BOSTON PUBLIC HEALTH COMMISSION
BOSTON EMERGENCY MEDICAL SERVICES

SPECIAL OPERATIONS VEHICLE – TANGO UNIT

REQUEST FOR QUOTES

March 13, 2023

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TIMELINE

The Boston Public Health Commission (BPHC) / Boston EMS is issuing a Request for Proposal (RFQ) for an Special Operations Response Vehicle.

RFQ Timeline	
, March 15, 2023	RFQ and instructions available online at www.boston.gov/bphc-RFQs-and-bids at 2:00PM
, March 17, 2023	Questions concerning this RFQ due in writing by 5:00 PM to Laura Segal, segal@bostonems.org. The email title of questions should be, "Questions – Special Operations Vehicle RFQ".
March 20, 2023	Responses to written questions will be posted on www.boston.gov/bphc-RFQs-and-bids
March 22, 2022	RFQ proposal due by 3:00 PM – email quote to Laura Segal at segal@bostonems.org with an email title of "Boston EMS – Special Operations Vehicle" NO EXCEPTIONS TO THIS DEADLINE
Week of March 31, 2023	Notification of Decision This is the desired date to award, however, BPHC has the discretion to extend this time without notice to the proposers. All proposals shall remain valid and open for a period of one hundred twenty (120) days from the proposal submission date, unless a proposer notifies BPHC of its withdrawal. BPHC/Boston EMS has the discretion to reject all bids and reissue the RFQ.
Week of March 31, 2023	Contract signing anticipated completion date.

A. INTRODUCTION AND 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.

The BPHC, on behalf of Boston EMS, is soliciting quotes from qualified vendors to provide a response vehicle for Boston EMS Special Operations. Vendor must have capability to provide a vehicle that meets the specifications stipulated in this RFQ. Vendor must also be able to provide all necessary user training for immediate use of the Special Operations response vehicle.

Boston EMS responds to over 125,000 incidents per year resulting in more than 85,000 transports, making it the largest municipal EMS provider in New England and one of the busiest EMS services in the country. The department employs over 350 EMTs and Paramedics, in addition to Supervisory, Command, and Support personnel, for a total of 423 uniformed members and an additional 27 non-uniformed administrative and support services personnel.

The Special Operations Division is integral to Boston EMS's emergency preparedness and response

posture. The Special Operations response vehicle bolsters the department's capability to respond to complex incidents as well as mass casualty incidents.

B. INSTRUCTION TO VENDORS

1. PROCESS, DETAILS AND REQUIREMENTS

1.1. LOCATION & REPUTATION - Proposals shall only be accepted from vendors located in the continental United States that have an established reputation of permanency and reliability in the field of public safety response vehicles.

1.2. PUBLIC SAFETY REFERENCES – To verify the vendor's history of satisfactory production of emergency response (911) vehicles, three (3) references are required for departments that the vendor recently provides similar work, as described in this RFQ.

1.3. ADDENDA - Any changes to the submitted documents shall be made only by written addenda issued no later than one week, seven (7) calendar days prior to the date set for bid due date. Proposers shall bear the entire responsibility for being sure they have received any and all such addenda.

1.4. AGREEMENT WITH TERMS - By submitting a proposal, the proponent agrees to all the terms and conditions of this RFQ. Proponents who have obtained the RFQ must not alter any portion of the document, with the exception of adding information requested.

1.5. EXCEPTIONS - Any and all exceptions to the specifications or other bidding requirements must be noted in the space provided in the proposal. Any exceptions may constitute suitable grounds for rejection of the bid.

1.6. MODIFICATION OF TERMS - The BPHC reserves the right to modify the terms of the RFQ at any time at its sole discretion.

1.7. RIGHT OF REJECTION/SELECTION – The Boston Public Health Commission/Boston EMS reserves the right to reject any or all bids and to waive minor irregularities and defects in form where the best interests of the Boston Public Health Commission would be served.

1.8. RIGHT OF CANCELATION – BPHC/Boston EMS may during the proposal review process, or at any time prior to award, cancel this solicitation, if BPHC/Boston EMS determines such action will best serve the public interest. Notice of the cancellation will be made to the applicants or potential applicants as appropriate.

1.9. PROPONENT EXPENSES - Proponents are solely responsible for their own expenses in preparing a proposal and for subsequent negotiations with BPHC, if any. If BPHC elects to reject all proposals, BPHC will not be liable to any proponent for any claims, whether the costs or damages incurred by the proponent in preparing the proposal, loss of anticipated profit in connection with any final contract or any other matter whatsoever.

1.10. ADVERTISEMENT - It is further agreed that any proposer submitting a bid will not use the name of the Boston Public Health Commission or Boston EMS in any advertisement without first obtaining the written consent of the BPHC Legal Counsel.

1.11. FAMILIARITY WITH PROPOSED WORK - The proposer shall examine carefully the contract documents and the specifications for the proposed work.

1.12. CONFLICT OF INTEREST - The proposer shall disclose in its proposal any actual or potential conflict of interest and any existing business relationships it may have with BPHC, its elected or appointed officials, or employees. BPHC has the right to reject any proposal submitted by a proponent who in BPHC's determination, has, or if awarded the contract would have, an actual, perceived or potential conflict of interest.

1.13. CLEAR & CONCISE PROPOSAL – Lengthy and wordy proposals can be difficult to

evaluate. As such, proposals should be clear, concise and address all of the elements outlined in the Scope of Work.

1.14. PROPOSAL SUBMISSION CHECKLIST – When completed, check off items in the proposal checklist to ensure inclusion of all requested items.

2. LIST OF SUBCONTRACTORS'

2.1. Each proposer shall submit with this bid, a list of subcontractors, including complete names and addresses, whose services the proposer intends to use in performing all work under the contract. Bids submitted without such a list, or with a list not completely or properly executed, are subject to rejection.

2.2. Each proposer is required to notify all subcontractors that they are obligated to comply with the provisions of Federal and State law, including but not limited to HIPAA, as they pertain to this project, and that they must submit evidence of such compliance upon notice or request. The proposer shall certify their compliance with this requirement on the list of subcontractors.

2.3. After the contract has been awarded, the successful proposer (vendor) shall not substitute another subcontractor for any subcontractor whose name was set forth on the list of subcontractors which accompanied his bid, without the written consent of the Boston Public Health Commission/Boston EMS.

3. LAWS TO BE OBSERVED - The successful proposer shall at all times observe and comply with all Federal, State, Local and Municipal Laws, ordinances, rules and regulations in any manner affecting the work, and all such orders or decrees as exist at present and those which may be enacted later, of bodies or tribunals having any jurisdiction or authority over the work, and shall indemnify and save harmless the BPHC/Boston EMS and all its officers, agents, and servants against any claim or liability arising from or based on the violation of any such law, ordinance, rule, regulation, order or decree, whether such violations be by the vendor or any Subcontractor or any of their agents and/or employees.

4. DISCREPANCIES OR OMISSIONS – The proposer recognizes that the Boston Public Health Commission is not in the business of preparing specifications. Proponents finding discrepancies or omissions in the RFQ documents or having any doubts to the meaning or intent of any part thereof, should submit questions in writing by the deadline noted in the timeline of this RFQ. Any omissions in this request for proposal, which have not been addressed in the response to questions, must be strictly addressed by the firm with the submittal of its proposal.

5. NON-DESCRIMINATION & EQUAL OPPORTUNITY STATUS - The vendor shall comply with all current federal and state non-discrimination and equal opportunity status and policies and agrees to not hold the Boston Public Health Commission liable for any inadvertent action by the company which conflicts with such statues and/or policies.

6. PROPOSAL WITHDRAWAL – Any proposal may be withdrawn until the date and time stated above for the opening of the proposals. Any proposals not so withdrawn shall constitute an irrevocable offer to sell to the Boston Public Health Commission the services indicated for a period of sixty (60) days, or until one or more of the proposals have been accepted by the Department, whichever occurs earlier.

D. CONTRACT

1. **CONTRACT TERMS**
   - **1.1** The Vendor will execute the Boston Public Health Commission's contract and associated contract attachments. While such documents do not need to be completed at this time, vendors should review them closely and be prepared to comply with their provisions. This includes but is not limited to the Boston Living Wage documents. The standard agreement shall take precedence over any conflicting terms in this request for bids.
   - **1.2** The initial Contract Term shall be two (2) years. At BPHC/Boston EMS' discretion, the Contract may be renewed for an additional one (1) year.
     - **1.2.1 ADDITIONAL PROVISIONS -** Boston EMS/BPHC reserves the right to add additional and necessary contract provisions during the contract negotiation process.
2. **OPERATIONS -** The Vendor shall conduct the work in such a manner and in such sequence as to ensure the least interference with Boston EMS operations.
   - **2.1** The schedule and any additional specifications not clarified in the proposal require approval prior to commencement of the work.
   - **2.2** Shall schedule pre-production, mid-production and near-production completion meetings with Boston EMS project team throughout the pre-implementation process.
3. **TIMELINE**
   - **3.1** All proposers shall submit an anticipated delivery date.
4. **PAYMENT TERMS** - The vendor shall outline clear cost to Boston EMS for the production of the Special Operations Vehicle outlined within.

E. GENERAL PROVISIONS

1. **QUOTE –** The quote should be provided verifying specifications of the vehicle and compliance with the scope of work outlined herein.
2. **TAXES –** The Boston Public Health Commission is exempt from federal excise taxes (Federal Exemption No. E-043-316-655). Exemption Certificates will be provided, if requested, following award to the successful applicant.
3. **LICENSING** - The successful proposer shall be registered and licensed to operate in the State of Massachusetts.
4. **NONCOLLUSION** - Proposers are prohibited from entering into any agreement, participating in any collusion or otherwise taking any action in restraint of free competitive bidding in connection with this bid.
5. **WORKING HOURS** - Boston EMS is 24-7 operations, although the administrative offices maintain standard Monday through Friday 9AM to 5PM business hours. The Vendor shall be available to provide client support and customer service during these EST business hours.
6. **TRAVEL -** No paid traveling time will be allowed from the Vendor's location to the Boston EMS buildings. If included in the vendor's schedule are in-person meetings, all associated expenses will be covered by the Vendor for up to two representatives from Boston EMS. Likewise, the Vendor will be responsible for travel cost associated with vendor's representatives travel cost, if necessary.

F. SCOPE OF WORK

BPHC, on behalf of Boston EMS, is seeking quotes from qualified vendors for the production of a Special Operations response vehicle as specified below. Boston EMS plans to contract separately for any hardware not referenced in the below specifications.

Accompanying the RFQ submission, vendors must include drawings that provide a visualization of each exterior side of the vehicle, to include the roof, front, back, and both sides.

Technical Specifications

Required	Available	Not Available	Notes
Ford F-550 Chassis Cab (X5H) 168" WB, 4x4, Super Cab, 60" Cab-axle length shall be provided that includes all base model features and the additional options listed below:			
• Engine: 6.7L 4V OHV Power Stroke V8 Turbo Diesel B20 - inc: Operator Commanded Regeneration (OCR), Diesel Exhaust Fluid (DEF) tank, intelligent oil-life monitor and manual push-button engine-exhaust braking, 4.10 Axle Ratio, 250 Amp Alternator, Dual 68 AH/65 AGM Battery			
• Transmission: Torq Shift 10-Speed Automatic -inc: 10R140 w/neutral idle, Select Shift and selectable drive modes: normal, tow/haul, eco, slippery roads and off-road (STD)			
• 4.10 Axle Ratio			
• Tires: 225/70Rx19.5G BSW Traction: 4 traction tires on the rear and 2 traction tires on the front, Not recommended for over the road applications; could incur irregular front tire wear and/or NVH			
• Oxford White			
• Medium Dark Slate, HD Vinyl 40/20/40 Split Bench Seat; center armrest, cupholder, storage, 2-way adjustable driver/passenger headrests and driver's side manual lumbar			
• Ambulance Prep Pkg w/Special Emissions (LPO) Requires valid FIN code			
• Engine Block Heater			
• Transfer Case Skid Plates			
• 410 Amp Dual Alternators includes: 250 Amp & 160 Amp			

• GVWR: 19,500 lb. Payload Plus Upgrade Package includes upgraded frame, rear-axle and low deflection/high-capacity rear springs, increases max RGAWR to 14, 706 lbs			
• Dual 68 AH/65 AGM Battery			
• Platform Running Boards			
• Spare Tire, Wheel & Jack - includes excludes carrier, 6-Ton Hydraulic Jack			
• 6-Ton Hydraulic Jack (Regional) w/51D			
• Front Wheel Well Liners (Pre-Installed)			
• 120V/400W Outlet (w/o LS,4S-inc: 1 in-dash mounted outlet w/LS,4S-inc: 1 in-dash mounted outlet and 2nd outlet in the console includes: Dual 68 AH/65 AGM Battery			
• A PTO and hydraulic generator system will be installed in the truck. The hydraulic generators tentative position is in the R1/L1 compartments			

General Body Specifications

Required	Available	Not Available	Notes
A custom Emergency Service Unit style rescue body. Heavy-duty in nature and with walk-around features having all exterior compartments modified to fit on a sixty-inch (60”) cab-to-axle frame design.			
The body must be aluminum construction rated to 6061 T6 and 5052 H32 standard minimums.			
Units must include eight (8) exterior compartments with box pan type doors.			
All outer side compartment doors shall be side hinged except for compartments constituting the ladder chute, which shall consist of a single top hinged door			

Said body must have a non-slip NFPA compliant diamond plate roof which shall be configured as a heavy-duty work platform			
Walk-around body interior must be coated in bed liner type coating			
All aspects of body construction utilizing welds must have welds performed by certified welders.			
The entire body must be watertight against rain leaks. Failure of manufacturer to provide a watertight vehicle against rain leaks will constitute rejection of unit(s) until corrections are made.			
Dimensions: Body one hundred eight inches (108”) long, ninety-three inches (93”) wide, seventy-two inches (72”) tall (at ladder chute) of which fourteen inches (14”) must be below the floor level at the sides, outside of the chassis rails.			
Body Mounting: The rescue body shall be mounted to the chassis frame at five points on each chassis rail, ten total. Body mounts shall be OEM style, isolated anti-vibration "Puck" mounts, rated for size and weight of the apparatus body to be provided. Isolation mounts shall be installed on frame rail mounted steel brackets, designed, and conforming to Ford QVM guidelines. The use of U-bolts shall not be acceptable for body mounting.			
Body Construction: Rescue body must consist of eight (8) exterior compartments. The forward two (2) compartments #L1 and #R1 must have a single center mounted dividing wall. Compartment #L2 and #R2 must be full through and compartments #L3 and #R3 must be separated by the rearward facing compartment #Rear-1. Compartment #Rear-2 must be			

configured to be sub divided with a single top hinged door.			
Field replaceable parts: Because of the extreme service duty this type of vehicle is designed for, components such as compartment doors, shelves, roof access ladders, bumpers, and aluminum protection panels shall be made with such precision that they can be reproduced upon request by the end user agency by the manufacture's parts department within 48 hours and shipped to the end user's location. The replacement parts shall fit the vehicle without the need for auto body work and can be installed using standard mechanics tools. The existing structures of the vehicle must not be required to recreate the replacement part. Parts shall be available pre-painted to match existing vehicle's color. To achieve this, the use of automated equipment including laser CNC machinery and benders are required during the vehicle's initial build process.			
Material specifications: The following minimum thickness aluminum must be used in the construction of the body for durability and corrosion resistance			
Rub Rails: High density (UHMW) polyethylene rub rails shall be installed along the top of the body, the front lower edge compartment door and the rear lower edge compartment door. Each rub rail will be 1.5 inches x 1.5 inches, black in color. Rub rails must be bolted into place, every six inches.			
Wheel Well Liners: Must be constructed of 16-gauge stainless sheet.			
Roof Access ladders: There shall be one roof access ladder per side of the rear apparatus body, two total. Ladders must be heavy duty aluminum construction consisting of 0.25-inch-thick x 2-inch flat bar stock sides with 2-inch x 2 inch non-slip rungs welded to form "rungs". Rungs shall be spaced in			

such a way to not block rear facing lighting as much as possible.			
Protection Panels: The following areas of the body shall be covered with 0.125" thick aluminum tread plate panels. These panels will remain un-painted. Panels must be attached to the body in a manner that facilitates removal with permanently installed "Pem" nuts and stainless-steel machine screws. The use of self-tapping sheet metal screws shall not be acceptable. These areas include the following: The entire front of apparatus body must be protected with 0.125 inch thick, aluminum diamond-tread plate panels. Areas over both wheel wells on both sides of vehicle must also be protected with 0.125 inch thick, aluminum diamond tread-plate panels. Rear face of vehicle below the rear doors must be covered with one-eighth inch (1/8”) polished aluminum diamond plate. Panels must cover the entire area below the rearward facing doors and cover the full width of body. Protection panels must also be installed on front and rear of body on lower sections of front exterior side doors of compartments L1 and R1 and rear exterior side doors of compartments L3 and R3. Height of panels must be twelve inches (12”) by width of doors. All panels must be attached with “nutserts” or similar means to facilitate easy removal. All holes must be properly sealed and watertight against rain leaks. There shall be rubber protection fenderettes over rear wheels. Fenderettes must be bolted in place over diamond plate with heavy duty bolts and Nylock or Teflon, or equal (self-locking) nuts.			

Master Bar Locks: In addition to standard door locks, two internal master slide bars, non-spring loaded, designed to lock doors on each side of body must be supplied and installed. Said bar locks must be controlled by handles and mounted through the interior walls of rear compartments (#3 & #6). For additional security an eight inch (8") small link heavy-duty chain contained in an exterior rubber coating must be provided. Chains must be bolted to wall of body compartments # 3 and # 6 with heavy duty locking hardware. Two "J" shaped hooks shall be attached to previously mentioned chains. Chains shall be painted safety yellow in color.			
D Ring Locks: All compartment doors must be equipped with Hansen, or equal six inch (6"), stainless steel, locking, bent "D" ring handles. Handles must activate steel rods to accomplish locking. All handles must turn in the same direction to lock and unlock regardless of which side they are positioned on. All doors shall have a 0.125" aluminum tread plate access panel covering the back side of the handle mechanism for protection. Said panels must utilize stainless steel machine screws to secure them in place to facilitate maintenance.			
Door Holders: Side hinged compartment doors shall be equipped with Cleveland, or equal spring type door holders. All doors must have heavy duty rubber bumpers installed on their exterior surfaces to protect them from damage when opened.			
Compartment Shelves: All shelves must be constructed of 0.188" thick aluminum sheet with a one inch flange up all sides, minimum. All shelves must be constructed to mate with the heavy-duty standards that must be installed in the compartments. Shelves must have infinite adjustments on the standards. Shelving hardware must be "Uni-strut", "C" channel design.			

Said shelves MUST resist bending over years of hard use. Therefore, the shelves in compartments #2, #5 and #6 must have 3/4" thick aluminum rod welded lengthwise along the 1" lip to strengthen the shelf from bending.			
Wire Holes /Wiring: The following wiring holes will be made in the body prior to painting: • Four, holes (each three inches in diameter) with rubber grommets shall be cut in all lateral interior compartment walls at roof line. • One on each side of center line, four inches from center brace and one on each side, four inches from side walls to permit wire runs inside body • Wire looms run across ceiling of utility body must be supported by vinyl coated Adel (neoprene) or equal compression clamps which must be screwed in, or tack welded • Adel or equal clamps must be supplied and installed every eight inches. • In locations where wiring in looms is subject to possible damage or binding with equipment, removable "C" channels must be supplied and installed to encase looms. • Wiring in compartments #3 and #6 leading to brake/turn/reverse lights must be armored. • No wiring shall interfere with movement of any shelving, doors, or other body module components.			
Rear Step Bumper: The rear bumper shall have an aluminum tread plate safety step rear bumper, reinforced by a 0.25-inch-thick steel "C" channel sub structure. The overall bumper shall be 16-inches deep by the width of the body. The center shall have a notched step up well and must be installed on the rear of chassis. The bumper must be capable of supporting a five-hundred-pound burden. Surface of step must be			

fabricated from non-skid grating, Bustin "Firm-Grip Safety Tread", or equal. Rear surface of bumper must be covered with 0.1875-inch thick, polished aluminum diamond plate secured with 0.5-inch, grade-8 bolts and Nylock style nuts. Two heavy duty rubber dock bumpers, 18-inches long x 4.5 inches wide x 3.5 inches thick shall be installed on bumper at outer edges with heavy-duty hardware.			
Rear Hitch, Class 5: A custom fabricated rear hitch, rated at Class 5 shall be installed at the rear of the vehicle. It shall be powder coated in gloss black finish. Hitch shall be bolted to the rear frame rails using grade 8 hardware. Rear hitch wiring shall include 7-pin and 4-pin wiring.			
Compartment Layout: There must be eight exterior compartments that constitute the body. Design must be a partially "Sweep Out" style easily cleanable of debris. All seams where body is joined together must adhere to the above requirements. Any gaps found during inspection of body whether be it by poor welds or otherwise must be corrected either by reconstructing said welds or applying waterproof sealer inside and outside. Automotive neoprene bulb type style, or equal weather seals must be used on both body panels and doors.			
Compartment Number Assignments: • L1 compartment, Driver's side, In front of rear wheels with dimensions of 32"W x 58"H x 45"D • L2/ R2 compartment, above rear wheels, (Transverse), with dimensions of 48"W x 36"H x 92"D • L3 compartment, Driver's side behind rear wheels with dimensions of 27"W x 58"H x 15"D • R1 compartment, Driver's side in front of rear wheels with dimensions of 32"W x 58"H x 45"D			

• R3 compartment, Passenger side behind rear wheels with dimensions of 27"W x 58"H x 15"D • REAR1 compartment, rear of body, lower compartment with dimensions of 60"W x 40"H x 27"D • REAR2 compartment. rear of vehicle ladder chute with dimensions of 56"W x 15"H x 108"D			
Compartment L1: This compartment shall occupy the area of the body in front of the rear wheels, on the driver's side. *Door*: One (1) door must be provided for this compartment and shall be hinged at the forward edge. Compartment door must be protected with one eight-inch (1/8”) aluminum panels on the interior and the exterior. Inside surfaces of door must be completely covered and outside lower twelve inch (12”) by width of door must be covered with aluminum diamond plate bolted in place for easy removal. *Door lock mechanism*: The door on this compartment must be equipped with a stainless steel, "D" ring, two-point type handle with 3/8" thick rod bar. *Shelves*: There shall be a minimum of six (6) heavy duty shelf standards with three (3) each lateral wall. There shall be two (2) adjustable shelves mounted.			
L 2/R2 Compartment (Transverse) This compartment shall occupy the area of the body over the rear wheels and be transverse across the entire body. The floor above the wheel wells must be flat. A six inch (6") wide steel brace must be installed running along the center of the compartment at the roof line from the front wall of the compartment to the rear wall. *Door:* Two (2) doors must be provided for this compartment on each side of the body and shall be hinged at the forward			

and rear edges. Compartment door must be protected with one eight-inch (1/8”) aluminum panels on the interior and the exterior. Inside surfaces of door must be completely covered and outside lower twelve inch (12”) by width of door must be covered with aluminum diamond plate bolted in place for easy removal. *Door lock mechanism*: The doors on this compartment must be equipped with stainless steel, "D" ring, two-point type handles with 3/8" thick rod bars. *Shelves*: There shall be a minimum of twelve (12) heavy duty shelf standards with six (6) each lateral wall. There shall be two (2) adjustable shelves mounted. *Cargo netting*: The upper shelf areas of this compartment shall contain a cargo net. The net(s) must be fabricated out of two inch (2") black nylon web, triple stitched, permanently attached to the bottom of the adjustable shelf. The top must include an automotive seatbelt type release that can be easily released by a “gloved” hand to access the equipment stored on the shelf. *PVC storage*: Mounted horizontally to the rear or back wall c-channel, for height adjustability of the center compartment must be a four-inch (4”) inch diameter schedule 40 PVC pipe. Each end cut at a 45-degree angle, and filed smooth, for the storage of long handled tools. Mounted directly below this must be another schedule 40 PVC pipe, three-inch (3”) diameter, mounted in the same manner with the same end cuts. Said pipes must be mounted with heavy duty muffler style brackets for easy removal and serviceability.			
L3 Compartment This compartment shall occupy the area of the body behind the rear wheels, on the driver’s side.			

Door: One (1) door must be provided for this compartment and shall be hinged at the forward edge. Compartment door must be protected with one eight-inch (1/8”) aluminum panels on the interior and the exterior. Inside surfaces of door must be completely covered and outside lower twelve inch (12”) by width of door must be covered with aluminum diamond plate bolted in place for easy removal. *Door lock mechanism*: The door on this compartment must be equipped with a stainless steel, "D" ring, two-point type handle with 3/8" thick rod bar. *Shelves*: There shall be a minimum of four (4) heavy duty shelf standards with two (2) each lateral wall. There shall be four (4) adjustable shelves mounted.			
R1 Compartment This compartment shall occupy the area of the body in front of the rear wheels, on the passenger's side. *Door(s):* One (1) door must be provided for this compartment and shall be hinged at the forward edge. Compartment door must be protected with one eight-inch (1/8”) aluminum panels on the interior and the exterior. Inside surfaces of door must be completely covered and outside lower twelve inch (12”) by width of door must be covered with aluminum diamond plate bolted in place for easy removal. Door lock mechanism: The door on this compartment must be equipped with a stainless steel, "D" ring, two-point type handle with 3/8" thick rod bar. *Shelves*: There shall be a minimum of six (6) heavy duty shelf standards with three (3) each lateral wall. There shall be two (2) adjustable shelves mounted. *Oxygen Bottle Holder*: There shall be a horizontal compartment on the lower area to hold four oxygen bottles. There			

shall be a cargo net to secure the bottles in place with quick release buckles.			
R3 Compartment This compartment shall occupy the area of the body behind the rear wheels, on the passenger's side. *Door*: One (1) door must be provided for this compartment and shall be hinged at the forward edge. Compartment door must be protected with one eight-inch (1/8”) aluminum panels on the interior and the exterior. Inside surfaces of door must be completely covered and outside lower twelve inch (12”) by width of door must be covered with aluminum diamond plate bolted in place for easy removal. *Door lock mechanism*: The door on this compartment must be equipped with a stainless steel, "D" ring, two-point type handle with 3/8" thick rod bar. *Shelves*: There shall be a minimum of four (4) heavy duty shelf standards with two (2) each lateral wall. There shall be one (1) adjustable shelf mounted.			
Rear 1 Lower compartment! This compartment will occupy the rear of the vehicle between the rear side compartments. It must be sweep out design with flat floor. The dimensions of Compartment #7 are approximately sixty inches (60”) wide by forty-four inches (44”) high by twenty-eight inches (28”) deep. The back doors must be thirty inches (30”) wide by forty inches (40”) high, centered on the rear, with two fixed panels covering the outer portions of the rear of the body. The doors on this compartment must be equipped with "D" ring two-point type locks. The partition in the forward part of the rear compartment, between compartments R-2/L-2 and REAR-1, must be reinforced using four (4) hat sections, four inches (4”) by sixty			

inches (60”), to prevent the wall from buckling or flexing under a load. The bottom of said partition must be notched in approximately seven inches (7”) high by approximately 47 inches deep. Said section must be reinforced from underneath to provide maximum strength to partition and floor. *Vertical divider*: There shall be one full height floor to ceiling vertical divider approximately 24 inches from the curbside wall. *Horizontal shelves*: There shall be two shelves on the left side and two on the right side of the vertical divider above. *Drawers*: There shall be two (2) 25-inch-long x 20-inch-wide steel drawers with 4 inch raised lip on both sides installed on heavy duty Accuride brand or equal ball bearing slides. Slides shall have a lock in / lock out mechanism incorporated into the slide assembly and a 7-inch-wide minimum grab handle to assist in opening the drawers. U.H.M.W. plastic panels, (1/4" thick) shall cover the floor and inside of rear doors to protect from damage. Panels shall be installed using stainless steel hardware.			
Rear-2 Upper Compartment (Ladder Chute) A fully enclosed compartment measuring approximately fifty-six inches (56”) wide by fifteen inches (15”) high by one-hundred-eight inches (108”) deep. A center divider must run lengthwise forming two (2) compartments of equal width. The right-side compartment/chute must have a forward partition installed to make an inside length dimension of ninety-eight inches (98”) from the forward partition to the rearward compartment doors. The left side compartment/chute must have a shelf installed eight inches (8”) above the bottom of the compartment/chute.			

On the top portion of the shelf a forward partition must be included that will make the upper shelf portion of the left side compartment/chute run ninety-eight inches (98”) from the partition rearward to the rear of the chute. This shelf is to separate the ladder from other equipment (i.e., Transit Evacuation Board). The lower ladder portion of the left side chute must be one hundred eight inches (108”) in length. The shelf must end eight inches (8”) from the rearward compartment doors. Compartments/chutes must be mounted on the roof at the longitudinal center. A single door of double panel steel construction must be provided. The door must have aluminum diamond tread plate panels installed on the inside and outside surface of the door. The door must be top hinged and be welded and bolted in place, located at the rear of the chute with a "D" ring type two (2) point lock. The door must be equipped with gas charged cylinders to hold the door in the open position. The door must be equipped with automotive type weather stripping and be completely watertight when closed.			
Compartment Lighting The body compartments shall be illuminated with Whelen model #PSC0MPH Super-LED compartment light wired to a pin switch to activate. Light shall be surface mounted and contain Whelen #PSBKT2 protective guard for light so that it doesn't get damaged by equipment. Light shall be wired to ignition power. • Compartment L1: Four (4) lights • Compartment L2: Two (2) lights • Compartment L3: Four (4) lights • Compartment R1: Four (4) lights • Compartment L2: Two (2) lights • Compartment L3: Four (4) lights • Compartment Rear-1: Four (4) lights			

Compartment Floor Tiles Turtle Plastic 12-inch x 12-inch interlocking tiles shall be installed on all body floor and shelf horizontal areas. Tiles shall be custom cut to fit the contours of each area without leaving gaps or overhangs.			
Exterior Paint Finish The apparatus body shall be painted to match the Chassis OEM color. Finish must consist of corrosion-resistant primer, urethane high build primer and high-performance durable color coat. The cab exterior must have no mounted components prior to painting to assure full coverage of metal treatments and paint. Any vertically or horizontally hinged smooth plate doors must be painted separately to assure proper paint coverage on cab, door jambs and door edges. The following must be adhered to in painting process: *Corrosion Prevention*: All raw materials must be pre-treated with MetaLok-CVP, or equal system to provide superior corrosion resistance and excellent adhesion of topcoat. ▪ DuPont Uro® Prime 1340S™polyurethane primer, or equal must be applied. ▪ DuPont Imron® Elite Express System, or equal, minimum two (2) coats must be applied providing superior coverage and durability. ▪ DuPont High Solids Clear coat TC35000™, or equal, minimum two (2) coats must be applied at two (2) mils film thickness minimum. All Aluminum Diamond Tread Plate Surfaces; must remain unpainted.			

INTERIOR BODY FINISH

Required	Available	Not Available	Notes

Interior Compartment Finish The interior of the apparatus body will be properly sanded and prepped for the application of U-POL products "Raptor Liner" spray on 2-part bedliner finish that is a UV resistant, salt water resistant, durable coating to protect the vehicle's interior from equipment damage, wear and tear. Color choices available are black, gray or white. Floor, walls, and ceiling will be coated.			
Undercoating Finish The entire undercarriage of the chassis and body will be coated with automotive grade, Zeibart brand professional undercoating			

REVERSE SAFETY

Required	Available	Not Available	Notes
Backup Alarm A Whelen model WBUA107, 107dB back up alarm shall be installed on the rear of the vehicle and wired to the reverse circuit. *Backup alarm cover*: Add a custom aluminum cover bracket around the backup alarm to protect from damage, debris and corrosion. Made from 0.125" thick aluminum.			
Backup Camera System Install a color day/ night back up camera with IR illumination on the rear of the vehicle's roof facing downward behind the vehicle. A 7" color LCD monitor will be installed on the front dash. Specific location will be agreed upon with Boston EMS. Back up camera will be triggered when the vehicle is placed in reverse. Rosco Safety Vision Model #STSK7665			

ELECTRICAL SYSTEM – 12 VOLTS DC

Required	Available	Not Available	Notes
Cab Central Wiring System			

Included in the conversion will be an FPEV vehicle specific custom harness system throughout the vehicle including OEM factory style plugs and connectors. All wiring shall be GXL wire function coded every 4”, and the harness system utilizing a minimum of 10 different colors and shall be protected with high temperature convoluted loom. There will be no splices or connectors within any harness and anywhere it passes through a wall a snap ring grommet is included. OEM factory style plug in connectors used where possible eliminating cutting and splicing into factory wiring. *Central wiring location*: The rear wall of the cab shall have a 3/16" thick aluminum plate installed for mounting of electrical components including but not limited to breakers, relays, fuse blocks, amplifiers, mobile radio components and so on. The wiring panel shall be covered with a rubber insulated, three-piece aluminum convert panel system. Cover panels shall be tapped and held in place by removable machine screws and hardware. *Connections*: All connections shall be soldered and covered with heat shrink tubing. The use of scotchlok or butt connectors will not be used. Exterior light heads will be connected with Deutsch connectors for serviceability. *12 Volt System:* A completely designed and coordinated 12-volt, negative ground, system shall be provided. The system must be designed so that all components are permanently grounded (-) and positively (+) energized, where possible. All electrical devices, circuit breakers, relays, switches, solenoids, must be designed in accordance with applicable SAE standards. It is incumbent upon the primary vendor to ensure that all relevant SAE standards are adhered to.			

Wiring method: The entire electrical system must conform to SAE J1292 requirements. It is incumbent upon the primary vendor to obtain and provide SAE specifications. All splices made by vendor during construction/wiring of vehicle must utilize heat shrunken connections or commercially produced heat activated self-sealing connector that is weatherproof. No connection shall be buried within a harness or conduit where it cannot be accessed for troubleshooting and diagnosis. All connections to light heads must include an automotive style “weather pack” or “Deutsche” style plug-in connector. All body wiring must meet at a centralized junction box with easily removable cover installed on the rear wall of the vehicle's cab. Inside junction box must be a wiring index identifying all circuits and their corresponding fuse. Also included in this junction box must be all relays, circuit breakers and fuses. All vendor-installed accessories must ground at a common point inside the junction box and then common ground point must be extended to one of the vehicle batteries to ensure a reliable and consistent ground in order to minimize mobile radio interference. Wherever a harness passes through a vehicle panel or bulkhead a liquid tight conduit connector must be utilized to maximize weatherproofing. Grommets and silicone or similar sealants will not be accepted. Circuits must be provided with properly rated circuit breakers. Entire 12-volt electrical system must comply with recommended standards and practices of F.M.V.S.S., Federal Specifications, S.A.E. and N.E.A. All measures to protect wiring from chafing, heat damage, solvents, and vibration must be taken. Wiring circuits must be color coded to allow easy diagnosis of electrical system problems. All wiring must be loomed and armored where			

necessary to protect from damage and must include six-inch (6") service loops for easy maintenance.			
Vendor for Installation of Electrical Components: • Vendor must use soldered, hermetically sealed connections designed to block entry of moisture where possible. If a solder-less connector necessary, only "Deutsche" solder-less connector will be accepted. • Vendor must use dielectric grease to displace moisture. • Vendor must avoid use of connectors with top-mounted lids through which moisture can enter. • Vendor must mount connectors in protected places and avoid spots where moisture can collect. • Vendor must mount all connectors horizontally so moisture will run off without running into seals and joints. • Vendor must be aware of any connectors or other parts that might be exposed to fluids and take all necessary preventative measures. • Vendor must use connectors of the same metal composition to eliminate electrolysis between dissimilar metals which will result in additional corrosion. • Vendor must not allow exposed wiring anywhere in vehicle. • Body must not be multiplexed. Standard wiring must be used. • Vendor must provide a six-inch (6") service loop when wiring vehicle components. All wiring must be wired as to function.			
Door Ajar Indicator A Whelen 0S series, marker/Clearance, Illumination and Flashing LED, Chrome Housing, Size is 1-inch-wide x 1.5 inches long. Light will be installed on front dash or console and notify the operator when a compartment door is left open. Doors shall have a pin switch			

to determine when a door is not fully closed.			
Placard Labeling Package Engraved UV resistant plastic placards labels shall be created and attached throughout the vehicle as listed in the following specifications. They shall describe the function of switches and devices installed in the vehicle as per the specifications. Placards shall be two colors (background and text). Exterior placards labels shall be attached using adhesive VHB tape and rivets. Interior placard labels shall be attached using VHB tape only.			

SYSTEM SPECIFICS

Required	Available	Not Available	Notes
Battery System OEM battery system			
Digital Voltmeter An "Auto Meter Competition Instruments" model #6393 digital LED voltmeter shall be installed on the dash in the steering column area. This meter will be connected to the vehicle's 12vdc electrical system and show a current volt measurement.			
Ignition Security Module Ignition over-ride system operating from a switch on the dash which allows the keys to be removed and the vehicle left running while in park. When the transmission is shifted from Park, the vehicle will shut off automatically, requiring the keys to re-start.			
Jump Start System (Extreme Duty) A jump start receptacle shall be provided at the front grille area of the vehicle. Cable thickness shall be 2/0 stranded copper with SAE J1284 molded plug. Includes dust cap with cable. *Wiring*: Jump start circuit shall be activated by Cole Hersee model 75920-05 300A switch. Additionally, a 300A ANL fuse will be installed close to the vehicle's battery. There shall be a pilot light to indicated when the system is energized installed on the vehicle's dash. *Cable set*: Included is one set of 2/0 x 16ft long cables containing truck end and clamp end.			

ELECTRICAL SYSTEM – 110VAC

Required	Available	Not Available	Notes
Shoreline Inlet A 20-amp Kussmaul weatherproof "Super" auto-eject shall be provided. One (1) inlet receptacle shall able installed on the left rear side of the vehicle wired to eject when the key is in the "start" position. Included is a junction box with circuit breaker protection and one (1) junction box located in the apparatus body for connection to equipment. *Shoreline indicator light*: Install a power on indicator light mounted on the console or dash activated when power is applied to the shoreline. Includes engraved placard label stating "SHORE POWER". *Shoreline indicator light*: Install a power on indicator light mounted on the exterior of the vehicle near the shoreline inlet activated when power is applied to the shoreline. *Battery Charger*: The battery system shall be maintained while plugged into the shore power system using multi-stage battery charger conditioner. Progressive Dynamics "Charge Wizard" 45-amp unit shall be installed. This charger shall keep the Primary and Secondary batteries conditioned but not overcharged while plugged in. *Automatic transfer switch*: A 30-amp, 120 VAC automatic transfer switch shall be installed that will switch between two (2) 110 VAC power sources**.**			
Inverter There shall be a Xantrex SW-2000 inverter installed in the cab of the vehicle. Inverter shall be connected the automatic transfer switch. Inverter shall have a remote on/ off switch located on the front console. Inverter shall be wired			

to operate only when the vehicle's ignition is on. A properly rated ANL fuse and fuse holder will be located under the hood of the vehicle. Wiring shall be copper stranded and properly sized to handle 125% of the maximum load produced by the inverter.			

INTERIOR CAB ITEMS

Required	Available	Not Available	Notes
Console Customized vehicle specific front control console shall be provided and installed between the front driver and passenger seats. Console shall be manufactured from 6000 series smooth aluminum sheet. Console shall be custom contoured to the vehicle's floor and dash area using prevision CNC machinery. It shall be padded and covered with a color coordinating vinyl fabric that closely matches the interior of the vehicle. *Radio panels*: There shall be two (2) removable radio panels total. Each shall be made from 1/2-inch-thick HDPE starboard composite material. Radios, switch panels and other devices stored in the console shall be custom cut into the console face for a contoured fit. *Power Sources*: One (1) 12-volt power outlet and one (1) dual port USB charge socket. *Cup holders:* Two (2) drop in cup holders. The remaining area is available for the optional installation of radio control heads and other equipment which shall be addressed in the communications section of this proposal. Extra space can be utilized as an open pocket for books, portable chargers (not included) etc. A detailed set of three-dimensional computer-generated plans will be			

submitted for approval after a contract is issued and prior to construction.			
Cab Dome Light(s) There shall be Two (2) Whelen 60C0EHCR LED white & red interior LED dome light(s) on the cab ceiling over the driver and passenger seat area. Light(s) shall be wired to ignition power. Contains an internal 3-way switch.			

EXTERIOR ITEMS

Required	Available	Not Available	Notes
Push Bumper with Winch Kit The original equipment front bumper must be replaced with a highly custom unit fabricated from minimum one quarter inch (¼") steel. Said push bumper through Diversified Products Manufacturing, Jacksonville, Florida. Diversified Products Manufacturing part #PB-9310W1-2C must be provided, or equal. Grille guard must be non-tubular design. This push bumper must accept a Warn 16,500 TI, or equal, electric winch with a four-way roller fairlead. The roller fairlead / cable hook must be protected by rubber dock bumpers of sufficient depth that when compressed the fairlead / cable hook does not contact anything that the bumper may come in contact with. Rubber dock bumpers, four (4) in total, must be mounted to the immediate left and right of the fairlead and secured with recessed grade 8 hardware. The complete bumper must be sprayed with bed liner style material. Color must be BLACK. There must be no exposed wires running through the bumper itself that are not concealed in a conduit for protection.			

Grille Guard A metal grille guard constructed of two inch by three eighths inch (2" x 3/8") steel flat stock must be supplied and mounted on push bumper. Grille Guard must be minimum fifteen inches (15") high and include vehicle clearance guides and license plate bracket. Clearance guides must be three-quarter inch (3/4") steel stock eighteen inches (18") tall with four inches (4") reflective SCOTCHLITE, or equal, strip on ends. Strips must be "GRABBER BLUE", or equal, in color. Accommodations for all warning lights to be mounted on grille guard must be provided. The complete grille guard must be sprayed with bed liner style material. Color must be BLACK.			
Winch Cable / Hook Retention System: A vendor supplied and installed winch Cable / Hook retention system must be installed in the area of the top bumper flange to retain winch retrieval hook. Configuration shall be determined during pre-construction meeting. A Heavy Lift Swivel Hoist Ring from the Crosby Group, or equal, must be utilized. Bolt Size must be 5/8-11 x 2.25. Working load limit 3,200 lbs.			
Winch 16,500 lbs. 12 V DC Winch (Recovery Winch): A Warn 16,500 TI 12 V DC, or equal, winch must be mounted to front of vehicle via frame rails in accordance with manufacturer specifications. One (1), special fifty-foot (50') wire pendant(s) must be provided. Ninety feet (90') of seven sixteenths of one inch (7/16") galvanized aircraft cable must also be included with replaceable manufacturer's specified clevis hook. All wiring must be 2 gauge at a minimum and must meet winch operating requirements.			

Winch Power Supply: Winch must 12-volt design wired to manufacturer's specifications with power being switched through a Cole Hersee, or equal, 50-amp paddle type switch. A Weldon Technologies 9186, or equal, LED type status light must be provided in the dashboard area.			
Front License plate bracket: There shall be a custom steel bracket welded in place prior to bumper coating that shall secure a front license plate with threaded 1/4"-20 thread mounts.			
Running Boards The vehicle shall come equipped with OEM molded composite running boards. One (1) per side, two (2) total.			
Mud Flaps Install a set of mud flaps for the rear wheels. Flaps shall be minimum 1/4" thick. There shall be an anti-sail device custom made from aluminum that covers the top half of the flap, leaving the bottom half flexible.			

EXHAUST MODIFICATIONS

Required	Available	Not Available	Notes
Exhaust Turn Downs Extend the current exhaust pipe to edge of the vehicle and downward at 90-degree bend. Additional hanger supports will be added to support the weight of the exhaust pipes after modifications.			

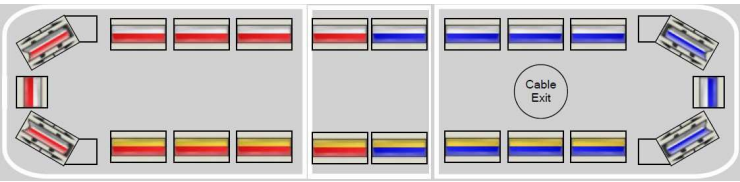
EXTERIOR GRAPHICS

Required	Available	Not Available	Notes
Graphic Package A 3M Scotchlite and Avery vinyl graphics package for a rescue vehicle shall be provided. A computer-generated conceptual graphics plan including front, rear, left, right and top views of the layout will be presented for approval.			

Package includes the following, or equal graphics package: *Door emblems*: Two (2) door shield decals (approximately 18" high x 12" wide). One (1) installed on each front door, approximately one (1) inch behind the front door edge. Top edge just below the body-side stripe. *Side Stripes*: Five (5) inch 3M reflective tape stripe with one (1) inch of spacing above and below the stripe. One (1) inch 3M reflective stripe above and below the spacer of the Five (5) inch center stripe. Stripes shall run the full length of the vehicle's side, front to back. *Rear Stripe*: Five (5) inch 3M reflective tape stripe with one (1) inch of spacing above and below the stripe. One (1) inch 3M reflective stripe above and below the spacer of the Five (5) inch center stripe. Stripe shall run full width of vehicle's rear. *Lettering:* Two (2) sets of four (4) inch high vinyl letters stating the agency/ department's name. One (1) installed on each side of the vehicle. • One (1) set of four (4) inch high vinyl letters stating the Agency/ Department's name on the front edge of the hood. • One set of four (4) inch high vinyl letters stating the Agency / Department's name on the rear hatch of the vehicle. *Rear chevron*: A 3M Scotchlite, reflective inverted "V" pattern shall be installed on the rear of the apparatus body.			

WARNING LIGHTS AND SIRENS

Required	Available	Not Available	Notes
Roof Warning Light – Cab Light Bar A Whelen Legacy 54" wide, LED lightbar shall be installed on the cab roof. It shall be populated as per the diagram below with LED light heads. Light bar will be mounted permanently, with Whelen adjustable MKAJ7 mount. Wiring shall pass through the roof with sealed, wire bulkhead compression fitting and dually sealed with RV type silicone sealant to prevent leaks. Illustration below.			



Required	Available	Not Available	Notes
Intersection Warning, Front Whelen Vertex surface mount LEDs on the front fenders. two (2) per side, four 4) total. Installed with chrome surface mount flanges (VTX-FC).			
Push Bumper Warning Light Package The lighting below shall be installed on the front heavy duty push bumper of the vehicle. *Top Center*: Two (2) Whelen M6 series LED warning lights on the top center section of the grille guard; color red. *Mid-Level Center*: Two (2) Whelen M6 lights shall be installed mid-level where the grille guard meets the push bumper; color blue. *Outer corners*: Two (2) Whelen M6 lights shall be installed on the outer corners of the push bumper facing at 45-degrees outward; color white			

Mounting style: These lights shall be installed using custom fabricated steel brackets, welded in place, prior to the prime prep and coating of the push bumper / grille guard. Whelen M6 Chrome flanges shall be provided.			
Alternating Headlight Flasher A head light flasher module shall be installed in the high beam circuit of the vehicle's head lamps.			
Side Body Upper Warning There shall be one (1) Whelen model M9 series RED warning LED each upper corner of the sides of the body, four (4) total. At approximately mid-point on the rescue body ladder chute, there shall be a single Whelen model M6 BLUE color warning led on each side, two (2) total. Each light shall be installed with a chrome flange. Lenses are clear.			
Side Body Lower Warning Whelen M6 LED surface mounted warning LEDs with chrome surface mount flanges shall be installed on the sides of the lower body, above the rear wheel wells. One (1) per side, two (2) total. Color BLUE. Lenses CLEAR.			
Rear Body Warning Whelen M9 Series warning LEDs with chrome surface mount flanges shall be installed on the rear of the body. Two (2) shall be mounted in the upper corners and two (2) shall be mounted at mid-level. Four (4) light heads total. Lighting shall be set to flash in an "X" pattern. Colors shall be two (2) red and two (2) blue. Lenses shall be clear.			
Traffic Arrow A Whelen TANF85** 6-LED amber traffic advisor bar with one color flasher on each end, eight LEDs total. Installed on upper rear of body. Includes 0.125-inch-thick aluminum tread plate protective branch cover. Control unit installed on the front dash or console. (If Whelen CenCom is selected, arrow			

controls will be controlled through CenCom). 45.12" Long.			

AUDIBLE WARNING

Required	Available	Not Available	Notes
Siren Light Controller A Whelen CenCom Carbide programmable siren and light controller. System consists of a relay / amplifier module that shall be remote installed in the electrical control center of the vehicle and have a remote head siren controller with three position slide switch and 6 programmable light switches. 200-watt siren amplifier. Includes CANEM16 (16) position expansion module for additional lighting outputs. *Speakers:* The siren shall be connected to two (2) Whelen 100-watt siren speakers (model SA-315P) with vehicle mounting brackets included and installed behind the front grille/ bumper area.			
Low Frequency Siren System A Whelen Howler low frequency siren system. Includes two (2) speakers. System shall activate when the horn ring is depressed and activated in conjunction with the siren operation.			
FMVSS Marker Light Package Supply and install a Whelen "0S Series" square LED marker light package. Package includes: • Two (2) amber LED on front of body • One (1) amber and one (1) red on right side of body • One (1) amber and one (1) red on left side of body • Two (2) red and one (1) triple ID red bar on rear of body			
Side Turn Signals Each side of the body, between the rear wheels and L2/R2 doors shall have one (1) Truck Light model "Super 60" series			

amber LED turn signal indicator installed. Each light shall be wired to the factory turn signal circuit. Two (2) lights total.			
Taillight Modules The rear taillights shall be Whelen M6 style LEDs. There shall be one (1) vertical chrome plated triple stack housing per side, two (2) total. Each stack shall contain the following: • One (1) red stop • One (1) amber arrow turn signal. • One (1) white backup light The stacks will mount as per FMVSS. They will be wired directly into the chassis wiring harness.			
Rear Door Brake Lights Whelen M6 series LED Brake lights shall be centered on the rear doors. These lights shall serve as third brake lights and be connected to the OEM brake light circuit. Two (2) total. Whelen M6BTT with M6FC chrome flanges.			
Rear License Plate Assembly A license plate bracket with threaded 1/4"-20 fastener screws on the driver side rear of the body. Included is a white LED lamp to illuminate the license plate and is activated with the headlamp / parking lamp circuit.			

SCENE LIGHTING

Required	Available	Not Available	Notes
Side of Body – Body of Upper Scene Whelen M9LZC LED scene lights with chrome surface mount flanges on the upper sides of the body, toward the corners. Two (2) per side, four (4) total.			
Front Body Lightbar Rack Whelen Micro Pioneer #MPBB LED flood lights on swivel style bail brackets shall be installed along the front edge of the apparatus body roof. Four (4) of the			

lights shall be "spot" and four (4) shall be "flood" style, eight (8) total. Lights shall be installed on a custom fabricated aluminum mounting bracket, rather than directly through the vehicle's roof to avoid excess holes in the roof. This will prevent water leakage issues. All wiring will run to the driver side of the installation bracket and enter the body through (1) sealed fitting to minimize holes in the roof. Lighting shall be controlled through a switch in the cab.			
Push Bumper Flood Lights Whelen Micro Pioneer model MPPBS flood lights shall be provided and installed using included adjustable bail brackets. Light(s) shall be set to activate with a switch on the dash or siren and light controller. Additionally, lights can be set to flash when warning lighting is activated. Two (2) of lights total.			
Rear Upper Body Flood Lights Whelen Micro Pioneer #MPPBBS lights on swivel style bail brackets in the upper rear corners of the body, facing the area behind the vehicle. Lights shall be "Flood" style. Lighting shall turn on with a switch in the rear compartment and/ or by placing the vehicle in reverse. Two (2) lights total.			
Scene Lights, Telescoping Poles, Front Body Whelen model PFH1P1B Pioneer style LED on side mount style pole mounts shall be installed on the front of the body. One (1) light on left side and one (1) on right side of body front. Lights shall be installed using a Heavy Duty 75A relay and be controlled by individual switches in the vehicle's cab. Each light head shall have a light position sensor and be wired to a flashing Whelen 0S series indicator on the vehicle's dash area. Each light head shall have an on/ off switch incorporated into the light head fixture			

in addition to the switching inside the vehicle.			
Portable Hand Spotlight A Whelen model LF35, 12vdc, rechargeable LiFePO Battery, 3500 Usable Lumens portable light will be provided with the vehicle. Mounting base installed in the vehicle's cab, behind the driver's seat.			
Antenna Rack A custom fabricated aluminum antenna rack shall be installed on the forward edge of the apparatus body. There will be. (5) NMO style 3/4" diameter antenna bases installed in the channel with leads terminating in the cab rear wall area. Antennas will be enclosed in an aluminum protective channel along the front of the body to protect wiring from damage. (Antennas are not included).			
Mobile Radio Installations The end user shall provide the radio equipment package(s). This equipment package includes radio, connection cables/harness, microphone, external speaker(s) and roof antenna(s). Vendor shall provide the necessary power sources to power the radio system and install the components listed above. Vendor's production should allow for the installation of APX 6500 UHF mobile and an APX 8500 V.H.F., 7/800 mobile. *Total Qty of radios*: One (1)			

CONTENTS OF THE PROPOSAL & REQUIREMENTS

As part of their Proposal preparation, Vendors should thoroughly and carefully explain how their proposal best meets the requirements of BPHC/Boston EMS. This specification sets forth minimum capacity and performance, requirements. Vendors may offer a Proposal which exceeds the minimums set forth in this document. Vendors may suggest different business terms and conditions provided that their Proposal references the difference as an "exception."

1. **TITLE PAGE -** The proposal shall include a title page showing the company's name, contact person and title, address, and contact information.

2. **PRODUCTION AND DELIVERY TIMELINE –** Include a schedule that covers the production timeline and delivery.
3. **COMPLETE COST PROPOSAL -** Boston EMS is seeking a firm fixed price proposal only. Vendor must outline all pricing associated with delivery, including warranty. Any potential costs not outlined in the contract associated with potential future work, should be listed.
4. **REFERENCES -** Provide a minimum of three (3) and a maximum of five (5) selected references from comparable work who can speak to the Vendor's qualifications. Name, title, phone and email shall be included for each reference.
5. **W-9 –** Include a completed and signed W-9 with proposal package.

STANDARD BPHC CONTRACT – The selected vendor will be asked to sign the BPHC standard contract as written.

SUBMISSION OF PROPOSAL

The proposal can be submitted by email to Laura Segal (segal@bostonems.org) or by mail to Boston EMS, ATTN Laura Segal, 785 Albany Street, Boston, MA 02118. If submitting by mail, please ensure it in a clearly marked envelope with 1) the Company Name and Address, and 2) "Boston EMS Special Operations Vehicle".

There will be no public opening for this RFQ. The responsibility for submitting a proposal to Boston EMS on or before the stated time and date will be solely and strictly the responsibility of the proposer. BPHC/ Boston EMS will in no way be responsible for delays caused by the United States Mail service or caused by any other occurrence.

REQUEST FOR INFORMATION

Questions concerning this RFQ are due in writing to Laura Segal at segal@bostonems.org. Responses to written questions will be posted on www.boston.gov/bphc-RFQs-and-bids. All deadlines are outlined in the timeline section of this document.

AWARD AND IMPLEMENTATION

1. **AWARD -** BPHC/Boston EMS will endeavor to negotiate a Contract with the successful proposer within thirty (30) days of the Notice of Award. In the event that a mutually agreeable Contract cannot be negotiated with said Vendor, BPHC/Boston EMS will then enter into contract negotiations with the next highest rated Vendor, and so on until a mutually agreeable contract can be negotiated.

PROPOSAL SUBMISSION CHECKLIST

For Inclusion with Proposal

Refer to section *I. Contents of the Proposal and Requirements* for additional detail pertaining to contract documents.

Check When Complete	Contents of Proposal Documents	Signature Required where X
☐	Cost Proposal with verification all items in scope of work will be met	-
☐	Production and Delivery Timeline (may be included in the quote)	-
☐	References	-
☐	W-9 Form	X

Failure to submit all of the above information may result in disqualification from the review process.