1 DYNAMIC SIDE IMPACT & ROLLOVER TESTS

Y___N___

Bidder shall perform Dynamic Side Impact & Rollover Tests with same module that was involved in side impact crash test. This module must be the same brand, make, and model for both tests. Video documentation to be provided to the Purchaser upon request. Crash test shall be performed within a controlled and repeatable environment, validated by a third-party testing facility.

1.2 KKK COMPLIANT

Y___N___

Bidder should remain compliant with KKK specifications as of the date of each ambulance order, including but not limited to:

1.2.1 BIDDER KKK-A-1822F CHANGE NOTICE 8 COMPLIANT

Y___N___

Bidder shall be KKK-A-1822F Change Notice 8 compliant to meet SAE J3026 - Ambulance Patient Compartment Seating Integrity and Occupant Restraint Standards, and SAE J3027 - Ambulance Litter Integrity, Retention, and Patient Restraint Standards.

1.2.2 BIDDER KKK-A-1822F CHANGE NOTICE 9 COMPLIANT

Y___N___

Bidder shall be KKK-A-1822F Change Notice 9 compliant to meet SAE J3043 - Ambulance Equipment Mounts; Interior Stowage Accommodations; Equipment Mounting Devices: Installed Oxygen cylinder, cardiac monitor, and fire extinguisher mounting devices shall meet the performance requirements of SAE J3043.

1.2.3 BIDDER KKK-A-1822F CHANGE NOTICE 10 COMPLIANT

Y___N___

Bidder shall be: KKK-A-1822F Change Notice 10 compliant to meet: SAE J3058 - Ambulance Interior Storage Compartment Integrity; SAE J3057- Ambulance Modular Body Evaluation-Quasi-Static Loading for Type I and Type III Modular Ambulance Bodies; SAE J3102-

Ambulance Patient Compartment Structural Integrity Test to Support SAE J3027 Compliant Litter Systems; SAE J3043 - Ambulance Equipment Mounts, Interior Stowage Accommodations, Equipment Mounting Devices; Installed suction mounting; to conform to all applicable requirements.

1.2.4 BIDDER KKK-A-1822F CHANGE NOTICE 11 COMPLIANT

Y___N___

Bidder cab console to meet SAE J3043; Ambulance Equipment Mount Device or Systems, to be KKK-A-1822F Change Notice 11 compliant and shall be labeled with its weight capacity.

1.2.5 BIDDER KKK-A-1822F CHANGE NOTICE 12 COMPLIANT

Y___N___

Revision to the existing standards include Temperature Conditions; Engine High-Idle Speed Control; Ambulance Emergency Lighting; Photometric, Chromaticity, and Physical Requirements; Tests, Warning Light System; Flood and Loading Light (Exterior); Bumpers and Steps; Doors; Equipment Mounting Devices; Oxygen Main Supply and Installation; Ventilation Criteria; Siren – Public Address System; and Test Criteria.

1.2.6 KKK-A-1822F CERTIFICATION PACKAGE

Y___N___

KKK-A-1822F certified ambulance shall include the following additional items (unless specified otherwise by the customer and waiver letters are submitted from the state certifying agency):

- Automatic Charger / Conditioner Label in cab.
- Two (2) Portable equipment charging circuit leads KKK-A-1822F / warning light flash pattern (KKK, SAE, NFPA configuration acceptable).
- Fuel fill diamond plate splash plate Drip rails around the entire modular body, front, rear, both sides, above doors.
- Partition Door.
- Twelve (12) disposable plastic trash liners.
- Light and door spring in battery compartment.
- Two (2) 5# ABC fire extinguishers with compliant mounting brackets - shipped loose.
- KKK Orange reflective stripe.
- KKK-A-1822F lettering and decal package (installed).
- Stepwells to be illuminated.
- A KKK-A-1822F certification sticker, electrical load analysis sticker and payload sticker shall be installed in the oxygen compartment.
- NTEA UltraMod used to calculate payload capacity, horizontal, lateral, and vertical CG

Any deviations from KKK-A-1822F shall be listed in the vehicle delivery packet with a notation on the certification sticker.

2. VEHICLE

2.1 CHASSIS FORD F-450 4 x 2, 169” WB, 84 C.A. Diesel Engine

Y___N___

- 2.2 CAB IS TO BE OEM WHITE Y___N___

- 2.3 TYPE I - AMBULANCE - 72 INCH INTERIOR HEADROOM Y___N___
SPECIFICATION INTENT: Type I, 156-inch module, constructed with not less than 72-inches interior module height, an overall length of 294-inches, an overall width of 98-inches, and an overall height not to exceed 112-inches.

- 2.4 Chassis shall be equipped with power seats and power adjustable gas/brake pedals. Y___N___

- 2.5 Install rain guards on each chassis door. Rain guards are to be stick on style. Y___N___

- 2.6 Setina PB-400 push bumper shall be installed with black finish. The siren speakers and jump start connection are to be located on the push bumper. The bumper guard shall have two (2) Whelen 500 series Red / white split super LED warning lights installed on it. One (1) on either side of the bumper guard. Y___N___

- 2.7 Install an Associated Jump start system #6146. The socket box shall be installed on the push bumper so that the box is flush with the front of the push bar. Socket box shall have protective cover. Y___N___

- 2.8 Install two (2) Whelen dual watt SA314B siren speakers. Speakers shall be installed below the middle cross bar on the front push bar. Y___N___

- 2.9 Flexible Bumper Poles are to be installed on the front bumper. Y___N___

- 2.10 Two (2) additional remote key FOB's - use OEM key FOB's. Two (2) FOBS's to be provided with Chassis. Y___N___

- 2.11 Install Tremco police products anti-theft system. Unit to be mounted to the underside of the steering column. Y___N___

- 2.12 Install a two (2) bolt on stainless steel glove box holders in the cab. The holders are to be located beneath the pass-through opening and above the MCC. Glove holder is to be as low as possible but still be able to remove the EPCR tablet on the rear of the console. Y___N___

- 2.13 FUEL TANK - FULL UPON FACTORY RELEASE Y___N___
The chassis fuel tank of the completed unit shall be full at time of release from the ambulance manufacturer's facility.

- 2.14 ENGINE BLOCK HEATER - OEM PLUG Y___N___

An engine block heater shall be included in the chassis with the 125 VAC power cord, located under streetside cab door.

2.15 HEAT SHIELDS, PROTECTIVE

Y___N___

Aluminized steel protective heat shields shall be installed to the upper laterals above the exhaust system to help protect the module from the chassis exhaust system heat. This shall meet OEM guidelines for heat shields.

2.16 HIGH IDLE SYSTEM, AUTOMATIC

Y___N___

A high-idle system shall be provided on the chassis. The high-idle shall activate via cruise control switches on dash only when the transmission is placed in park/neutral/parking brake. High idle will be automatically engaged when node provides low voltage signal and when in park/neutral/parking brake. The system is set to 1100 RPM and adjustable to 750 RPM

2.17 Chassis running boards are to be grip strut. Steps are to be wider and lower than standard (3" wider and 3" lower). Add a back plate to tie thru running boards to the chassis cab. Fill 3" area with black Gatorhyde panel.

Y___N___

2.18 SUSPENSION - LIQUID SPRING TYPE I (REQUIRED)

Y___N___

A CLASS®, or Compressible Liquid Adaptive Suspension System, shall be provided and installed. Utilizing a strut, with a compressible fluid as the spring/damping medium, and its sophisticated on-board microprocessor, CLASS® adapts the entire vehicle's response to road variations and the driver. Unlike current steel and air sprung suspension systems, CLASS® can automatically and instantaneously change the spring stiffness and damping at each wheel over a very broad range with minimal power consumption while the vehicle is being driven and without driver intervention. The system shall include an automatic lowering feature, which is activated by opening the rear patient compartment doors. There shall be a switch near the rear doors which will defeat the lowering feature.

2.19 MIRRORS, EXTERIOR TELESCOPING W/REMOTE & HEAT Install a pre-wire to the chassis mirrors for future install of warning lights. Ship loose two (2) Sound Off Intersector LED Under Mirror Lights. Reference previous units.

Y___N___

2.20 Floor console as approved by customer. Console shall be silver gray and include a 12V outlet, and USB outlet. USB OUTLET TO BE LOCATED ON PASSENGER SIDE OF CONSOLE ON THE FORWARD DOGHOUSE PORTION BELOW THE 12V OUTLET. Outlets in floor console shall be hot only with ignition. Arm rests THAT MOVE UP AND DOWN AND ARE REMOVABLE. ARM RESTS TO BE MOVED AS FAR BACK AS POSSIBLE WITHOUT INTERFERING WITH THE ABILITY TO FASTEN THE SEAT BELT. Arms rests are to be turned around and facing inward, so that they do not rub the seats. Forward flat area with tapping plate for a customer supplied computer doc. The computer doc is to be fastened with nuts and bolts and will be a Havis keyboard mount and Havis computer mount for a Dell tablet. Install customer supplied UHF radio model APX 6500, vista screen on flat portion with siren located above the vista, scanner shall be toward the rear of the console. Back part of console shall have a recessed area with two (2) cup holders. The back of the console shall have a ABS pocket (9" w X 11" long X 3" deep attached to hold EPCR tablet. Arms rest shall be located in a position that

Y___N___

allows full travel of the PMT mount. Add hinged lockable Vista, radio, and scanner plate on console. Use Medeco lock. CUSTOMER SUPPLIED COMPUTER POWER SUPPLY TO BE INSTALLED IN CONSOLE. INSTALL CUSTOMER SUPPLIED POWER SUPPLY FOR EPCR TABLET IN CONSOLE. CONSOLE IS TO HAVE A RIGHT HINGED ACCESS PANEL ON THE PASSENGER SIDE OF THE CONSOLE, AS LARGE AS POSSIBLE WITH MEDECO KEY LOCK. Drill hole in bottom of holder for drainage.

2.21 Two (2) Weldon #8080 red/clear dome lights shall be installed and located one (1) above both the passenger and driver's seat, in the cab headliner forward of the customer supplied installed radio speaker. The lights shall be activated by individual lamp switches. This needs to be the Weldon 8080-8000-13 LED red/clear dome light. part number 27587

Y___N___

2.22 BACKUP ALARM

An (OSHA approved) back up alarm shall be installed with a disable control for silent backing. The disable control shall be located on the MCC (master control console). The backup alarm system shall automatically reset to the "on" mode when the transmission is taken out of reverse.

Y___N___

2.23 DEF TANK FILL PROTECTOR - DIAMOND PLATE

An anodized aluminum diamond plate DEF tank fill protector shall be provided and installed.

Y___N___

2.24 OEM AUTO-LOCK DISABLED (cab & module doors do not auto lock or unlock)

The OEM auto-lock feature will be disabled.

Y___N___

2.25 BATTERY SYSTEM

The battery system will have five total batteries. Two (2) batteries will be under the hood and two batteries will be in the on a slide out tray in OSS #5B. All four of these batteries will be connected together to start and run the chassis as well as run the module functions. A fifth battery will be installed in a sealed and vented battery box in OSS #2. This battery will be isolated with a contactor and will be tied to the MDT functions. Each ground that goes from the battery to the frame should have its own individual ground bolt. All five (5) batteries will be Optima Yellowtop D34/78.

Y___N___

2.26 OEM WHEELS - WITH VALVE STEM EXTENSIONS - F/R SERIES

The vehicle shall be provided with OEM wheels and valve extensions.

Y___N___

3. RADIOS/ACCESSORIES/WARNING DEVICES AND CONTROLS

3.1 SIREN, WHELEN 295-HFSA7-REMOTE WITH MICROPHONE (Meets CA Title 13)

A Whelen 295-HFSA7 remote dual siren amplifier shall be flush-mounted in the master control console located in the cab. The siren shall be capable of hands-free operation and shall be equipped with a noise canceling microphone. Note - Meets CA Title 13. Some features of this siren include:

Y___N___

DUAL 200-WATT, FLUSH MOUNT SIREN with REMOTE SIREN AMPLIFIER

- Six function siren plus radio repeat and public address.
- Operates two 100-watt speakers.
- Operates in dual (outputs 2 independent siren tones creating rich harmonic dual tone sound) or mono sound modes.
- External dip switch programmable siren tones.
- PTT (push to talk) switch on microphone overrides all siren functions.
- Removable unidirectional microphone with adjustable microphone volume adjustable preset radio repeat volume.
- SI TEST®, silent diagnostic test.
- Quick disconnect plug for ease of service or replacement.

6 Siren Tones

- Air horn
- Wail
- Yelp
- Piercer
- Manual

3.2 HOWLER - SIREN & SPEAKER SYSTEM / OPERATED VIA VISTA SCREEN / MECHANICAL SWITCH Install Whelen Howler siren & speaker system, to be activated by a switch on the MCC Vista Screen. IATS. A momentary switch shall be installed in the console per the attached layout IAT the switch in the Vista screen.

Y___N___

3.3 The siren amp should be installed behind the access panel in the pass-through area, giving them access through the panel to the siren amp.

Y___N___

3.4 Install a Back-up Safety Alert IATS backup alarm

Y___N___

3.5 Attendant Control Panel (ACP) contains a color microprocessor screen, controls all equipment modified and on a flat removable panel with the flat portion of ACP 3" deeper than the rest of the panel and installed in the patient compartment located.

Y___N___

3.6 Install customer supplied David Clark knee pedal and wiring as specified below. Switching to be located under the ACP. This shall include knee pedals (P/N 07145-7) near the attendant seat. Wiring for knee pedals to be ran through conduit, shall be routed to radio cabinet with as simple of a run as possible. Attachment hole for wiring to be behind knee pedal and not exposed. The connector is to be located, so as to eliminate protrusion into an area that might cause injury to an EMT. The Customer supplied black David Clark Head Set hanger (P/N 08343-10) is to be installed in the primary action area above the oxygen access window.

Y___N___

3.7 Garmin Model DEZLOTR700 to be installed on dashboard. A 12V hard wired power supply and installed by the manufacturer. Power to be ignition hot. The GPS system shall be mounted on the dash above the OEM radio. The Garman GPS will be customer supplied. Install anti-theft device included with GPS.

Y___N___

3.8 Install Kussmaul voltage indicator. Indicator to be a dual bar graph indicator. The dual bar graph shall show each of the two (2) circuits. Circuit for items that stay on after ignition is turned off will not have an indicator. The circuits on the indicator are to be labeled. Indicator is to be located on the front of the module below height sticker.

Y___N___

3.9 Install the following customer supplied parts: C-MD-305 ACTADP, HDM, Slide, TS, SP PKG-KB-201 PKG, KBM, DEVMT, KYBRD, UNVMT (P/N 08015-3) PKG-PSM-388 PKG, Base, VMT, HDM, W-SHRTHNDL, COL, 15-19 (PN 08015-2) DS-Dell-601Docking Station for Dell Tablet (PN 08015-4)

Y___N___

3.10 Install four (4) customer supplied antennas. Two (2) to be located on the module and two (2) to be located on the cab roof. The two (2) antennas on the module roof shall be installed. Each is to be centered above the streetside cabinet wiring access. Wiring access plates in the streetside cabinets to be as large as possible. Access plates shall not be installed with self-tapping screws as these can rub through wiring. Ensure that all antenna mounts are tight and follow manufacturer's instructions for bending of coax cable. Module antennas shall be mounted and sealed using silicone only. Do not bolt down antennas. The antenna placement shall go from front to back: Sierra Wireless antenna 1, UHF antenna. When mounting the Sierra Wireless antenna, the larger center hump on the antenna shall face the front of the module. The cab antennas shall be located towards the front of the cab on the 2 inner high spots of the roof. The standard antenna bases have been deleted. One (1) module antenna shall terminate to the radio cabinet for Sierra Wireless (PN 07688-6). One (1) module antenna shall terminate to module APX6500 radio in ACP (P/N 07688-7). Two (2) antennas on cab roof shall terminate to the MCC, one (1) scanner (P/N 07145-4), and one (1) for cab APX6500 radio (P/N 07688-7).

Y___N___

3.11 Two (2) 12V in the primary action area. Two (2) in the lower front wall cabinet #2. One (1) on right side of console. Module 12VDC Medical equipment 12-volt outlets turn off upon expiration of the module timer: currently set for 4-hours after engine shut-down. If battery voltage is too high, or too low, the timer will shut down immediately. If the ambulance is plugged into "Shore Power" the outlets will remain on indefinitely.

Y___N___

3.12 All customer supplied wiring and radio wiring to be run through "liquid tight" conduit. Conduit to be smooth on the inside. Conduit to be 3" and sized so that connectors at end of cable can be easily pulled through for replacement. LARGE access holes shall be installed for easy access to all radio / MDT wiring. This may require additional access panels in OSS#1. Wires from ACP to radio cabinet to be ran as smoothly and as easily accessible as possible. Wires from radio cabinet to front console to be run through their own conduit and to be routed next to wiring. Large access plates shall be installed in the ceiling of streetside cabinets # 1, 2, and 3. Access plates

Y___N___

shall not be installed with self-tapping screws. Self-tapping screws can puncture wiring routed above cabinet. A date shall be provided for Boston EMS to work with electrical during wiring of first unit. This unit shall serve as the example for all other units to match.

3.13 Two (2) Customer supplied Motorola APX6500 radios (P/N 07688-2) and speakers to be installed. Includes a radio speaker for each radio (P/N 03832-1). Radios to be flush mounted, module radio shall be installed so that only the knobs on the radios stick out past the plate (THE RADIO PORTION OF THE ACP WILL NEED BUILT OUT 3" FROM STANDARD TO ACCOMMODATE THIS), there shall be no rough edges, ref last BEMS units. Radio speaker in cab to be installed in REAR ceiling area REF PREVIOUS UNITS, headliner shall be reinforced for install of speaker. Radio speaker in module to be located BEHIND ACP PANEL WITH HOLES PUNCHED IN VISTA PLATE FOR THE SOUND TO GO THROUGH PER PREVIOUS UNITS. Radio and scanner installed in console shall have 2"-3" space back of radio and floor for wire routing, so wires are not pinched. Installation shall include three (3) supplied installed junction studs and two (2) terminal strips, to be installed in radio cabinet. Radio installation shall include the install of the following customer supplied parts. These parts are to be installed in the front wall radio cabinet. Layout should be similar to the attached PDF exact layout shall be determined during design and layout shall be sent to customer for approval prior to release. 1) ONE (1) 30-amp relays with sockets (P/N 04346-27) 2) Two (2) 6-position fuse blocks (ATC) (P/N 04346-28) 3) ONE (1) timer (P/N 07145-5) 4) ONE (1) 75 AMP RELAY (P/N 08343-3) Install customer supplied scanner (BCD996P2) (P/N 07688-4) in front console. Speaker to be installed in ceiling of cab towards rear wall, ceiling to be reinforced. Install power and ground pre-wire in the cab console for a customer installed computer mount. A list of serial numbers for all customer supplied parts. Serial # by truck.

Y___N___

3.14 The cover for node 1 shall be bolted on so it cannot be easily removed.

Y___N___

3.15 Provide hidden unlock switch to the top lip of the license plate insert between the LED lights. This switch is to unlock module doors only. Unlock button shall not be able to be depressed when hitting bumper with the license plate installed.

Y___N___

3.16 The color microprocessor screen shall be installed on a built out removable access panel. The panel will be located to the immediate right of the attendant's seat. The panel shall have a cut out for customer supplied APX6500 radio. There shall be a cut out for a customer supplied customer installed switch above the radio. There shall be punched out holes for sound to go through the aluminum panel for a customer supplied radio speaker to be mounted behind the panel.

Y___N___

3.17 Install power door locks on module OSS doors and passage doors. OEM Key FOBs required. Key fobs should only lock and unlock the cab. Hidden unlock switch to be installed in the rear license plate to unlock module doors only. Once inside the module there shall be a switch located at the ACP area. to unlock the cab doors. Standard lock / unlock switches at the curb and rear door shall remain.

Y___N___

3.18 Install a customer supplied Sierra Wireless Airlink MP70 system (P/N 07688-8) in the radio cabinet on the floor of the cabinet, in front of the radio filter. INSTALL AND CONNECTORIZE (2) LAN CABLES FOR EACH UNIT WITH ONE LAN CABLE RUNNING FROM THE COM CABINET TO THE CENTER CONSOLE, AND THE OTHER LAN CABLE RUNNING FROM THE COM CABINET TO THE ACP. THE CABLES ARE TO BE 15' IN LENGTH. To be run through conduit. Conduit to be 3" and large enough for connectors on each end to be pulled through. will make cables in house. Reference previous units.

Y___N___

3.19 REVERSE CAMERA

Install Hanscom MV1 back-up camera, or equivalent, supplied by the vendor. The camera is to be tied to the Front Console display screen.

A button on the Vista in the MCC needs to be programmed to allow the driver to turn the rear camera on at all times along with auto on in reverse.

Y___N___

3.20 Install Weldon V-MUX Vista IV (or equivalent) interface module/display screen mounted on a flat removable panel in the patient compartment ACP area.

Y___N___

3.21 ELECTRICAL SYSTEM - WELDON V-MUX, MICRO PROCESSOR BASED

A Weldon V-MUX (or equivalent) 100% solid state microprocessor based multiplex system shall be installed to control the electrical functions. The system shall include load management, load shedding, power modulation, load sequencing capabilities and provide on-board diagnostics with real-time status reporting. The system shall consist of one (1) color control console (Vista) in the cab, one (1) color control console (Vista) in the patient compartment, a total of three (3) control nodes: two (2) High Content nodes and one (1) 8 X 16 node, and a module warning display with video input and monitoring capabilities. The system must be a Weldon V-MUX. No exception. Bidders who propose any other proprietary electrical system shall be considered as non-compliant. Documentation required with bid submission. Bidder must supply with his/her bid proposal, a listing of not less than 1500 ambulances produced with the Weldon V-MUX system within the past 5 years. The documentation shall include a production order number, the purchaser's agency name, and the date the ambulance was delivered. Bids submitted without this documentation shall not be considered.

Y___N___

3.22 ELECTRICAL CIRCUITS

All electrical circuits shall have wiring and circuit protection suitable to the demand and must meet the national electric code (NEC) wiring requirements. All added on wiring (18 GA through 10 GA) shall be color coded and stamped with code numbers and functions every 4" for easy identification (all other wiring shall be color coded). SLX high temperature thermoplastic cross link wire shall be used. insulated cable shall be used for all under hood / underbody battery and charging system cable. High temperature (375° f) thermoplastic loom shall be used on all harnesses.

Y___N___

3.23 FLASHER - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

The flasher shall be provided within and programmed by the multiplex electrical system.

3.24 FLASHING HEADLIGHTS - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

The headlights (high beams) shall be programmed through the multiplex system to alternate flash (wig-wag), activated by a switch on the master control console screen labeled "Flashing Headlights", with the ignition on and module power and emergency master switches enabled. The flashing headlights are to be disabled when the low or high beams are activated. They are also disabled when the transmission is placed in the neutral/park position. The flashing headlights shall have the capability to be reactivated with the "park override" switch in the "on" position if the low and high beams are off.

3.25 M POWER FASCIA HOOD LIGHTS

Y___N___

Install two (2) 4" M Power Fascia lights with Stud mounts, 6 LED 9-32 Volt SAE with 1.5" Pigtail with clear lens and white housing, to be mounted on the rear lip of the hood of the chassis. Separate the lights by approximately 16". Lights are to be red on the passenger side and white on the driver side. Shut off button to be programmed in the emergency master menu.

3.26 GROUND FAULT CIRCUIT INTERRUPTER-GFCI

Y___N___

A 125 VAC, 20 AMP circuit breaker with ground fault circuit interrupter (GFCI) electronic ground leakage detection shall be installed in the load center for the shoreline circuit.

3.27 MODULE DISCONNECT - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

An In-Power 15 minute, nonadjustable disconnect shall be installed to keep the module power switch engaged, after the ignition is switched to the "off" position. This disconnect can also be activated from the side and rear doorways to turn on the check-out lights.

3.28 REVERSE -TRANSMISSION- FUNCTIONS - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

The system shall be programmed to provide activation for the rear outboard warning lights, the rear side warning lights, the rear scene lights, and the rear side scene lights, when the transmission selector lever is placed into "reverse" position.

3.29 SPARE CIRCUIT - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

One (1) spare 15-amp circuit shall be provided.

3.30 WIRING HARNESS CONNECTORS - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

All wiring harnesses shall be connected via quick connect circular plug connectors.

3.31 VOLTMETER - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

One (1) digital voltmeter shall be provided on the master control console screen.

3.32 WARNING DISPLAY - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

A digital warning display shall be integrated into the cab display console and programmed through the multiplex system to provide visual and audible indications for: Parking brake set condition, Parking brake release condition, Patient status alarm (four color with reset capability), Individual outside storage compartment "door open" warnings in vehicle outline form, Low voltage alarm, Low oxygen pressure alarm.

3.33 EMERGENCY MASTER SWITCH - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

A single emergency master switch shall be supplied for activating all the emergency warning lights and shall be provided on the master control console screen. The emergency master switch will activate the module power automatically. There shall also be an Emergency Master Menu button which shall allow access to individual warning light functions.

3.34 CONTROL PANEL SWITCHES - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

The switches on the master control console and attendant control panel screens shall have dimmable perimeter backlighting for easy identification.

3.35 MODULE POWER SWITCH - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

A module power switch for the electrical system shall be provided on both the Master Control Console and the Attendant Control Panel screens.

3.36 PARK OVERRIDE - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

A park override switch, located on the master control console screen, shall reactivate all lights disabled when the transmission is placed in the neutral/park position.

3.37 LOAD MANAGER-SEQUENTIAL SWITCHING SYSTEM - MULTIPLEX ELECTRIC SYSTEM

Y___N___

The load manager-sequential switching system shall be controlled by the microprocessor based electrical system. The emergency master button shall control the sequential switching of the emergency lights and/or other warning devices. The load manager shall automatically shed non-critical electrical loads during low voltage conditions to help prevent electrical system overload when the vehicle is stationary, and the transmission is in the park position.

3.38 FRONT CLEAR DISABLE SWITCH - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

Activation of the switch on the master control console screen shall disable all forward-facing clear warning lights.

3.39 MASTER CONTROL CONSOLE (MCC) - MULTIPLEX ELECTRICAL SYSTEM

Y___N___

A floor mounted Master Control Console (MCC) shall be located in the cab. The console shall house the siren and the color microprocessor display screen, which will control all the Emergency Warning functions as well as also being able to control the Patient Compartment lighting and module heat/ac functions.

3.40 CURBSIDE SCENE LIGHTS ON WITH CURBSIDE DOOR Y___N___

The Curbside scene lights shall be programmed to activate when the Curbside door is in the open position.

3.41 REAR SCENE LIGHTS ON WITH REAR DOORS OPEN Y___N___

The rear scene lights shall be programmed to activate when the rear doors are in the open position.

3.42 DISABLE SWITCH FOR REAR SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM Y___N___

A disable switch shall be installed at the rear door area to disable the rear scene lights.

3.43 DISABLE SWITCH FOR SIDE SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM Y___N___

A disable switch shall be installed at the curbside door area to disable the curbside scene lights.

3.44 VISTA IV MCC - PUSH BUTTON Y___N___

A Weldon V-MUX Vista IV interface module / display screen shall be provided and installed in the cab. The Vista module shall be operated through the use of push buttons.

3.45 VISTA DISPLAY SCREEN - PUSH BUTTON - CURBSIDE - FIXED ANGLED Y___N___

One (1) Vista screen shall be provided in the patient compartment on the curbside wall on a fixed angled mount with removable plate.

3.46 SYSTEM ACTIVE AND CHECK OUT LIGHTS - 10 MINUTES Y___N___

A switch shall be located at the curb and rear entry doors that will allow activation of the V-MUX electrical system. There shall also be a check out light switch located at the curb and rear doors that will allow activation of the left LED angled lights prior to entering the module. The system shall be programmed to shut down automatically after 10 minutes unless the ignition is on. This shutdown delay shall be user adjustable.

3.47 DAYTIME RUNNING LAMPS - MULTIPLEX ELECTRICAL SYSTEM Y___N___

The OEM Daytime Running Light Headlights, for daytime operation when transmission is placed in drive, as a feature of the multiplex system. (If not standard on the chassis). The OEM Daytime Running Light Headlights shall be activated, for daytime operation, when transmission is placed in drive as a feature of the multiplex system. (If not standard on the chassis).

3.48 BATTERY CONVERTER - CHARGER Y___N___

A Progressive Dynamics #PD9245C, 45-amp, 125V AC to 13.6V DC converter shall be connected to the shoreline inlet and be capable of maintaining the batteries when plugged in.

3.49 USB - DUAL OUTLET, ONE (1) INTERIOR LOCATED ON CONSOLE Y___N___

One (1) dual USB port outlet, 5 volt / 2.1 amp, shall be installed on the Master Control Console in the cab. The outlet shall have power and ground for charging equipment, such as cell phones, iPad, etc.

3.50 OUTLET, 125VAC - ONE (1) INTERIOR DUPLEX - LEFT WALL ACTION AREA

Y___N___

One (1) 2-wire +plus ground 125 VAC hospital grade duplex outlet shall be installed in the street side wall in the primary action area, with wiring connected to the shoreline. An indicator lamp shall be located within the 125 VAC outlet as a line monitor to indicate a live circuit. The outlet shall be labeled, "125 VAC".

3.51 OUTLET, 125VAC - ONE (1) INTERIOR DUPLEX - FRONT WALL CABINET

Y___N___

One (1) 2-wire +plus ground 125 VAC hospital grade duplex outlet shall be installed in the front wall cabinet, with wiring connected to the shoreline. An indicator lamp shall be located within the 125 VAC outlet as a line monitor to indicate a live circuit. The outlet shall be labeled, "125 VAC".

3.52 RECEPTACLE SHORELINE INLET-SUPER 20 AMP, AUTO EJECT - YELLOW COVER

Y___N___

A Kussmaul super auto eject shoreline inlet receptacle with yellow cover shall be installed on the module exterior (forward Streetside) near the driver's door. The receptacle shall be equipped with an integral dynamic disconnect.

3.53 SHORELINE INDICATOR LIGHT- ALLIED VCC GREEN MINI NEON - EXTERIOR MOUNTED

Y___N___

An Allied VCC green mini neon indicator light will be installed on the module and located near the shoreline inlet. The indicator shall illuminate when shoreline power is present at the outlet.

3.54 LIGHT, ATTENDANT CONTROL PANEL AREA - TECNIQ SILHO-X LED - WARM WHITE

Y___N___

A Tecniq Silho-X 2.75" round warm white LED light with SS trim ring, shall be mounted above the left wall forward action area counter. The light shall be operated through a button on the ACP Vista screen labeled "Attendant Light"

3.55 RADIO TIE-IN POINT - (1) 12V/40 AMP - CAB CONSOLE AREA

Y___N___

Install one (1) set of 12 volt/40 amp radio tie-in points in the cab console: one (1) battery hot, one (1) ignition hot, and one (1) "grounded" stud rated for a maximum of 250 amps.

3.56 RADIO TIE-IN POINT - (1) 12V/40 AMP - PATIENT COMPARTMENT

Y___N___

Install one (1) set of 12 volt/40 amp radio tie-in points in the patient compartment: one (1) battery hot, one (1) ignition hot, one (1) "grounded" stud rated max 250 amps.

3.57 RADIO TIE-IN POINT - (1) 12V/400 AMP - PDQ

Y___N___

Install one (1) set of 12 volt/40 amp radio tie-in points PDQ: one (1) battery hot, one (1) ignition hot, and one (1) "grounded" stud rated for a maximum of 400 amps.

3.58 Ten (10) Whelen 600 series super LED warning lights with chrome bezels shall be installed on the module front. There shall be four (4) red w/clear lenses and four (4) clear lights. The outer most warning lights on each side shall be Whelen red Roto beam. Roto/W/R/W/R/W/Roto, below the condenser there shall be three Whelen 600 LED's R/W/R. The first inside white and red on each side shall be scan lock flash pattern. All lights including Roto beams to have clear lenses.

Y___N___

3.59 Install nine (9) Whelen 600 Series LED lights on the rear of the module: End lights each side shall be (2) Whelen Red Rotobeam lights, two (2) 600 red LED lights, two (2) 600 blue LED lights, (2) 600 clear LED load lights and one center 600 amber LED light. Inner red and blue light on each side to be scan lock flash. All lights to have clear lens with chrome bezels. Roto/R/B/Load/A/Load/B/R/Roto

Y___N___

3.60 Install four (4) Whelen 600 super LED lights with chrome bezels on the rear of the module, in a stacked configuration, at window level, two (2) each module side, for a total of four (4) lights. The two (2) upper lights shall have red LED with clear lenses and the two (2) lower lights shall have one (1) amber LED with clear lenses, and one (1) blue with clear lens. Flash pattern per KKK.

Y___N___

3.61 Install one (1) Whelen 500 series brake light on the rear of the module. Light is to be installed beneath the center Whelen 600 amber light.

Y___N___

3.62 Six (6) Whelen 900 series 24 diode LED scene lights with chrome bezels shall be installed, three (3) each module side, inboard of the warning lights, with one (1) centered on each side.

Y___N___

3.63 CLEAR LENSES ON ALL WARNING LIGHTS
All warning lights to have clear lenses

Y___N___

3.64 LIGHTS GRILLE - 4 WHELEN 500 SUPER LED
Four (4) Whelen 500 series super LED warning lights, with waterproof connectors shall be installed the grille area of the chassis. The lights shall operate from a switch on the master control console labeled "Flashers".

Y___N___

3.65 GRILLE WARNING LIGHT LOCATION 1 - RED
The warning light located on the grille in location 1 shall be red.

Y___N___

3.66 GRILLE WARNING LIGHT LOCATION 2 - RED
The warning light located on the grille in location 2 shall be red.

Y___N___

3.67 GRILLE WARNING LIGHT LOCATION 3 - WHITE
The warning light located on the grille in location 3 shall be white.

Y___N___

3.68 GRILLE WARNING LIGHT LOCATION 4 - WHITE

Y___N___

The warning light located on the grille in location 4 shall be white.

3.69 STRAIGHT PATTERN WARNING LIGHTS

Y___N___

The front warning lights will be aligned in a straight pattern across the module.

3.70 LIGHTS, ICC / LED CLEARANCE - ON MODULE FRONT - TECNIQ

Y___N___

The vehicle shall have five (5) amber Tecniq LED (S33-AA00-1) clearance / ICC lights on the front of the module near the roof line.

3.71 LIGHTS, FRONT MODULE TURN SIG - WHELEN 600 LED ARROWS AMBER

Y___N___

One (1) pair of Whelen 600 LED amber turn arrows in chrome bezels shall be mounted on the front of the module under the warning lights.

3.72 LIGHTS, ICC / LED CLEARANCE - ON MODULE REAR - TECNIQ

Y___N___

The vehicle shall have five (5) red TECNIQ LED (S33-RR00-1) clearance / ICC lights on the rear of the module near the roof line.

3.73 LIGHTS, REAR TAIL - WHELEN 600 LED STOP, TURN, & MINIMUM INTENSITY BACK-UP

Y___N___

One (1) pair each of Whelen 600 series LED stop/tail lights, turn lights, and MINIMUM intensity LED back-up lights with chrome bezels shall be installed on the rear of the module.

3.74 LIGHTS FRONT INTERSECTION - 2 WHELEN 700 LED W/15 DEGREE TILT HOUSING

Y___N___

Two (2) Whelen 700 series super LED warning lights, with water-proof connectors, shall be mounted in 15 degree tilt housings on the front chassis fenders, one (1) on each side. The lights shall operate from a switch on the master control console labeled "Flashers". NOTE: When vehicle is placed in park, the override switch must be on for intersection light(s) to remain on.

3.75 FRONT INTERSECTION LIGHT LOCATION 1 - RED

Y___N___

The warning light located on front of the chassis fender in location 1 shall be red.

3.76 FRONT INTERSECTION LIGHT LOCATION 2 - RED

Y___N___

The warning light located on front of the chassis fender in location 2 shall be red.

3.77 LIGHTS INTERSECTION REAR - 2 WHELEN 700 LED

Y___N___

Two (2) Whelen 700 series super LED warning lights with, chrome flanges and water-proof connectors, shall be installed above the rear wheel wells, one (1) on each side. These lights shall operate from a switch on the master control console screen labeled "Flashers". NOTE: When vehicle is placed in park, the override switch must be on for intersection light(s) to remain on.

3.78 REAR INTERSECTION LIGHT LOCATION 1 - RED

Y___N___

The warning light located on above the rear wheel well at location 1 shall be red.

3.79 REAR INTERSECTION LIGHT LOCATION 2 - RED

Y___N___

The warning light located on above the rear wheel well at location 2 shall be red.

3.80 LIGHTS, ICC / LED CLEARANCE - ON MODULE SIDE - TECNIQ

Y___N___

The vehicle shall have two (2) Tecniq (S330) red mini-LED marker lights: one (1) red on each side at the rear of the vehicle which will also flash with turn signal.

3.81 LIGHTS SIDE WARNING - 4 WHELEN 900 SUPER LED

Y___N___

Four (4) Whelen 900 series super LED warning lights with chrome flanges shall be installed, two (2) on each side of module exterior. These lights shall operate from a switch on the master control console labeled "Flashers".

3.82 SIDE WARNING LIGHT LOCATION 1 - RED

Y___N___

The warning light located on side of the module, in outer location 1 shall be red.

3.83 SIDE WARNING LIGHT LOCATION 2 - RED

Y___N___

The warning light located on side of the module, in outer location 2 shall be red.

3.84 SIDE WARNING LIGHT LOCATION 3 - RED

Y___N___

The warning light located on side of the module, in outer location 3 shall be red.

3.85 SIDE WARNING LIGHT LOCATION 4 - RED

The warning light located on side of the module, in outer location 4 shall be red.

3.86 AWS ALUMINUM CERTIFIED WELDERS

Y___N___

AWS Aluminum Certified Welders shall construct the module. AWS certificates shall be required to be part of the completed bid packet. Bids without AWS certificates shall be considered non-compliant (no Exception).

3.87 CONNECTIONS, MODULE

Y___N___

The module shall be bolted to the chassis frame rail with (12) 5/8" -11 grade 8 bolts through OEM rubber insulating spacers installed on outriggers at twelve (12) separate locations (six each frame rail), providing noise insulation and easy removal for chassis replacement. The frame mounting bolts shall be properly torqued and secured with Loctite. The system used for fastening the module to the frame shall be that approved by the chassis manufacturer.

3.88 INSULATION - POLYURETHANE SPRAY FOAM

Y___N___

The walls, ceiling, passage doors, outside storage doors, the entire underside of the module floor (except for mounting pads), the underside of the outside storage compartments, the wheel wells, and the underside of the curbside step area shall be completely foam - in - place insulated with nominal 3/4" thick sprayed on Class I, urethane foam for thermal and acoustical insulation. The insulation shall comply with FMVSS #302 flame spread requirements. The underside of the body shall be properly prepared to ensure adhesion before the spray insulation is applied.

3.89 MODULE BODY CONSTRUCTION – SEAMLESS

Y___N___

The module shall be fabricated entirely of parts cut and formed from .125" (minimum) thickness 5052-H32 flat aluminum sheet stock, using CNC machines capable of .010" repeatability. This is the only alloy that may be used for body parts that are welded together. The roll-cage type interior super-structure, aluminum partition and module shall all be welded together into a single unit to give optimum strength for patient and attendant protection. The module roof shall be designed with a minimum 1.5" crown to facilitate water run-off. The floor, roof, sides, and all exterior doors shall be fabricated from .125" (minimum) thick flat aluminum sheet stock. The exterior joints between the roof and side components shall be continuous full seam welded the entire length of the module. All exterior body panel joints shall be continuous full seam welded. No VHB bonding tape or other adhesives shall be used in the construction of the ambulance module.

3.90 SOLE SOURCE MODULE BODY CONSTRUCTION

Y___N___

It is required that the manufacturer of this vehicle have the ability to manufacture a completed ambulance, with the exception of the chassis, within their own manufacturing facility. The modular body must be built in the manufacturer's facility and shall not be the product of a subcontractor or any company other than the manufacturer.

3.91 A Cast Products license plate holder shall be installed on the rear of the module located on the streetside below the taillights. The holder shall be recessed into the module and shall have dual Whelen Mini LED lights, which activate with the chassis headlamp switch. (Holder #16415)

Y___N___

3.92 Two (2) Trucklite Red Super 44 LED lights shall be installed, one (1) each on the rear passage door interior panels. The lights will be located in the lower-outer corners, with doors in the opened position. Lights to flash with the rear passage door opens. (#96998) Two (2) additional Red Truck lite 44's are to be installed on the interior rear facing exterior compartment #3 and #4 doors. Lights are to be located on each lower outer corner. The lights shall random flash upon door opening.

Y___N___

3.93 Bright dip anodized polished solid aluminum rub rails shall be installed on the lower sides of the body below the outside compartment sill areas. Also, a mid-height rub rail. The rails are to be 1" thick and 1.5" wide. The rub rails shall be offset 3/16" from the body to facilitate wash down of road debris. Add a second rub rail at mid body height, one on each side of the module. Second rub rail should be solid anodized aluminum to match previous Boston EMS units. Ensure that mid height rub rail does not interfere with sliding side door.

Y___N___

4. EXTERIOR STORAGE/COMPARTMENT DOORS

4.1 Outside storage compartment #1 shall have a fixed shelf that will be located above the EZ O2 lift, the shelf shall have rubber gasket installed to seal the oxygen area from the upper section. There shall be two (2) Zico QR-D-2 brackets installed on the back wall of the compartment at floor level.

Y___N___

4.2 OSS#3 STREET SIDE REAR to be built per dimensions and have a clear opening 60.25h x 33.25w, inside dimensions 63.25 x 36.75w x 20.75d /

Y___N___

4.3 HOLD-OPEN - REAR DOORS - GRABBERS Door grabbers (2 pair) for a total of 4 with hard rubber inserts shall be installed on the rear doors. for location.

Y___N___

4.4 SLIDING DOOR (REQUIRED)

Y___N___

Install a sliding curb side door. Curb door to have drain below the lower Track.

Hinged doors are not acceptable.

4.5 Install a Whelen mini LED FLASHING amber warning light in a 45-degree housing to rear upper head pad to flash when rear step is up. Black/yellow "CAUTION" sticker located near light in rear head pad, per attached photo. A yellow / black sticker to be installed on the bottom side of the rear bumper stating, "Step is up", approximately 6"W x 4"H. Rear step is to be grip strut. Install additional support in rear step.

Y___N___

4.6 LATCH ACCESS PLATES, TOP/BOTTOM OF DOOR

Y___N___

Install latch access plates with 2" holes at the top and bottom of the interior of the rear doors for serviceability.

4.7 OOS 4 CURB SIDE REAR has been modified in width and shall be built per dimensions. 71.75 H X 20.75 W, inside dimensions of 81.5 H x 24.25 W 20.5 D. 4 A Compartment to have backboard / scoop storage to rear of the divider, this area shall have an aluminum strip at the top to prevent backboards from falling out. Forward portion 4B 41.5 H x 16.875 W to have two (2) adjustable shelves on a Unistrut track and a fixed shelf above the stair chair(s) storage, this area shall have inside / outside access to the patient compartment. Lower portion shall have storage area for Ferno model 40 stair chair to the forward end of the compartment 4D and shall be 7.5" w, rear of that shall be 4C is 9 5/8" W, this is storage for Stryker stair chair Pro Model 6252 with a fixed divider between. Compartment shall open past 90 degrees. Remove gas shock, install door grabber so door can open fully. Install a seat belt type strap across the entire lower compartments.

Y___N___

4.8 Each outside storage compartment shall be equipped with clear round Truck lite model 44 LED lights. OSS 1-2-3-4 have two (2) 4" round lights. (This does not include OSS #5 / Lower Ft wall cabinet or the battery compartment) 8 lights total. The battery compartment OSS#5B shall contain a clear mini-LED light (p/n 16709) per KKK requirements.

Y___N___

4.9 The upper portion of the OSS #2 compartment will have inside/outside access to interior streetside cabinet #7. The lower 12" of the compartment shall be boxed off for an additional battery and the door shall be vented and sealed. SHELF TRACK - EXPOSED - OSS #2 Install exposed shelf track in OSS #2 (Exposed tracks will be welded in place and coated with Gatorhyde material for a cleaner look and no exposed fasteners) dimensions: clear opening 48.25 H x 19" W. inside dimensions are 51.25 H x 26. W x 20.75D

Y___N___

4.10 OSS #5 curb side forward 43.25 H x 13.50 W ,The two (2) adjustable shelves to have no lips. OSS#5 to be split into two (2) compartments. Lower below frame rail for battery compartment. Add structural support under the shelves so that equipment can easily be removed from the shelves. Gas shock to be located so that the OSS#5 door can open as far as possible without hitting the cab door.

Y___N___

4.11 Protector on the face of the module to be extended. Should be as long as possible without hitting the cab. Protector should prevent water or snow from settling on the pass thru boot.

Y___N___

4.12 ALUMINUM PARTS - MODULE EXTERIOR

Y___N___

All unpainted exterior aluminum parts shall be bright dip anodized after fabrication to retain the finish and increase corrosion resistance.

4.13 CORROSION MINIMIZATION - MODULE

Y___N___

All module contact with dissimilar metals shall be minimized with the use of nylon screw-hole inserts to provide hinge to door isolation with the module body, polypropylene strip hinge Isolation, polyethylene backed rubber tape, ceramic coated stainless steel hinge bolts, and ECK brand corrosion inhibitor spray.

4.14 DOOR CONSTRUCTION - GASKET PLACEMENT

Y___N___

All exterior hinged module doors shall be constructed in an inverted pan-formed design. The pan shall be constructed from .125" thick 5052-H32 flat sheet aluminum. The exterior door skin shall be constructed of .190" thick aluminum and welded to the pan. Door gaskets shall be attached to the interior side of the door skin on the top, bottom and outer edge of the door. The gasket on the hinge side of the door will be attached to the door frame.

4.15 EXTERIOR COMPARTMENTS - SWEEP-OUT

Y___N___

Exterior module compartments shall be of a sweep-out design to aid in facilitation of the purchaser's routine care and cleaning of the vehicle.

All exterior compartment floors, with the exception of the front ALS compartment shall be constructed to be flush with the bottom door frame.

4.16 EXTERIOR COMPARTMENTS, VENTING

Y___N___

A minimum of nine (9) square inches of venting shall be provided inside the #1, #2, #3, & #4 exterior storage compartments to provide for easier closure of the compartment doors.

4.17 EXTERIOR COMPARTMENTS, VENTING - OXYGEN STORAGE

Y___N___

A minimum of nine (9) square inches of venting shall be provided in the exterior oxygen storage compartment, to dissipate any leaking oxygen gas.

4.18 HANDLES, EBERHARD - CHROME FREE FLOATING TYPE

Y___N___

Eberhard #EMC-1-2110 chrome "free-floating" handles shall be installed on each exterior module door. The handles shall be large enough to accommodate a gloved hand.

4.19 LOWERED MODULE SIDES

Y___N___

Module sides to be as low as possible and still comply with KKK-1822-F ramp break over angle. Lowered sides will allow easier entry into the module as well as increased compartment storage.

4.20 STEPWELL, CURBSIDE DOORWAY

Y___N___

An aluminum diamond plate step well liner shall be installed in the curbside doorway step area.

4.21 THRESHOLD, STAINLESS STEEL - ALL OSS STORAGE COMPARTMENTS

Y___N___

Each exterior storage compartment with a hinged door shall have a stainless-steel lower threshold at the door opening to protect the paint as equipment is installed and removed from the compartment.

4.22 SOUND DEADENING PACKAGE

Y___N___

Audioguard acoustic coating shall be applied to help reduce structure-born vibrations and associated sound transmission. The entire floor, the left wall, the ceiling, and the left and right panels forward of the partition shall be covered at the manufacturers recommended thickness.

4.23 UNDERCOATING SEAL

Y___N___

The entire underbody (excluding drive shaft, wheels, fuel tank, and 12" either side of exhaust system) shall be sprayed with an undercoating seal for reduced corrosion.

4.24 STONE GUARDS, MOD FRNT -ANODIZED DIAMOND PLATE

Y___N___

An anodized aluminum diamond plate stone guards shall be installed, on module front, (1) each side.

4.25 DOCK BUMPERS, REAR

Y___N___

Formed hard rubber dock bumpers shall be attached to the rear bumper.

4.26 DOORS - REAR PASSAGE

Y___N___

There shall be a 47.50" wide x 59" high rear door opening in the patient compartment. The doors shall be flush without a protruding flange or lip. The right rear passage door shall have a lockable,

chrome exterior handle. The left rear door shall have a non-locking, chrome exterior handle. All handles shall be installed with a gasket to protect the paint. The hinge shall be full length stainless steel with a 3/16" stainless steel hinge pin and shall be two-way adjustable. Each rear door shall have a two-point slam action automotive type rotary latching system to the body. The right rear door shall lock to the body at the top and bottom, not to the left rear door. The doors shall have .213" steel door latch activator rods with clevis adjusters. The doors shall be lockable from the inside and outside. All doors shall shut on molded, air-core, automotive type door seals to prevent any water from leaking into the vehicle interior.

4.27 WINDOWS, PASSAGE DOOR - (CURB SLIDING, REAR SLIDING)

The curbside passage door shall have a 16" x 23" openable (sliding) window with removable screen. Each rear passage door shall have a 19" x 18" openable (sliding) window with removable screen. The distance between the rear window glass shall not exceed 6" to assure maximum vision to the rear. The windows shall have a 69% dark tint and shall be secured with black oxide coated fasteners. No warning lights shall be blocked from view when the curbside or rear doors are open.

4.28 FENDERETTES - RUBBER

Black rubber fenderettes shall be installed around the rear wheel well openings.

Y___N___

4.29 KICKPLATE/THRESHOLD, REAR DOORWAY - ANODIZED DIAMOND PLATE

An anodized aluminum diamond plate kick plate shall be installed at the rear exterior doorway, providing a kick / scuff plate at the rear of the vehicle above the rear step.

Y___N___

4.30 MUD FLAPS, REAR - BLACK RUBBER FIBERGLASS REINFORCED - THREE COLOR

Black rubber, fiberglass reinforced mud flaps with a minimum 1/4" thickness shall be bolted to the underside of the module behind the rear wheels. The width and length of the flaps shall provide adequate coverage of the rear dual wheels of the chassis. The mud flaps shall be three colors with the Manufacturers Logo.

Y___N___

4.31 TOW HOOKS, MODULE REAR

Two (2) tow hooks shall be provided in the rear step area and shall be securely fastened to the rear step braces.

Y___N___

4.32 DOOR SKINS, OUTSIDE STORAGE COMPARTMENTS - DIAMOND PLATE INTERIOR SKINS

The interior door skins for all outside storage compartments shall be constructed of .063" thick aluminum diamond plate.

Y___N___

4.33 OSS #1 - STREETSIDE FORWARD

77.75H x 18.50 W, inside dimensions 87.5 H x 22 W x 20.75 D. There shall be an outside storage compartment OSS #1, (streetside forward) with a hinged door held open by a spring-loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

Y___N___

4.34 OSS #1 - EZ-O2 LIFT OXYGEN SYSTEM

Y___N___

There shall be an outside storage compartment OSS #1, (streetside forward) with an EZ-O2 lift system, for housing an O2 cylinder.

4.35 OSS #1 - OXYGEN STORAGE EZ O2 LIFT

Y___N___

An E-Z O2 lift shall be mounted to the door as an assisted lift for the H and M cylinders. It is operated using body weight to lower the cylinder to the ground and lock into position. The cylinder can be returned to the loaded and locked position with a minimum input from the operator. This mechanically operated lift does not require an electrical source running into the compartment. (Note - Aluminum O2 cylinders will require greater body weight to lower the cylinder to the ground. The cylinder will return to the loaded and locked position without additional input from the operator.) The lift system shall not be purchased from an outside vendor. No alternatives shall be accepted. The compartment shall also contain a spring-loaded, hinged acrylic door shall be provided to allow access from inside the patient compartment to the oxygen cylinder valve. Restraining devices shall meet AMD standard 003, oxygen tank retention system requirements. A cylinder changing wrench shall be provided and secured inside the oxygen compartment. A nine (9) square inch minimum vent shall be provided in the oxygen compartment to dissipate any leaking oxygen gas. The oxygen cylinder shall be provided by the purchaser.

4.36 OSS #2 - STREETSIDE CENTER

Y___N___

dimensions: clear opening 48.25 H x 19" W. inside dimensions are 51.25 H x 26. W x 20.75D.
There shall be an outside storage compartment OSS #2 (streetside center) with a hinged door held open by a spring-loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

4.37 OSS #2 - (2) ADJUSTABLE SHELVES

Y___N___

There shall be an outside storage compartment OSS #2, (streetside center) with two (2) adjustable shelves.

4.38 OSS #2 - SHELVES TWO (2) ADJUSTABLE WITH TRACK

Y___N___

Outside storage compartment #2 shall contain two (2) adjustable shelves with track.

4.39 OSS #3 - STREETSIDE REAR TALL DOOR

Y___N___

dimensions and have a clear opening 60.25h x 33.25w, inside dimensions 63.25 x 36.75w x 20.75d.
There shall be an outside storage compartment OSS #3, (streetside rear, tall door) with a hinged door held open by a spring-loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

4.40 OSS #3 - SHELVES TWO (2) ADJUSTABLE WITH TRACK

Y___N___

Outside storage compartment #3 shall contain two (2) adjustable shelves with track.

4.41 OSS #4 - CURBSIDE REAR

Y___N___

Overall dimensions are 71.75 H X 20.75 W, inside dimensions of 81.5 H x 24.25 W 20.5

There shall be an outside storage compartment OSS #4 (curbside rear) with a hinged door held open by a spring-loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

4.42 OSS #4 - FIXED DIVIDER

Y___N___

One (1), fixed divider with sprayed on polyurethane material shall be provided and installed in outside storage compartment.

4.43 OSS #4 - SHELVES TWO (2) ADJUSTABLE WITH TRACK

Y___N___

There shall be two (2) adjustable shelves with track in outside storage compartment #4.

4.44 OSS #5 - CURBSIDE FORWARD

Y___N___

Overall dimensions 43.25 H x 13.50 W

There shall be an outside storage compartment OSS #5 (curbside forward) with a hinged door held open by a spring-loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

5. INTERIOR STORAGE/CABINETS/ACCESSORIES

5.1 Primary action area with counter suction, suction control, 125VAC/ (2) 12VDC outlets, (2) oxygen outlets, bypass, and Vista on a flat removable panel.

Y___N___

5.2 Nine (9) Whelen #LED (80C0EHCR) dome lights, shall be installed IPOS in the patient compartment.

Y___N___

5.3 Install a front wall cabinet #4, 10h x 18.5w x 20d to be located above the pass thru cabinet is to have drop down aluminum door and secured with a locking center squeeze latch with heavy duty key and keyed alike with lower front wall cabinet.

Y___N___

5.4 Bench to be split at the sharps / trash area. There shall be a divider to separate the sharps/ trash area from the rest of the squad bench. The sharps / trash is to be recessed with a hinged acrylic lid. Boston style squad bench. The sharps and trash openings in the lid shall be small enough as not to allow sharps or trash to fall past the sharps or trash container, containers should not rattle in the holder. Utilize Boston EMS med sized sharps box from bottom to top with no spacer, area to be sealed from rest of compartment for easy cleaning. Includes EVS seating reference (#SQSTOP3) <<http://catalog.bd.com/nexus-ecat/getProductDetail?productId=305489>> 6.9 qt for under the bench seat.

Y___N___

5.5 Net, Squad Bench - yellow shall be installed at the head of the squad bench.

Y___N___

5.6 Interior FRONT WALL RIGHT: The lower front wall cabinet shall be split into two (2) equal sized compartments. Door openings are 21" H x 25.25W. the Inside dimensions are 24.75H x 31.50 W x 17.75D. Each compartment shall have one (1) adjustable shelf. No lips shall be installed on shelves. Lower front wall #2 to have hinged polycarbonate doors with full length handles and to be secured with a non-locking center squeeze latch. Lower front wall #3 to have hinged solid aluminum doors with vents IPOS. Lower front wall cabinet #3 to have heavy duty key for squeeze latch on the left door of the cabinet and the left door shall overlap the right door to hold it shut. The lower font wall #3 and cabinet #4 on the front wall are to be keyed alike.

Y___N___

5.7 Front wall cabinet #1 upper top right has been modified due to the heat/ac and shall be built per 16.5 h x 13.75 w x 16 d. dimensions. Cabinet shall contain one adjustable shelf and be enclosed by a flip up hinged aluminum door with a polycarbonate insert, with gas hold open and to be secured with a center squeeze latch.

Y___N___

5.8 PDQ Power Distribution Quarters to have Medeco key lock.

Y___N___

5.9 Install a left wall cabinet #7 below the forward section of the extended primary action area 14.25 h x 22.75 w dimensions and location. Cabinet will provide inside/outside access to OSS#2 and be enclosed by a set of sliding polycarbonate doors.

Y___N___

5.10 Install recessed aluminum countertop in the streetside action area modified in length to be 60" long.

Y___N___

5.11 Install a 3.3 qt. sharps container recessed in the action area counter. The container shall have an acrylic lid, lid shall have a drop-in area and shall flip up to replace the container. The drop-in hole shall not be larger than the opening for the sharp's container, sharps shall not be able to fall past the sharps container. There shall be no spacer and opening shall be flush with lid.

Y___N___

5.12 An SSCOR suction system shall be installed on the primary action area wall near the attendant's seat. The 12 VDC SSCOR electric vacuum pump to be installed in the upper forward most wall of OSS#3 ref previous units.

Y___N___

5.13 Install a left wall #2 10.5 h x 24.5 w dimensions and location 2nd cabinet from rear. Cabinet is to have one (1) adjustable shelf and be enclosed by a set of sliding polycarbonate doors with flip up restocking frame. Install heavy duty push to close latches on restocking frame.

Y___N___

5.14 Lower left wall cabinet #4 shall be built 18.5h x 20.5 w dimensions and location are mid line with the lower edge even with the counter top. It contains two (2) adjustable shelves. Cabinet

Y___N___

shall be enclosed by a set of sliding polycarbonate doors attached to a flip up restocking frame. Install heavy duty push to close latches on restocking frame.

5.15 Left wall cabinet #1 locator top rear. Cabinet is to be built 15h x 16.75w dimensions. Cabinet is to have one (1) adjustable shelf. Cabinet is to be enclosed by a set of sliding polycarbonate doors attached to a flip up restocking frame. Install heavy duty push to close latches on restocking frame.

Y___N___

5.16 Below the pass thru window there shall be a flat aluminum counter. Below the counter there shall be two (2) pull out drawers. Drawers are to be secured with stainless steel flush pull latches, each drawer to have an oval shaped 900 series Simplex lock dimensions of drawers are 8 h x 16.5w x 16 d.

Y___N___

5.17 A 12 VDC controlled electric O2 system operated through the v-mux multiplex electrical system shall be provided and installed. Oxygen bypass valve located on the head end wall of the action counter.

Y___N___

5.18 HOSELINE HEAT

Install a Hoseline center ducted heat / ac system with brushless motors. The center duct shall be designed in such a way that the heat / ac system and front access panel can be removed without having to remove the entire center duct. Vista should not have a note on the display about the freeze thermostat or having to have the ac on in the chassis to make the ac in the module work, no special alerts.

Y___N___

5.19 Supply and Install Gates Heater Hoses

Y___N___

5.20 A Hoseline TMC2007 Aux AC condenser shall be installed on the front of the module. The condenser shall be top center mounted with PR-182-5 mounting brackets. Condenser and brackets shall be painted to match the Module.

Y___N___

5.21 Install an ESPAR auxiliary heater. Espar heater shall have stainless steel exhaust tube to match previous BEMS units. Exhaust shall exit on the driver's side rear of the rear wheels.

Y___N___

5.22 The lower left wall cabinet #5 13.5 h x 20.5 w added due to the deletion of the CPR seat. The cabinet shall contain one (1) adjustable shelf and be enclosed by a set of sliding polycarbonate doors, attached to a drop-down restocking frame. Install heavy duty push to close latches on restocking frame.

Y___N___

5.23 The upper forward left wall cabinet #3 is 10.5 h x 52.25w x. Cabinet is to have a center fixed divider with one (1) adjustable shelf on each side of the divider. Cabinet shall be enclosed by a set of sliding polycarbonate doors that are attached to a flip up restocking frame. A strap will be added to the center to support the frame. Install heavy duty push to close latches on restocking frame.

Y___N___

5.24 Does not include CPR seating area or secondary action area.

Y___N___

5.25 There shall be a vented radio cabinet located above the PDQ. This shall be for install of customer supplied radio equipment. To have large access holes going into compartment. Engineering to provide CAD layout of radio cabinet and streetside cabinets so wiring access and route can be approved by customer prior to build. Cabinet is to be built to match previous units, an access plate shall be installed to the radio cabinet and PDQ. The AVL panel shall be mounted to the left wall. The forward most wall towards the cab shall be left open with no closeout. Cabinet to have Medico key lock and Ridgeback LED strip light at the top.

Y___N___

5.26 Cabinet #4, curbside rear wall access to OOS4 33.75 H x 10.25 W dimensions and location. Cabinet will be enclosed with a right hinged polycarbonate door with full length handles and will be secured with a center squeeze latch. The cabinet will have inside/outside access to OSS #4.

Y___N___

5.27 Install cabinets #2 and #3 5.25 h x 28.25w on the curbside above the squad bench. Both cabinets are be enclosed with top hinged polycarbonate doors with gas shocks and center squeeze latches.

Y___N___

5.28 Install a left wall cabinet #6 under the extended primary action area counter 14.25h x 20.5 w dimensions and location below #4 (ILO CPR). Cabinet shall contain one (1) adjustable shelf and be enclosed by a set of sliding polycarbonate doors.

Y___N___

5.29 The PDQ (power distribution quarters) door and the radio cabinet door shall be secured with chrome locking lever latches. All remaining interior hinged cabinet doors with center squeeze latches. All interior drawers with locking flush pull latches. Location entire front wall left, left of pass thru.

Y___N___

5.30 Install a locking/sliding window in the rear of the cab to pass thru.

Y___N___

5.31 CABINET CONSTRUCTION - INTERIOR – ALUMINUM (REQUIRED)

Y___N___

All interior cabinets shall be constructed of .090" thick welded aluminum. Wood products shall not be used in the construction of any interior cabinet. All cabinet exteriors, interiors, drawer fronts, drawer interiors, and aluminum doors shall be sealed with a washable sprayed-on multi-use polychromatic coating.

5.32 CATCH, MAGNETIC - ADHESIVE BACK FOR INTERIOR DOOR(S) OVER 36 INCHES

Y___N___

All interior doors that are over 36" inches tall with a latch on the top of the door shall have an adhesive back magnetic catch installed on the bottom of the door.

5.33 EMBLEMS / SIGNS - REAR PATIENT COMPARTMENT

Y___N___

Two (2) "No Smoking / Oxygen Equipped / Fasten Seat Belts" signs shall be provided. One (1) sign shall be installed in the cab and one (1) above the oxygen outlets in the patient compartment street side cabinet.

5.34 FLOOR CONSTRUCTION- PATIENT COMPARTMENT, NON-WOOD COMPOSITE

Y___N___

The sub-floor in the patient compartment shall be constructed of .125" thick aluminum over .125" and .190" thick reinforcing hat sections and mounting laterals. The aluminum sub-floor shall be covered with a 3/4" non-wood composite material. All corner molding, edging and trim shall be anodized aluminum or stainless steel and shall be sealed to prevent fluids from seeping under the cabinets. Wood floors are not satisfactory and shall not be accepted by the purchaser.

5.35 FLOORING - COVE

Y___N___

The patient compartment floor radius shall be covered with pre-formed floor coving material. The coving shall be installed behind the vinyl floor covering, along both the street side and curbside walls.

5.36 HEADLINER - REAR PATIENT COMPARTMENT

Y___N___

The headliner in the patient compartment shall be one-piece, seamless, .090 thick aluminum finished with sprayed-on multi-use polychromatic coating.

5.37 HOLD OPENS FOR INTERIOR DOORS

Y___N___

All interior cabinets with doors less than 6" tall shall have gas shocks as hold opens for door(s). Doors 6" and taller shall be designed using gas shocks as hold opens for the door(s).

5.38 PADDED EDGING PROTECTION

Y___N___

Padded corner edging shall be installed where necessary on exposed corners and edges in the patient compartment for patient and attendant protection.

5.39 ROUNDED INTERIOR CORNERS

Y___N___

Interior vertical edges shall have rounded/padded corners in the following locations: forward and aft edges of the CPR seat (if provided), the wall at the aft end of the squad bench, and the partition opening cabinet edges, along with the upper front wall cabinet (if provided).

5.40 RECESSED ADJUSTABLE SHELF TRACK - CABINETS

Y___N___

Unistrut 13/16" x 13/32", 19-gauge channel shall be installed in the interior cabinets that contain adjustable shelves. The track shall be welded in and recessed to reduce the number of fasteners and provide a cleaner look.

5.41 UPHOLSTERY - RENAISSANCE - STEEL BLUE #9214

Y___N___

All cushion, head pads and seating surfaces shall be covered with Spradling International "Renaissance" Steel Blue #9214 expanded vinyl upholstery material. The vinyl and all foam

cushion material shall comply with FMVSS #302 flame spread requirements.

5.42 INTERIOR MODULE PADS

Y___N___

Vinyl upholstered, foam cushioned head/back pads shall be installed as follows: the lower edge of the upper front wall cabinet (above the partition doorway or window), above the rear doors, above the side door, and on the street side wall behind and on each side of the CPR seat. The pads shall be covered with a flame-retardant color coordinated vinyl upholstery material.

5.43 LONPLATE II, NON-SLIP EMBOSSED SM. GRID - GUNMETAL #424

Y___N___

The floor in the patient compartment shall be covered with Lonseal brand "Lonplate II" non-slip; small grid (embossed) Gunmetal #424, resilient sheet vinyl flooring material, which shall be covered 3-inches up the wall on the street side, and to the top of the squad bench base on the curbside. The flooring material shall be stripped and waxed before delivery.

5.44 INTERIOR CABINET DOOR HANDLES - All interior cabinet handles to be pre-drilled and bolted into place.

Y___N___

5.45 CABINET DOORS - CLEAR POLYCARBONATE

Y___N___

All cabinet doors shall be clear polycarbonate material. The sliding cabinet doors shall be installed in aluminum track lined with PPL inserts to eliminate rattles and prevent the doors from opening during transit. An edge mounted aluminum handle shall be installed on each sliding cabinet door.

5.46 CABINETS/ WALLS - POLYCHROMATIC COATING - CAMILLE WHITE

Y___N___

All exposed side walls, the partition wall (on the patient compartment side only), the headliner, along with the cabinet and drawer fronts, aluminum doors, cabinet and drawer interiors shall be covered with a washable #99-7372 Camille White sprayed-on multi-use polychromatic coating, to create a laminate-free interior.

5.47 COUNTERTOP - RECESSED ALUMINUM - POLYCHROMATIC SPRAY COATED

Y___N___

The countertop shall be recessed 3/4" to prevent equipment from sliding off. All countertop work surfaces shall be finished with multi-use poly-chromatic spray coating prior to being clear coated.

5.48 LATCHES, CABINET, CN10 COMPLIANT AS APPLICABLE

Y___N___

The ACP (attendant control panel) door and the PDQ (power distribution quarters) door shall be secured with chrome locking lever latches; all remaining interior hinged cabinet doors shall be secured with center squeeze latches. All interior drawers shall be secured with flush pull latches. Cabinet(s) shall be KKK-A-1822F Change Notice 10 compliant and conform to all applicable SAE J3058 requirements.

5.49 HOLD OPENS - SQUAD BENCH LID - GAS CYLINDERS

Y___N___

Two (2) gas cylinders hold -opens shall be provided and installed to hold the cushioned lid in the open and closed position.

5.50 SQUAD BENCH FACE - VINYL FLOORING MATERIAL

Y___N___

The face of the squad bench shall be covered with vinyl flooring material.

5.51 SQUAD BENCH BASE W/STORAGE

Y___N___

A storage area shall be provided in the squad bench base. The squad bench base shall be constructed of .090" thick aluminum for maximum storage capacity and minimum weight. The interior of the squad bench shall be sprayed with sound absorbing polyurethane material.

5.52 SEATING - ATTENDANT - EVS HiBAC, INTEGRAL CHILD, SWIVEL BASE CN8 COMPLIANT

Y___N___

A rear facing EVS HiBAC attendant seat shall be installed at the head of the patient cot. The seat shall be equipped with a SB-2, two position, sliding swivel base and incorporate an integral child safety restraint system. The seat shall be KKK-A-1822F Change Notice 8 compliant with V4 harness style shoulder / seat belt and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The seat shall be padded and covered with color coordinated, cushioned vinyl.

5.53 Attendant seat to be centered with the cot and shall also be moved forward to allow 9.45" from the face of the seat in neutral position to the head of the cot.

Y___N___

5.54 SEATING - CN8 COMPLIANT TWO (2) EVS V4

Y___N___

A Squad bench seat with two (2) EVS individual seating positions will be installed on the curb side of the patient compartment. The squad bench seat shall be KKK-A-1822F Change Notice 8 compliant with (2) V4 harness style shoulder / seat belts and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The headrest and backrest will be constructed of energy absorbing material. The seat bottom, backrest, and headrest shall be padded and covered with color coordinated, cushioned vinyl material.

5.55 ASSIST HANDLES, (2) 'V-BARS', (4) HANDLES, STAINLESS STEEL, YELLOW ANTIMICROBIAL

Y___N___

A total of six (6) stainless steel, yellow antimicrobial assist handles shall be provided: one (1) on the streetside to left of cabinet #4, one (1) at the curbside doorway, one (1) on the top left curbside sliding door, and one (1) to left of rear passage door. Two (2) stainless steel, yellow antimicrobial V - Bars shall be located one (1) on each rear passage door.

5.56 DOOR PANELS - MODULE PASSAGE DOORS - FULL LENGTH ALUMINUM - W/ACCESS PANELS

Y___N___

The inner door panels shall be manufactured from aluminum and covered with a washable sprayed-on multi-use polychromatic coating. The panels shall run the full length of the door and will contain a removable latch access panel.

5.57 EXHAUST VENTILATOR, 3-SPEED - MULTIPLEX ELECTRIC SYSTEM

Y___N___

A three-speed, 250 CFM (minimum) exhaust fan meeting KKK-A-1822F requirements shall be provided and located in the street side cabinet in the patient compartment. The exhaust fan shall be pulse width modulated from a switch on the attendant control panel vista screen. The exhaust system shall have a louvered grille inside and a chrome vent outside. The exhaust system shall vent through the side of the vehicle, not through the roof.

5.58 GLOVE DISPENSER - (3) BOX - ABOVE ENTRY DOOR - CURBSIDE (ABS)

Y___N___

A three (3) - box glove dispenser unit, with a 1/4" clear acrylic hinged access panel with three (3) cut-outs, shall be recessed above the curbside entry door. The dispenser shall be 8.25" high x 33.50" wide with interior dimensions of 5.38" high x 30.25" wide x 3.25" deep. A 1/4" turn latch will be installed on the face of the glove box access panel.

5.59 GLOVE DISPENSER - (3) BOX - ABOVE REAR DOORS (ABS)

Y___N___

A three (3) - box glove dispenser unit, with a 1/4" clear acrylic hinged access panel with three (3) cut-outs, shall be recessed in the head pad above the rear entry doors. The dispenser shall be 8.25" high x 33.50" wide with interior dimensions of 5.38" high x 30.25" wide x 3.25" deep.

5.60 GRAB RAILS, 1-1/4" DIAMETER, ANTI-MICROBIAL(YELLOW) 96" AND 64"

Y___N___

Two (2) 1-1/4" diameter stainless steel, yellow Anti-microbial grab rails shall be installed on the ceiling of the patient compartment. One (1) 64" rail shall be installed over the squad bench area and one (1) 96" rail shall be installed over the patient cot area for attendant/patient balance control. The 96" grab rail will be attached to the ceiling with three (3) mounting brackets that secure it to the super structure of the module. Installation of each grab rail shall comply with AMD-008 requirements.

5.61 IV HANGERS - CEILING RECESSED - CAST PRODUCTS #IV2008-1 (2)

Y___N___

Two (2) Cast Products #IV2008-1 recessed; dual, ceiling I.V. hangers shall be provided. One (1) installed near the Streetside above the cot area, and one (1) near the Curbside above the squad bench area.

5.62 OXYGEN OUTLET (2) LEFT WALL - OHIO MED - ACTION AREA

Y___N___

Two (2) Ohio Medical flush mounted; quick release wall outlets shall be installed in the forward street side cabinet action area.

5.63 OXYGEN OUTLET (1) RIGHT WALL - OHIO MED - HEAD END OF SEATING AREA

Y___N___

One (1) Ohio Medical flush mounted; quick release wall outlet shall be installed in the right wall above the head end of the curbside seating area.

5.64 OXYGEN OUTLET (1) CEILING - OHIO MED - ABOVE HEAD OF COT

Y___N___

One (1) Ohio Medical flush mounted; quick release oxygen outlet shall be installed in the ceiling above the head of cot in the center mount position.

5.65 FLOW METER, OXYGEN - THORPE STYLE

Y___N___

One (1) Thorpe style oxygen flow meter (15LPM) shall be shipped loose with the completed vehicle.

5.66 TURTLE TILE - SKID-RESISTANT MAT, CURBSIDE STEPWELL

Y___N___

Skid resistant charcoal gray turtle tile matting shall be installed in the curbside step well.

5.67 STRYKER POWER LOAD (REQUIRED)

Y___N___

Supply and Install Stryker Power Load (P/N 08645-1) Cot System w/ inductive charger and floor plate. Attendant seat will be 9.45" from face of seat to head of cot when seat is in neutral position.

5.68 STRYKER POWER PRO XT 6506 (REQUIRED)

Y___N___

Provide the Power Pro XT 6506 with all standard options and High Config.

5.69 STRYKER STAIR CHAIR (REQUIRED)

Y___N___

Provide Stair chair pro model 6252

5.70 DOOR REFLECTIVITY

Y___N___

Door reflectivity on the inside of each rear door is to be orange and white.

5.71 Rear of the unit to have a "KEEP BACK 300 FEET" label mounted to rear kick plate mounted on a stainless-steel panel.

Y___N___

5.72 Orange/White Reflexite chevron striping 6" wide inverted "V" shall be installed on the bottom one-half of the module rear. Chevron shall be positioned from the bottom of the passage door windows, to the bottom of the module.

Y___N___

5.73 Graphics as follows:

Y___N___

- Roof shall have a 32 "star custom color Blue toward top front the of box
- Below star shall be 12" Boston *EMS*"
- Customer shall install Below the 12" lettering 20" License plate numbers.
- Star of Life Package shall be installed including the white outline per KKK standard.
- Reverse height on front of the box in red on both sides, visible in the mirrors to the driver. The unit numbers shall be provided.

- Orange reflective 3M 680-14 beltline 10” upper roof line 6”
- Lower strip vertical slanted is orange white Reflexite
- Sides- Boston “star” EMS on sides in reflective Blue
- Sides- Emergency in reflective red
- Sides Ambulance in reflective blue
- Sides Emergency call 911 reflective red and blue
- American flag on both front side doors on reflective white
- Boston EMS LOGO printed on reflective white, upper rear left and cab doors
- Unit number front of Condenser tray and rear upper right corner
- Boston EMS (in appropriate font) on rear in reflective blue above windows interior and exterior

 5.74 Caution and trip hazard signs to be installed per previous Boston EMS units. Alternating black / yellow grip tape to be installed at rear threshold. Caution sign at rear doors Caution sign on front wall cabinet #3 Note: Included with graphics package.

Y___N___

6. STANDARDS AND SPECIFICATIONS FOR VEHICLE PAINT APPEARANCE

6.1 PAINT PROCEDURE

Y___N___

All non-anodized aluminum module body surfaces shall be completely chemically steam cleaned, filled with premium body filler as needed, sanded smooth and primed with an epoxy primer and then primed again with a high solid primer.

6.2 The cured primer surfacer shall be DA sanded with 320 grit and cleaned. A high solid primer shall then be applied, where needed, as a sealer.

Y___N___

6.3 MEETS STANDARDS & SPECIFICATIONS FOR VEHICLE PAINT APPEARANCE

Y___N___

6.3.1 Definitions:

Class A Surfaces are defined as:

- Highly Visible or reflective surfaces that cause the viewer’s eye to focus on that area of the vehicle.
- The exterior of the vehicle from 36 inches off of the ground to 96 inches off of the ground.
- Areas that passengers of the vehicle would view in a normal viewing direction of (+/- 45 degrees) and a distance of (24 Inches – 36 inches)

Class B Surfaces are defined as:

- Less visible area that is viewed as a general area. This would include areas beyond the normal viewing direction as specified in Class A surfaces including those higher than 96 inches of the ground or lower than 36 inches off the ground.
- Another description would include areas seen peripherally.
- Any area that must be viewed at an unusual angle.

Class C Surfaces are defined as.

- Any area that must be viewed by close inspection.
- This would include the roof area of a cab.
- Any area that would be visible less than 1% of the time such as door jams or the back of doors including those on the module

Class D Surfaces are defined as.

- Areas that the consumer will be unable to evaluate without removal of other component parts.
- Any area that must be viewed at an abnormal or unusual angle.
- Any area that can only be seen when lying on the ground, from under the vehicle, or require a ladder to see, such as the roof.

6.3.2 Inspection Procedure

General Inspection Requirements:

- Cosmetic inspection by the Bidder or its suppliers shall use the TIME and DISTANCE method of inspection as described in different sections of this document.
- The Cosmetic standards defined in this document shall be used for training personnel, checking surface quality produced by any process and used in making “Accept/Reject” decisions.

Viewing Conditions:

- All visual inspection will be made under normal artificial lighting, unaided and viewed in a manner that duplicates the typical end use of the vehicle. During cosmetic inspection, only visual qualities (appearance) of the part surface shall be considered. surfaces shall be viewed without the aid of magnification, at an angle approx. 45° to normal of the surface to be inspected.

The following are Inspection criteria:

- Inspection shall be conducted using the unaided eye.
- Viewing distance shall be 18” or 24” as specified by surface class.
- Viewing angle shall be at a minimum of 45° to the surface.
- Light source shall be fluorescent light; the light source shall provide optimal viewing and minimized glare and shadowing of the vehicle.
- Where subjectiveness intervenes in the assessment, form/fit/function shall take precedent.

The following table shall be used to determine viewing distance and duration:

Class A

- Viewing Distance: 24 inches
- Viewing Time: 10 seconds
- Viewing Area: 50 inches SQD

Class B

- Viewing Distance: 36 inches
- Viewing Time: 5 seconds
- Viewing Area: 50 inches SQD

Class C

- Viewing Distance: 36 inches
- Viewing Time: 3 seconds
- Viewing Area: 50 inches SQD

Class D

- Viewing Distance: 36 inches
- Viewing Time: 3 seconds
- Viewing Area: 50 inches SQD

6.3.3 Conditions and Acceptance Criteria

- The total number of defects per surface shall not exceed the acceptable limit.

6.3.4 Specific Boundary samples are logged in the Bidder's Database and reviewed annually at a minimum for applicability.

6.3.5 These standards do not apply to an OEM chassis in which case, OEM acceptance standards apply unless it has been quoted to meet the Bidder's Appearance Standards.

6.3.6 Any OEM chassis painted by the Bidder will conform to the original OEM acceptance standards unless it has been quoted to meet the Bidder's Appearance Standards.

6.3.7 Specification Limits for Vehicle Appearance (Exterior)

“A” Surface

Item:

- Bare Substrate - NOT ALLOWED
- Pin Hole/Solvent Pop - .5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT
- Chips/Damage - NOT ALLOWED
- Cracking - NOT ALLOWED
- Fish Eyes - NOT ALLOWED
- Dings NOT ALLOWED
- Dirt - Must "feel" flat, .5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart
- Dry Spray - NONE ALLOWED
- Mottling - Color Specific- Must match Boundary Sample
- Off Color to Cab or other Module elements - Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
- Orange Peel
- Overspray - NONE ALLOWED
- Paint Drops/Drips - NONE ALLOWED
- Painting around Clean Idle or other stickers - NONE ALLOWED
- Pits/Porosity - NONE ALLOWED
- Crooked Mask Lines - NONE ALLOWED
- Burn Through - NONE ALLOWED
- Sags/Runs - NONE ALLOWED
- Scratches - NONE ALLOWED
- Polishing Swirls (Scratches) - Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
- Shrinking - NONE ALLOWED
- Thin Paint - NONE ALLOWED

- Water Spots/Rinse Blisters - NONE ALLOWED
- Wet Mark - NONE ALLOWED
- Wrinkling - NONE ALLOWED

“B” Surface

Item:

- Bare Substrate - NOT ALLOWED
- Pin Hole/Solvent Pop - 1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT
- Chips/Damage - NOT ALLOWED
- Cracking - NOT ALLOWED
- Fish Eyes - NOT ALLOWED
- Dings NOT ALLOWED
- Dirt - Must "feel" flat, 1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart
- Dry Spray - NONE ALLOWED
- Mottling - Color Specific- Must match Boundary Sample
- Off Color to Cab or other Module elements Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
- Orange Peel - Equivalent to # 10 panel MIN.
- Overspray - NONE ALLOWED
- Paint Drops/Drips - NONE ALLOWED
- Painting around Clean Idle or other stickers - NONE ALLOWED
- Pits/Porosity - NONE ALLOWED
- Crooked Mask Lines - NONE ALLOWED
- Burn Through - NONE ALLOWED
- Sags/Runs - NONE ALLOWED
- Scratches - NONE ALLOWED
- Polishing Swirls (Scratches) - Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
- Shrinking - NONE ALLOWED
- Thin Paint - NONE ALLOWED
- Water Spots/Rinse Blisters - NONE ALLOWED
- Wet Mark - NONE ALLOWED
- Wrinkling - NONE ALLOWED

“C” Surface

Item:

- Bare Substrate - NOT ALLOWED
- Pin Hole/Solvent Pop -1.5 mm max. size/2 per 50 inches Squared /must be a minimum of 25 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT
- Chips/Damage - NOT ALLOWED
- Cracking - NOT ALLOWED
- Fish Eyes - NOT ALLOWED
- Dings NOT ALLOWED
- Dirt - Must "feel" flat -1.5 mm max. size/1 per 50 inches Squared /must be a minimum of 25 inches apart
- Dry Spray - NONE ALLOWED
- Mottling - Color Specific- Must match Boundary Sample

- Off Color to Cab or other Module elements Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
- Orange Peel - Equivalent to # 10 panel MIN.
- Overspray - NONE ALLOWED
- Paint Drops/Drips - NONE ALLOWED
- Painting around Clean Idle or other stickers - NONE ALLOWED
- Pits/Porosity - NONE ALLOWED
- Crooked Mask Lines - NONE ALLOWED
- Burn Through - NONE ALLOWED
- Sags/Runs - NONE ALLOWED
- Scratches - NONE ALLOWED
- Polishing Swirls (Scratches) - Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
- Shrinking - NONE ALLOWED
- Thin Paint - NONE ALLOWED
- Water Spots/Rinse Blisters - NONE ALLOWED
- Wet Mark - NONE ALLOWED
- Wrinkling - NONE ALLOWED

“D” Surface

Item:

- Bare Substrate - NOT ALLOWED
- Pin Hole/Solvent Pop - 2.0 mm max. size/3 per 25 inches Squared / must be 12 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT
- Chips/Damage - NOT ALLOWED
- Cracking - NOT ALLOWED
- Fish Eyes – Must match Boundary Sample
- Dings NOT ALLOWED
- Dirt - Must "feel" flat - 2.0 mm max. size/ 3 per 25 inches Squared / must be 12 inches apart
- Dry Spray - Must match Boundary Sample
- Mottling - Color Specific- Must match Boundary Sample
- Off Color to Cab or other Module elements - Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
- Orange Peel - Equivalent to # 7 panel MIN.
- Overspray - Must match Boundary Sample
- Paint Drops/Drips - NONE ALLOWED
- Painting around Clean Idle or other stickers - Must match Boundary Sample
- Pits/Porosity - NONE ALLOWED
- Crooked Mask Lines - NONE ALLOWED
- Burn Through - NONE ALLOWED
- Sags/Runs - NONE ALLOWED
- Scratches - NONE ALLOWED
- Polishing Swirls (Scratches) - Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
- Shrinking - NONE ALLOWED
- Thin Paint - NONE ALLOWED
- Water Spots/Rinse Blisters - NONE ALLOWED

- Wet Mark - NONE ALLOWED
- Wrinkling - NONE ALLOWED

6.4 BUFFING, PAINT - MODULE

The paint on the module sides shall be buffed to a high shine using a recommended paint buff system.

6.5 REFLECTIVE - DOOR REFLECTIVITY

Y___N___

Reflective material (25" x 2.5" red/silver chevron style), meeting FMVSS 108 requirements, shall be installed on the lower interior stainless-steel panel of each rear door and hinged side door.

Sliding side door shall have a 1.50" x 40.00" white reflective stripe installed on the rear facing edge.

6.5 STARS OF LIFE LETTERING ONLY PACKAGE-INSTALLED

A "KKK" lettering and star of life package will be installed. The lettering shall be installed in the "KKK" prescribed dimensions, colors, and locations. "Ambulance" lettering shall be provided and installed on each side, the rear and in reverse image on the chassis hood. The stars of life decals shall be installed in the "KKK" dimensions, color, and placement. Stars of life will be installed as follows: (2) on the chassis hood, (1) on each module side, (2) on the module rear, and (1) on the module roof. Lettering and stars of life decals shall be blue in color.

7. VEHICLE MANUALS (1) PACKAGE SET

One (1) Delivery Manual Package shall be supplied with the vehicle, and shall include the following items: Ambulance manufacturer parts, service, and operation manuals, OEM chassis owner's guide, complete 12 VDC and 125 VAC wiring schematics for all included standard and optional systems, Multiplex Electrical system programming - electronic media

8. ADD STATEMENT OF LIMITED WARRANTY NEW AMBULANCES

Submission Instructions

Respondents must submit their response via email to:

Joe O'Hare
 Superintendent
 ohare@bostonems.org

Response format:

- Submit response as a single document in PDF format
- Include respondent's name and "RFQ Submission – Ambulances" in the PDF filename

Responses should include the items listed below:

1. A written description of how respondent will address all components outlined in the scope of work, including responses to requirements (Y/N). Should include an explanation of any deviations and equivalent products.

2. A full description of the qualifications of the respondent.
3. Verification the proposal includes costs for two factory visits for two personnel each trip for mid-point and pre-delivery inspections including airfare and lodging.
4. Verification ambulances will be delivered via flatbed to Boston EMS fleet services.
5. Timeline, including anticipated delivery of the first seven ambulances to be delivered this fiscal year, and timelines for future year orders, including desired date order should be placed each fiscal year and anticipated delivery.
6. A price sheet for year 1 and any commitments for future year pricing.
7. References from three similar sized departments with comparable call volume. References shall include department or company name and appropriate contact information.

This RFQ is for planning purposes only and shall not be construed as a solicitation or as an obligation on the part of BPHC to award a contract or pay for preparations of any information submitted, however, this RFQ may result in the award of a contract to a qualified respondent.

All responses to this RFQ will be public record under the Massachusetts' Public Records Law, Mass. Gen. L. ch. 66 s. 10, regardless of confidentiality notices to the contrary.

Responses must be received no later than Friday, October 1st, 2021, by 5:00 PM ET. Responses received after this date and time will not be considered.