



BID DOCUMENT

CITY OF BEVERLY HILLS OFFICE OF THE CITY CLERK 455 NORTH REXFORD DRIVE BEVERLY HILLS, CALIFORNIA 90210 (310) 285-2440

LEGAL NOTICE- BIDS WANTED

Sealed proposals are requested on the list of materials, supplies, equipment or services set forth herein, subject to all conditions outlined in the Bid Document, including:

SECTION I: REQUEST FOR BIDS

SECTION II: GENERAL INFORMATION AND INSTRUCTIONS

SECTION III: DETAIL SPECIFICATIONS

SECTION IV: BID FORM

(IF YOU CHOOSE NOT TO BID, SEE LAST PAGE)

Sealed proposals will be received only at the <u>Office of the City Clerk</u>, 455 North Rexford Drive, Beverly Hills, until 2:00 p.m. local time, on the dates hereinafter stated at which time they will be opened and publicly read for furnishing the materials, supplies, equipment or services or for supplying the materials, and/or providing labor for the repair, construction or improvement as the case may be, as indicated by the items hereunder listed and in accordance with applicable specifications.

SECTION I – REQUEST FOR BID

Date of Request: April 17, 2012

Bid Number: 12 - 31

Item Description: TRUCK, RESCUE, FREIGHTLINER M2

Bid Opening: May 3, 2012 @ 2:00 PM

All bids must be delivered by the specified opening time of the bid. Bids arriving after the specified hour will not be accepted. Mailed bids, which are delivered after the specified hour, will not be considered regardless of postmarked time on the envelope. All bids must be in writing and must contain an <u>original</u> signature by an authorized officer of the firm – Electronic bids (telephone, FAX, etc.) are <u>NOT</u> acceptable.

A bidder or potential bidder who has a procedural question may call <u>Craig Crowder at (310) 285-2490</u> or <u>Rene Biadoma at (310) 285-2484.</u>

CITY OF BEVERLY HILLS SECTION II – GENERAL INFORMATION AND INSTRUCTION

- 1. Bid deposits of unsuccessful bidders will be returned after the bid has been awarded. A successful bidder's bid deposit will be returned after he has entered into a written contract, or after a performance bond, if required, has been executed and accepted by the City
- 2. The vendor's proposal may be withdrawn at any time prior to the bid opening. No proposal may be withdrawn after the bid opening. Violation of this policy may cause forfeiture of the bid deposit and removal from qualified Bidder's List.
- 3. Bidders are advised to become familiar with all conditions, instructions and specifications governing this bid. Once the award has been made, a failure to have read all the conditions, instructions and specifications of this contract shall not be cause to alter the original contract or for vendor to request additional compensation.
- 4. Bidders agree to defend and save the City from and against all demands, claims, suits, costs, expenses, damages and adjustments based on any infringement of any patent relating to goods specified in this contract.
- 5. Successful bidder shall not assign the contract, or subcontract the whole or any part of the contract without written consent of the City. Such consent shall neither relieve the bidder from his obligation nor change the terms of the contract.
- 6. The City shall have the right to inspect any material specified herein. Equipment, supplies or services that fail to comply with the specifications herein regarding design, material or workmanship are subject to rejection at the option of the City. Any materials rejected shall be removed from the premises of the City at the expense of the vendor.
- 7. Bidder shall state the nature and period of any warranty or guarantee. Manufacturer's specifications shall be submitted with the bid and shall be considered a part of this contract where such specifications meet the minimum of the City specifications.
- 8. Each bidder shall submit in full this completed original BID DOCUMENT and all necessary catalogues, descriptive literature, etc., needed to fully describe the materials or work he proposes to furnish.
- 9. Bidders shall state the delivery date for commodities in terms of calendar days after notification of award. Where the contract calls for performance of labor, the bidder shall also state the number of calendar days required for completion after notification of award.
- 10. Cash discounts shall be considered in the evaluation of the bids, except that payment periods of less than thirty (30) days will not be considered in award of this bid. Where cash discounts are offered, the discount date shall begin with the invoice date or delivery date to the City, whichever is later.
- 11. Upon the award of the bid to the successful bidder, if insurance is required by the terms of this bid, the City will require evidence of such coverage be furnished within fourteen (14) days of notification of bid award. The amounts and types of coverage will be specified in Section IV of this bid. All insurance forms must be in a format acceptable to the City. (See attached City of Beverly Hills insurance form.)
- 12. Every supplier of materials and services and all contractors doing business with he City shall be an "Equal Opportunity Employer" as defined by Section 2000 (E) of Chapter 21, Title 42 of the United States Code Annotated and Federal Executive Orders #11375, and such shall not discriminate against any other person by reason of race, creed, color, religion, age, sex or physical or mental handicaps

- with respect to the hiring, application for employment, tenure, terms or conditions or employment of any person.
- 13. Prices quoted herein must be firm for a period of not less than ninety (90) days after date of bid opening.
- 14. Bids calling for other than a "lump sum" total bid may be awarded by single item, by groups of items, or as a whole, as the City deems to be in the best interest of the City.
- 15. The City will be the sole and exclusive judge of quality, compliance with bid specifications or any other matter pertaining to this bid. The City reserves the exclusive right to award this bid in any manner it deems to be in the best interest of the City.
- 16. Quantities specified in Section III are approximate only, the City reserves the right, within the period for delivery to increase or decrease the quantity ordered and upon mutual agreement after the period specified for delivery, order additional quantities of items bid.
- 17. "Contractor shall cooperate with the City in all matters relating to taxation and the collection of taxes. It is the policy of the City to self-accrue use tax associated with its own purchases. The City requests that its contractors self-accrue their use tax, when applicable, and report the use tax to the State Board of Equalization with a City-assigned permit number. The City's own use tax which is self-accrued by the City will be remitted to the State of California pursuant to the City's permit with the State Board of Equalization."

SECTION III - SPECIFICATIONS FOR A FREIGHTLINER M2 SLANT-SIDE RESCUE

IN THE EVENT OF CONFLICT, THE FOLLOWING SPECIFICATIONS SHALL PREVAIL OVER GENERAL INSTRUCTION CONTAINED ELSEWHERE IN THIS REQUEST FOR PROPOSALS

APPARATUS

Proposal to be submitted to the City of Beverly Hills shall be for a Freightliner M2 Slant-side Rescue vehicle (No Exceptions). The following paragraphs will describe in detail the apparatus proposed. It is intended to meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution, except where amended by these specifications. Loose equipment not specifically requested will not be provided.

DELIVERY

The apparatus will be delivered under its own power to insure proper break-in of all components while the apparatus is still under warranty.

INFORMATION

At time of delivery, three (3) complete sets of operation and maintenance manuals covering the apparatus will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission oil, and drive axle lubricant.

SAFETY VIDEO

At the time of delivery Manufacturer will also provide one (1) professionally produced apparatus safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus, including the following: vehicle pre-trip inspection, chassis operation, and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted with the apparatus fully loaded and a continuous run of no less than ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus will meet NFPA 1901 acceleration requirements and NFPA 1901 braking requirements. The apparatus when fully loaded will not have less than 25% nor more than 50% on the front axle and not less than 50% nor more than 75% on the rear axle.

ISO COMPLIANCE

The Manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that are established by the manufacturer for de-sign, manufacture, installation and service. A copy of the certificate of compliance shall be included with this proposal.

NFPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution.

Certification of slip resistance of all stepping, standing and walking surfaces will be supplied with delivery of the apparatus.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

The Manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications.

The Manufacturer will designate, in writing, who is qualified to witness and certify test results.

APPARATUS REGISTRATION

Apparatus will be registered by Manufacturer to:

City of Beverly Hills 455 North Rexford Drive Beverly Hills, CA 90210

Manufacturer shall ensure that purchaser receives license plates and registration by mail.

TOTAL VEHICLE ASSESSMENT CERTIFICATION

The apparatus will be third-party, independent, audit-certified through Underwriters Laboratory (UL) to the current edition of NFPA 1901 standards. The certification includes: all design, production, operational and performance testing of the apparatus. NO EXCEPTIONS.

INSPECTION TRIP(S)

The bidder will provide two (2) factory inspection trip(s) for <u>eight (8)</u> customer representative(s). The inspection trip(s) will be scheduled at times mutually agreed upon between the manufacturer's representative and the customer. All costs such as travel, lodging and meals will be the responsibility of the bidder.

MAXIMUM OVERALL HEIGHT

The maximum overall height of the apparatus shall not be higher than 106".

MAXIMUM OVERALL LENGTH

The maximum overall length of the apparatus will be 24' 8" (296"), or as short as possible and still accommodate the desired equipment and power train configurations.

APPROVAL DRAWING

A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Manufacturer's sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, including placement of Beverly Hills inventory as currently arranged, etc.

A "revised" approval drawing of the apparatus will be prepared and submitted by The Manufacturer to the purchaser showing any changes made to the approval drawing.

WARRANTY

Limited Warranty

The Manufacturer warrants to the user that its Fire and Rescue Apparatus vehicles are free of defects in material and workmanship for a period of ____ months after delivery to the original purchaser. This limited warranty will apply only if the vehicle is properly maintained and used in service, which is normal to the particular vehicle. Normal service means service which does not subject the vehicle to stresses or impacts greater than normally result from the careful use of the vehicle or chassis. If the buyer discovers a defect or nonconformity, it must notify Manufacturer in writing within 30 days after the date of discovery. This limited warranty is not transferable by the first user.

A copy of the Manufacturer's warranty is included with this proposal.

1 <u>CHASSIS</u>

1.01 CHASSIS

2013 or newer Freightliner M2-106 Conventional, meeting specifications of Section 1.01.

- Rescue & Emergency Service (No Exception)
- Provided by Manufacturer.

1.01.01 SPECIFIC RATINGS

•	Drive	4 x 2
•	G.V.W.R Capacity	18,000 lbs
•	Wheelbase	168"
•	Cab to Axle	102"

1.01.02 POWER TRAIN

Engine

- Cummins ISC-300 300HP @ 2000 RPM, 2200 GOV, 860 LB/ FT @ 1300 RPM
- Engine after-treatment device, Automatic over the road regeneration and dash mounted regeneration request switch
- Horton Drivemaster on/ off fan driver
- Six (6) gallon Diesel Exhaust Fluid Tank

Transmission

- Allison 3000 EVS automatic, 6-speed, with PTO provision and output retarder
- Auto Neutral (Package 174)
- Electronic shift control, Dash mounted push button
- Water to Oil Transmission Cooler

Engine Cooling System

- 1100 Sq. In. Radiator
- Note extended life coolant to -34F.

Exhaust

- Horizontal tailpipe, exit forward of rear tires, LH
- Single horizontal muffler

1.01.03 STEERING

- Power TRW THP-60
- Steering Wheel 18"
- Steering Column Adjustable Tilt and Telescoping

1.01.04 AXLES AND SUSPENSION

- Front Axle 8,000 lbs Capacity
- Front Suspension Taperleaf 8,000 lbs -- Maintenance free rubber bushings
- Rear Axle 17,000 lbs Capacity
- Rear Suspension 10,000#, airliner, low position ride height
- Rear Axle Ratio 4.10
- Front and Rear Shock Absorbers

1.01.05 BRAKING SYSTEM

- Air Brake Package
- Front Meritor 15 x 5 Q+ cam; Rear Meritor 15 x 6 Q+ cam
- Anti Lock Wabco 4S/4M ABS without traction control
- BW AD-IS brake line air dryer with shield, heater and integral reservoir
- Air compressor 18.7 CFM
- Parking Brake System with Dash mounted control

1.01.06 TIRES AND WHEELS

- Tires Six (6) 245/70R19.5, 16 Ply Radial
- Front Wheels Two (2) Alcoa 19.5x6.75 8-hub polished aluminum
- Rear Outer Wheels Two (2) Accuride 19.5x6.75 8-hub polished aluminum outside
- Rear Inner Wheels Two (2) 19.5" steel

1.01.07 ELECTRICAL

- Alternator 275 amp 40-SI Quadramount pad with remote battery voltage sense
- Batteries Four (4) Alliance 1131 Group 31 MF 4000 CCA
- Delco 12V 38MT HD starter

1.01.08 INSTRUMENT PANEL AND CONTROLS

Gauges

- Fuel Level
- Oil Pressure
- Transmission Oil Temperature
- Engine Coolant Temperature
- Hour Meter and Trip Meter
- Speedometer Electronic w/ mph, kph scale
- Tachometer 3000 RPM
- Digital Voltage
- Air Restriction Indicator with warning light

Warning system – Lights and Buzzer

- Low Fuel
- Low air pressure
- Park Brake
- Low Oil pressure
- High Engine Coolant Temperature
- Inside/ outside temperature gauge

Other

- Control Cruise, switches in LH switch panel
- Back Up Alarm
- Audio AM/ FM/ WB Two (2) speakers

1.01.09 CAB EXTERIOR

- Hood Fiberglass
- Grille & Intake Vent- Chromed Plastic
- Steps Double, driver's and passenger's side
- 106" BBC Flat Roof aluminum conventional cab
- Bumper Three-Piece 14" Chromed with collapsible ends
- Frame Steel, 5/ 16" x 3" x 10.125"
- Tow Hooks Front
- Mirrors Door Mounted Dual Bright West Coast, 102" equipment width
 - 8" convex, bright finish, mounted under primary mirrors
 - Passenger side convex mounted above window
 - Remote/ Heated
- Windshield wipers two-speed, with intermittent
- Windows Tinted safety glass
- <u>Lighting</u>
 - Headlights
 - Clearance/ Marker Lights Five (5) Amber LED
 - Daytime running lights
 - Turn signals Front lamps

Horns

- Dual electric
- Single horn shield
- Fuel Tank
 - 50 Gallon, LH, fuel fill behind cab.
 - Alliance Fuel Filter/ Water Separator with Primer Pump
- Keys Five sets all keyed alike
- Grab Handles right and left sides
- Rubber Cab Mounts
- Composite Exterior Sun Visor

1.01.10 CAB INTERIOR

- Interior Opal Gray
- Silencer Package for Cab
- Sun visors Driver and Passenger
- Flooring Black Vinyl with insulation
- Seats
 - Bostrom T910 High-back Air Suspension Driver's and Passenger's Seat
 - Black Cordura Plus Cloth Seat Covers
 - Dual Seat Armrests
 - Three-point High Visibility Orange fixed D-ring retractor seatbelts

• <u>Climate Control</u>

- Heater/ Defroster/ AC with a fresh air filter
- Main HVAC controls with recirculation switch
- Standard Heater Plumbing

- One (1) Denso heavy duty and one (1) Sanden compact refrigerant compressors
- Dome light activated by RH/ LH doors, map lights, reading lights, forward mounted
- Electric Door Locks and Windows. Passenger controls shall be located toward passenger side of dash.
- Electrical Solid state circuit protections and fuses
- Roof mounted console with upper storage compartments
- Cup holders in dash
- 12V Power Supply

1.01.11 COATINGS/PAINT

- Exterior Red
- Interior Gray / Black

1.02 CHASSIS MODIFICATIONS

The following modifications will be made to the chassis by Manufacturer

1.02.01 AUXILIARY CONDENSER

A 62k dual fan, skirt-mounted auxiliary condenser shall be installed.

1.02.02 EXHAUST HEAT SHIELDS

Shall be formed from 20 ga. galvanized steel sheets with stamped reinforcements and formed edges. Access openings shall be provided for shock absorber, mounting bolts, etc. Heat shields shall be bolted to chassis frame and extend from back of cab to the frame cross member just behind the rear axle

1.02.03 RUNNING BOARDS

Running boards shall be OEM steps. Steps shall be painted to match the chassis and trimmed with 0.125" polished diamond plate trim. There shall be a diamond plate trim cover above upper step.

1.02.04 MUD FLAPS

Mud flaps with metal stabilizers shall be installed behind each rear wheel. The stabilizers shall be black powder coated.

1.02.05 **AIR HORN**

Shall be two (2) chrome Grover Stutter Tone and be mounted one (1) on each side of hood. Two (2) switches shall be located; one (1) on the driver's side outer floor board area and one (1) on the passenger's side inboard floor area. Install a ½ turn shut off valve near the driver's seat bases for the chassis air supply to the air horns. Exact switch location to be determined at pre-construction.

1.02.06 DRIVER'S CONSOLE

Shall be installed in the cab between the seats. (Console described in Section 6.08) Exact console configuration shall be determined at pre-construction.

1.02.07 AIR SUSPENSION

The automatic drop system shall be activated by the module streetside rear door. An override switch shall be located on the wall at the aft end of the squad bench and on the rear door. An air dump warning light shall be installed in the driver's console. Exact switch location to be determined at pre-construction.

1.03 MODULE-TO-CHASSIS MOUNTING SYSTEM

1.03.01 MODULE MOUNTING SYSTEM

The module shall be bolted to the chassis frame in twelve (12) locations. Each mounting location shall include a hard rubber isolation pad between the chassis frame and the module lateral frame. Eight (8) 3/4" Grade 5 bolts shall extend through the lateral and sides of the frame member and bolt to the web of the chassis frame with a 3/4 Grade 5 bolt. The four (4) rearmost bolts shall be 5/8" bolts. All bolts shall be secured with locking nuts.

1.03.02 CAB-TO-MODULE ATTACHMENT

The module shall be attached to the cab with a flexible watertight boot to allow cab-body flex as designed by the chassis manufacturer. The chassis back shall be modified and reinforced with a welded steel framework. The rear window openings on each side of the module access shall be covered with 14 ga. steel and painted to match the body.

2 MODULAR CONSTRUCTION

All material utilized shall be of the correct type, alloy, and thickness to withstand the intended usage and provide protection against cracking, corrosion, or metal fatigue. All materials utilized shall be of open stock origin, commonly available through local sources, for rapid and economical repair or modification of the body. Any use of proprietary parts or materials in the construction of the body is unacceptable, due to potential delays or difficulties in future repairs or service. NO EXCEPTIONS TO BE TAKEN IN THIS AREA. This specification has been designed and written to fill specific needs of this agency. Where brand name, make, or model of equipment has been specified, no exceptions will be allowed. Where compartment and cabinet sizes have been specified, bidder must bid substantially (plus or minus 1") the size specified.

The module shall have a transferable lifetime structural warranty.

2.01 MATERIAL

EXTRUSIONS ALLOY	SIZE
Structural Tubing 6063-T52	1" x 2" x 0.125" sq
Structural Tubing 6063-T52	2" x 2" x 0.125" sq
Cross Members 6061-T6	3" x 3" x 0.375"

FORMED SHEETING ALLOY	SIZE
Skin/ Roof/ Compartments/ Subfloors/ Doors	0.125"
5052-H32	
Interior Cabinets - 5052-H32	0.090"
Diamond Plate - 3003-H32	0.125"/ 0.08"
Stainless Steel - 304 # 4B	16 ga., 20 ga

2.02 MODULE DIMENSIONS

Overall Vehicle Dimensions: (Specifications are listed as minimums.)

Length:	24' 8" (296")
Width:	8' 0" (96" - Excluding Mirrors)
Height:	8' 10" (106")

Exterior Module Dimensions: (Specifications are listed as minimums.)

Length:	13' 10" (166")
Width:	8' 0" (96")
Height:	7' 1.375" (85.375")

Interior Dimensions: (Specifications are listed as minimums.)

Length:	Forward Wall to Rear Doors	159"
Width:	Left Wall to Right Wall	89"
Floor Width:	Left Cabinets to Squad Bench	45"
Height:	Floor to Ceiling	70"
Load Height:	Ground to Floor Height (Approximate	33"
	with air suspension dropped)	

2.03 STRUCTURAL FRAMING

Sidewall and rear wall construction shall consist of 2" x 2" x 0.125" aluminum square tubing extensions welded together with a maximum of 14" centers. 1" x 2" x 0.125" aluminum tubing may be utilized in addition to 2" x 2" tubing to accommodate custom compartment sizes. The bottom of the wall structure shall be sealed with welded 2" x 2" tube, 2" x 2" angle, or 0.125" plate depending upon location. Wall structure shall be capped with 2" x 2" x 0.125" header upon which 2" x 2" x 0.125" roof structure is welded. This process provides a unitized roll cage structure for greater occupant safety. The front wall structure shall be constructed of a minimum of 1.250" x 3.875" x 0.125" formed aluminum channel to allow ample space for wiring raceways, heater A/C hoses, and cold air return duct.

2.04 FOUNDATION SYSTEM

Shall consist of a 0.125" aluminum sheet subfloor with foundation members securely welded under the subfloor. Members shall consist of eight (8) 3" x 3" x 0.375" structural angles with two (2) 0.250"x 1.5" aluminum members running lengthwise between the structural angles.

2.05 MODULE SEAMS

All body and compartment seams at or below floor level shall be full seam welded. The entire perimeter of the subfloor shall be completely sealed with a caulking material, creating a watertight, dust-free module environment.

2.06 EXTERIOR SKIN

In addition to welding the exterior skin to structural framing, a Norton very high bond system shall be utilized full length on all wall and roof frame members. A polyurethane adhesive sealant shall be applied to the edges of structural tubing at the exterior wall surfaces.

2.07 MODULE ROOF

In order to improve module strength and reduce roof seams the following roof system shall be utilized. The roof shall be seamed in the center, have a 1.500" radius at the corners, and provide a weatherproof overlap of the aluminum side sheets 5.250" below the roof line. The roof shall be supported by positive contact between sidewall framing and roof framing. All seams on the roof surface shall be full seam welded on the outside and caulked on the inside. In order to avoid the possibility of paint and/or weld cracking, no extrusions shall be used in the exterior construction of the roof or corners of the vehicle.

2.08 MODULE EXTERIOR COMPARTMENTS

All compartments are constructed from formed 0.125" aluminum and are securely welded to the subfloor and structural framing. A baffled drain hole shall be provided in all exterior compartment bottoms that extend below the floor line. All exterior adjustable shelves shall be mounted on heavy duty aluminum unistrut track which is securely welded to compartment interiors. Each shelf shall support at least 300 lbs. of equipment.

Each compartment shall be vented with a stainless steel vent.

COMPARTMENT #1

Interior Dimensions – 16"W x 45.5"H x 20"D

Doorway Dimensions – 16"W x 45.5"H

Location – Streetside, forward

Shelving – Two (2) adjustable, diamond plate

Door(s) - Single

Light(s) – See Section 6.25

Additional Instructions – The 120VAC Power Box shall be installed in the forward wall recessed so as not to protrude into the compartment. The inverter shall be installed in the top portion of the compartment. Pre-wire for two (2) flashlight chargers at adjustable shelf.

COMPARTMENT #2

Interior Dimensions – 48"W x 45.5"H x 20"D

Doorway Dimensions – 48"W x 45.5"H

Location – Streetside, forward of wheel well

Shelving – One (1) adjustable, diamond plate

Door(s) – Double

Light(s) – See Section 6.25

Additional Instructions – There shall be a vertical divider in the aft portion of the compartment creating an area that is a minimum of 13" wide for storage of a stairchair. Divider shall be coated with a polyurethane truck bed liner material.

COMPARTMENT #3

Interior Dimensions – 17.5"W x 61.25"H x 25.625"D

Doorway Dimensions – 17.5"W x 61.25"H

Location – Rear, streetside

Shelving - None

Door(s) - Single

Light(s) – See Section 6.25

Additional Instructions – Two (2) backboard restraining straps shall be installed. Two (2) full height vertical dividers shall be installed with the backboards located in the aft section. Divider shall be coated with polyurethane truck bed liner. A formed stainless steel gasket cover shall be installed so that backboards do not cut gasket material. Street side divider shall have shelf installed. Measurements for dividers and shelf shall be determined at pre-construction.

COMPARTMENT #4

Interior Dimensions – 32.625"W x 11.25"H x 15"D

Doorway Dimensions – 32.625"W x 11.25"H

Location – Rear, below rear doors

Shelving – Roll out tray

Door(s) - Single

Light(s) – See Section 6.25

Additional Instructions – This compartment shall contain storage for the battery system. A roll out battery tray shall be installed with stainless steel slides capable of supporting the tray load, be coated in a polyurethane truck bed liner material, contain battery absorbent mat base and be fitted with a locking device to secure tray movement in the stowed position.

COMPARTMENT #5

Interior Dimensions –20"W x 9.125"H x 52.875"D

Doorway Dimensions – 17.5"W x 12"H

Location - Rear, curbside

Shelving - None

Door(s) - Single

Light(s) – See Section 6.25

Additional Instructions – This compartment shall be set up to house two (2) 'M' sized cylinders. One (1) set of louvers shall be installed in the door. Exact cylinder mounting can be determined at pre-construction.

COMPARTMENT #6

Interior Dimensions – 39.5"W x 20.375"H x 20"D

Doorway Dimensions – 39.5"W x 20.375"H

Location - Curbside, rear

Shelving – One (1) adjustable, diamond plate

Door(s) – Double

Light(s) – See Section 6.25

Additional Instructions - None

COMPARTMENT #7 – Inside/Outside Access

Interior Dimensions – 36"W x 45.5"H x 33"D

Doorway Dimensions – 36"W x 45.5"H

Location - Curbside, forward

Shelving – See interior cabinet #18

Door(s) - Double

Light(s) – See Section 6.25

Additional Instructions – This compartment shall have a full width stainless steel threshold on the floor level shelf and provide inside/ outside access to Cabinet #18. The below-floor portion of this compartment shall be for general storage.

2.09 MODULE DOORS

The doors shall be box pan formed with a total thickness of 2".

2.09.01 **DOOR SEAL**

Each door frame will have a 0.875" flange for the installation of an air cell hollow core, 360-degree compression door seal. This seal creates watertight, dust-free compartment integrity. Door seal shall be knock-on type.

2.09.02 DOOR HINGES

Shall be full length, piano type, stainless steel hinges, 2.5" wide with a 0.25" pin. The hinges shall be attached with #12 x 3/4" stainless steel truss head screws spaced 4" apart. All curbside and streetside doors shall be hinged on the forward sides. All rear doors shall be hinged on the outboard sides.

2.09.03 DOOR LATCHES

Shall be flush mounted, stainless steel, Versch paddle type slam latches with rotary latch striker posts, which meet FMVSS 206 requirements. Striker shall be adjustable and shall be secured with a nut from behind door frame. The striker washer will not be removed. Cold rolled, threaded 0.162" steel rods shall be used to activate dual rotary latches. Once final adjustments to latches are made, threads are to have Locktite or equivalent applied. All double door compartments shall have an exterior stainless steel paddle handle and rotary latches on each door. Doors will latch to door frame mounted striker posts only and not to one another. All entrance doors shall have interior handles with dual point, rod actuated, rotary latch systems which are lockable inside and out. All latches will have a non-slip surface on the underside of the latch. All compartment and module access doors shall be keyed for #510CH keys.

2.09.04 COMPARTMENT DOOR CONTROL

A heavy-duty, double spring door control capable of holding the door open at approximately a 90-degree angle on any road surface shall be installed at the top of each compartment door. Compartment #3 & 5 will rubber bumper instead of hold open. Compartment #4 will not have hold open.

2.09.05 CURBSIDE DOOR CONTROL

Shall be a gas shock installed at the top of the door. This door check will hold the passage door open at approximately a 90-degree angle on any road surface.

2.09.06 REAR DOOR CONTROL

Shall be Cast Products "grabber" type hold-open devices with replaceable rubber catches.

2.09.07 COMPARTMENT DOORSKINS

Shall be 0.080" bright aluminum diamond plate and be removable to service door hardware. Reflectors shall be added to the top and bottom outboard corner of each full height door. One (1) reflector will be added to each door of Compartments #5 and 6. There shall be a 'Truck-Lite' 60 LED light installed in the bottom outboard corner of each door except Compartments #4 & 5.

2.09.08 ENTRANCE DOOR SKINS

Shall be 0.080" bright aluminum diamond plate and be removable to service door hardware. Reflectors shall be added to the top and bottom outboard corner of each door. There shall be a 'Truck-Lite' 60 LED light installed in the bottom outboard corner of each door.

2.09.09 ENTRANCE DOORWAYS

One (1) curbside and two (2) rear module entrance doors shall be provided. The curbside doorway dimensions shall be 31"W x 71.25"H. The rear doorway dimensions shall be 49.75"W x 56"H.

2.09.10 THRESHOLDS

All compartment and module access door frames shall have full width formed stainless steel threshold plates to protect the lower edge of frame. Non-slip tape shall be installed on the thresholds of the module passage doors.

2.10 MODULE INTERIOR CABINETS

Shall be formed of 0.090" aluminum and shall be securely welded or mounted to the structural framing. All interior adjustable shelves shall be mounted on 1" wide aluminum Unistrut track.

CABINET #1

Dimensions – 32.875"W x 14"H x 11.75"D

Framed Dimensions – 27.375"W x 10.25"H

Location – Streetside, upper forward

Shelving – One (1) adjustable

Door(s) – Sliding, clear 0.177" acrylic with felt lined anodized aluminum track in pre-formed, aluminum frame, hinged at top with gas shock lift system, passive latch, and full extruded aluminum door pulls.

Additional Instructions - None

CABINET #2

Dimensions – 32.875"W x 14"H x 11.75"D

Framed Dimensions – 27.375"W x 10.25"H

Location – Streetside, upper center

Shelving – One (1) adjustable

Door(s) – Sliding, clear 0.177" acrylic with felt lined anodized aluminum track in pre-formed, aluminum frame, hinged at top with gas shock lift system, passive latch, and full extruded aluminum door pulls.

Additional Instructions - None

CABINET #3

Dimensions – 24.5"W x 14"H x 11.75"D

Framed Dimensions – 19"W x 10.25"H

Location – Streetside, upper rear

Shelving – One (1) adjustable shelf

Door(s) – Sliding, clear 0.177" acrylic with felt lined anodized aluminum track in pre-formed, aluminum frame, hinged at top with gas shock lift system, passive latch, and full extruded aluminum door pulls.

Additional Instructions - None

CABINET #4

Dimensions – 32.5"W x 18.5"H x 20"D **Location** – Streetside, aft of CPR seat **Shelving** – None **Door(s)** – None

Additional Instructions – The entire area shall be lighted utilizing a Grote LED light. Full depth counter top shall be located below the action wall. The counter top shall be one-piece solid surface Corian with a 1.0" high Corian retaining lip. There shall be a solid surface Corian medical supply tray supplied with dividers and mounted on counter top. One (1) 120VAC duplex receptacle shall be installed on the wall at the forward end of the counter top. Exact action area components and component locations as well as counter top configuration and supply tray configuration to be determined at pre-construction.

CABINET #5 - Action Area

Dimensions – 53.625"W x 18.5"H

Location – Streetside

Shelving - None

Door(s) - None

Additional Instructions — It shall contain an attendant control panel, vacuum outlet, oxygen outlet, inverter panel, one (1) 120VAC duplex receptacle, and one (1) 12VDC cigar style receptacle. The entire action wall area shall be lighted utilizing two (2) Grote model #60591 12VDC LED lights. Full depth counter top shall be located below the action wall. The counter top shall be one-piece solid surface Corian with a 1.0" high Corian retaining lip. There shall be a solid surface Corian medical supply tray supplied with dividers and mounted on counter top. Exact action area components and component locations as well as counter top configuration and supply tray configuration to be determined at pre-construction.

CABINET #6 – Electrical/Radio Cabinet

Dimensions – 13.5"W x 47"H x 13"D

Location - Streetside, forward

Shelving – One (1) fixed; two (2) adjustable

Door(s) – Aluminum, hinged, two (2) rotating non-keyed locks, and an automatic compartment light.

Additional Instructions – The upper portion above the fixed shelf shall be the electrical cabinet and house the power component module. The lower portion shall be for radio components. The two (2) adjustable shelves shall be located in this area.

A map book holder shall be installed on the door.

CABINET #7 - Drawer

Dimensions – 30"W x 7.5"H x 20"D

Location – Streetside, aft of CPR seat

Shelving – None

Door(s) - None

Additional Instructions – There shall be one (1) 30"W x 5"H x 19"D metal drawer in this area. Drawer shall operate on 18" slides rated at 300 lbs. per set and have a gas shock hold open/closed device to ensure drawers do not accidentally open or close during operation of the vehicle. Drawer shall be formed 0.090"aluminum and welded construction. Drawer shall have machine stamped divider supports along the side for at least four (4) dividers per drawer with four (4) adjustable dividers provided with each drawer.

CABINET #8

Dimensions – 29.5"W x 15.875"H x 20"D

Location – Streetside, rear

Shelving – One (1) adjustable

Door(s) – Sliding, clear 0.177" acrylic with a felt lined anodized aluminum track and full extruded aluminum door pulls

Additional Instructions - None

CABINET #9 – CPR Seat with Storage

Dimensions Bench: 32"W x 18.75"H x 20"D

Storage: 32"W x 8.125"H x 20"D

Location – Streetside **Shelving** – None

Door(s) – Hinged aluminum bench lid, with high-density foam padding covered with seamless Spradling vinyl shall provide access to the storage area. It shall have a 1.5" overhang, an automatic hold-open device, and stainless steel paddle latch. The pad shall be removable.

Additional Instructions – The CPR seat back pad shall have high density foam padding covered with seamless Spradling vinyl. One (1) set of seatbelts shall be installed on the seat. The CPR seat base to be formed from aluminum and securely anchored to subfloor. The bottom and unfinished sides of the storage area shall be lined with indoor/outdoor carpet.

CABINET #10

Location – Above rear doors

Shelving – None

 $\mathbf{Door}(\mathbf{s}) - \mathbf{None}$

Additional Instructions – There shall be two (2) 12"W x 6.5"H glove butlers installed; one (1) on each end of the head pad. A clock shall be installed in the center.

CABINET #11

Dimensions – 9.75"W x 40"H x 9"D

Location - Curbside, rear

Shelving – Three (3) adjustable shelves

Door(s) – Aluminum, double hinged with quarter turn latches.

Additional Instructions – One (1) set of louvers shall be installed in top of each door. Bottom of cabinet door shall be aprox. 14" from top of bench pad to allow doors to swing open over patient feet. Exact compartment opening dimensions to be determined at pre-construction.

CABINET #12

Dimensions – 8"W x 10"H x 10"D

Location - Curbside, forward end of squad bench

Shelving - None

Door(s) - None

Additional Instructions – This cabinet shall be a rollout drawer, containing one (1) waste container, shall be installed at the forward portion of this squad bench.

CABINET #13 - Glove Storage

Dimensions – 31.75"W x 6.5"H

Location – Curbside, above passage door

Shelving – None

Door(s) – Aluminum hinged, swing down door with a hold open device, and twist/ slam latch

Additional Instructions – The cabinets shall be set up as glove storage for two (2) glove boxes.

CABINET #14 – Squad Bench with Storage

Dimensions Bench: 76.5"W x 19.75"H x 20"D

Storage: 25"W x 9.125"H x 20"D (fore) 52.875" W aft

Location – Curbside **Shelving** – None

Door(s) – Split aluminum lid shall provide access to the storage areas, have an automatic hold-open device and high density foam padding covered with seamless Spradling vinyl. The lids shall have a 1.5" overhang. The aft lid shall be fixed.

Additional Instructions – The squad bench back and/or head pads shall have high density foam padding covered with seamless Spradling vinyl. Three (3) sets of seatbelts shall be installed on the bench and set up for use with sit-up or stretcher patients. The squad bench base to be formed from aluminum and securely anchored to sub-floor. The bottom and unfinished sides of the storage area shall be coated with polyurethane truck bed liner material. There shall be a padded patient restraint with a 12" grab bar on the forward side installed at the forward end of the bench. A tip out sharps container shall be installed at the forward end of the squad bench and tip into aisle.

An attendant control panel, oxygen outlet, electric oxygen panel, digital thermostat, one (1) 120VAC duplex receptacle, one (1) 12VDC cigar style receptacle, one (1) fader switch, and door lock switch shall be installed above the forward end of the back pad.

Exact squad bench area components and component locations to be determined at pre-construction.

Storage for two (2) 'M' sized oxygen cylinders shall be provided in the rear under bench storage area. A bracket shall be provided to restrain cylinders. An oxygen window shall be installed at the forward end of the area facing aisle.

An air dump switch for the air suspension shall be installed on the wall at the aft end of the squad bench within reach from exterior, exact location to be determined at pre-construction.

CABINET #15 – HVAC

Dimensions – 25'W x 12.5"H x 36.875"D

Location – Front, right upper

Shelving - None

Door(s) - None

Additional Instructions – This cabinet shall house the heater/ AC unit and the suction pump.

CABINET #16

Dimensions – 13.5"W x 16.5"H x 16"D **Location** – Forward end of Action Area **Shelving** – Two (2) adjustable **Door(s)** – None **Additional Instructions** – None

CABINET #17

Dimensions – 28.375"W x 19"H x 36.875"D

Location – Front, center right

Shelving – One (1) adjustable

Door(s) – Sliding, clear 0.177" acrylic with a felt lined anodized aluminum track and full extruded aluminum door pulls

Additional Instructions - None

CABINET #18 - Inside/Access

Dimensions – 33"W x 30"H x 36.875"D

Location – Front, lower right

Shelving – One (1) adjustable

Door(s) – Sliding, clear 0.177" acrylic with a felt lined anodized aluminum track and full extruded aluminum door pulls

Additional Instructions – It shall provide inside/outside access to Compartment #7. One (1) 120VAC duplex receptacle and one (1) 12VDC receptacle shall be installed on the back wall.

2.11 SIDE DOORSTEP

A recessed curbside side doorstep shall be provided which is 7" deep (outside) 11" deep (inside) x 31" wide. There shall be a drain hole and an open grate step plate, which is removable for cleaning

purposes. Polished aluminum diamond plate kick panel will be installed on the sides and face of doorstep.

2.12 CAB TO MODULE PASSAGE

Shall be a walk-thru measuring 22.25"W x 54.25"H and shall contain a Spradling vinyl pad covering top of walk-thru.

2.13 WHEELWELL LINERS

Shall be installed in the wheel wells over the rear wheels. The liners shall be formed aluminum.

3 COATINGS AND FINISHES

3.01 MODULE FINISH PREPARATION

The module shall be seam sealed and all imperfections on aluminum surfaces of module shall be sanded smooth. The entire exterior shall be mechanically etched and washed with wax and grease remover to ensure proper primer and paint adhesion.

3.02 MODULE PRIMER

Module shall be primed with urethane primer prior to applying the finish coat of acrylic urethane paint.

3.03 PAINT TYPE

Shall be acrylic urethane.

3.04 COLOR SCHEME

Cab and Module to be painted RED (#L0934EB) to match existing BHFD apparatus.

3.04.01 CHASSIS COLOR

Chassis shall be painted black high solids polyurethane chassis paint.

3.05 COMPARTMENT FINISH

All compartments shall be sanded, etched, washed, primed, and painted with red polyurethane truck bed liner material.

3.06 INTERIOR CABINETRY FINISH

All interior cabinetry shall be sanded, etched, washed, primed, and painted light gray (#G8-51748).

3.07 MODULE UPHOLSTERY

Shall be Spradling vinyl Dove Gray, and be seamless.

3.08 MODULE FLOORING MATERIAL

Shall be LonplateII commercial grade flooring, #421 Mica. It shall be seamless and cove up the sidewalls a minimum of 5" as a seal.

An insulated floor shall be installed over the subfloor. It shall be constructed with square tubing (0.75" x 0.75" x 0.125"), filled with 0.75" thick polystyrene foam insulation, and covered with 0.125" aluminum sheet. (Section 2.04 related)

Beneath the sub-floor shall be insulated held in place with aluminum panels below the 0.125 aluminum sub floor between the floor framing. Below all exposed exterior compartments shall be insulated and held in place with aluminum panels.

3.09 COMPARTMENT LINING

Compartment floors and shelves shall be lined with red Dri-Deck material.

3.10 CABINET LINING

Interior cabinet shelves shall be lined with Dri-Deck material which is removable for ease of cleaning.

3.11 SURFACES AND FINISHES

All surfaces and finishes shall be impervious to soap, disinfectants, and water, to permit washing and sanitizing.

3.12 AUTOMOTIVE UNDERCOATING SEAL

The entire chassis and module underbody (excluding drive shafts, wheels, exhaust system, and lubrication fittings, per manufacturer's specifications) shall be sprayed with undercoating for reduced corrosion and added sound deadening.

3.13 DECALS AND LETTERING

Manufacturer shall install shadowed golf leaf lettering to match existing BHFD apparatus, to consist of fifty-two (52) 5" letters and fourteen (14) 3.5" letters. Exact lettering and placement location to be determined at pre-construction.

3.14 REFLECTIVE STRIPING AND PINSTRIPING

Manufacturer shall install 1" gold leaf pinstriping on cab and module to match existing BHFD apparatus. Manufacturer shall also install 8" white reflective striping on cab and module to match BHFD existing apparatus. Reflective striping on cab doors shall contain red shadowed "CLASS 1" 3.5" lettering. Exact striping and placement location to be determined at preconstruction.

4 <u>MODULE EXTERIOR</u>

4.01 STEP/BUMPER

Shall be a welded construction of $3" \times 3" \times 0.375"$ aluminum angle and $2" \times 0.250"$ plate and shall be covered by 0.125" bright aluminum diamond plate. The center section, below the doors, shall have grip strut open flow design to prevent accumulation of

water and snow and provide a 10" step. This step shall be 34" wide offset to the streetside and flip up for ease of access. The outermost 12" of each end shall be angled to prevent dragging of corners in high angle of approach/departure areas. Diamond plate shall be formed on front and rear edges for channel type strength and formed 0.090" aluminum close out shall be welded to the underside of the step/bumper. The bumper shall be bolted directly to the chassis frame using high strength Grade 5 bolts. Bumper shall be easily removable and replaceable in case of damage. Step/bumper to be designed to accommodate a "one-person style" cot.

4.02 RUB RAILS

Shall be bright finished extruded aluminum of a double channel design and 0.125" wall thickness for maximum strength. Rub rails shall be 2.5" high x 0.75" wide and run along the lower edge of body, interrupted only by wheel well opening. A red/white conspicuity reflective tape shall be installed in the insert area of the rub rail.

4.03 FENDER RINGS

Shall be installed on the module. They shall be stainless steel with a rounded outer edge following the full contour of the wheel well opening.

4.04 DRIP RAILS

Shall be extruded, anodized aluminum running full length of module at top of sides, front, rear and over each exterior compartment. Drip rails shall be installed with bonding tape that will withstand exposure to the elements. They shall be installed to allow easy replacement without the use of mechanical type fasteners, and finished with 45 degree angled ends to avoid hooking materials which brush against the vehicle causing damage.

4.05 ROCK GUARDS

Made of bright aluminum diamond plate shall cover front module corners 36" up from bottom of body, 2.5" down the side of body, and 15" across the front of the body.

4.06 REAR STEP GUARD

Made of bright aluminum diamond plate shall extend from top of rear step to the bottom of rear doors, full width formed around corners, and 2.5" forward on each side. A recessed license plate shall be installed on the door of compartment #4 below the rear doors.

4.07 MODULE WINDOWS

Shall have black anodized aluminum frames, rubber gaskets, and be attached with screws for ease of replacement. All module windows to be dark tinted. The side door window shall be 18.75" x 18.75" with sliding glass, a positive catch, and a screen. The rear door windows shall be 18.75" x 18.75" fixed glass to prevent exhaust from entering module.

4.08 LICENSE PLATE HOLDER

A recessed CPI license plate holder with dual lights shall be installed below rear doors.

5 MODULE INTERIOR

All interior hangers, supports, fasteners, latches, and hinges shall be of a near flush type design when not in use. The patient compartment shall be free of sharp projections. Exposed edges and corners shall be broken with a radius, chamfer, or covered with aluminum trim, plastic molding, or rubber edging.

5.01 UPPER WALL COVERING

Shall be covered with light gray heavy grade 0.125" ABS vinyl. All panels shall be attached with a Norton very high bond system.

5.02 HEADLINER

Shall be fiberglass reinforced 0.090" "Glasboard" with textured white surface.

5.03 HEAD PADS/CUSHIONS

Head pads located over all module access openings and seat backs shall be 1" high-density foam covered with heavy-duty vinyl matching upholstery.

Seat cushions shall be 3" high-density foam covered with heavy-duty vinyl matching upholstery. (Section 3.08 related)

5.04 LOWER WALL COVERING

The squad bench sides and lower portion of the streetside wall shall be nonporous, color-coordinated material.

5.05 GRAB RAIL

Two (2) 75" L x 1.250" D stainless steel grab rail with three (3) support brackets shall be securely mounted to roof structural framing running through centerline.

5.06 ACCESS DOOR GRAB RAILS

Each module access door shall have a 1.250" "L" style stainless steel grab handle which may also be used as an entry assist rail.

One (1) 12" grab bar shall be installed on streetside wall just inside rear passage doors.

One (1) 18"L x 1.250"D stainless steel grab rail shall be installed on the forward end of the squad bench just aft of the curbside passage door.

5.07 IV HANGERS

Two (2) Perko IV clips shall be provided and shipped loose.

5.08 COT MOUNT

A Ferno-Washington 173-3 single position cot fastener shall be installed. It shall be center mounted for and provide a 12"aisle in the center position.

5.09 ATTENDANT SEAT

A rear facing high-back bucket seat with a built in child safety seat, EVS Model #1802, and upholstered with heavy grade vinyl shall be located at the head of the cot position and provide easy access to all action wall controls and outlets, and to the patient. Seat shall swivel and be securely anchored on a pedestal base.

5.10 OXYGEN SYSTEM

The entire oxygen system to be assembled with certified Oxygen hose (1000 PSI burst strength) with brass fittings, pressure tested, and certified. Ohio type outlets shall be installed in the following locations: one (1) in action area, one (1) in ceiling above primary patient, and one (1) in the curbside wall above the squad bench. The Electric Oxygen system shall be controlled through an electric solenoid with manual bypass, have an LED content display, and audible low pressure alarm. One (1) OXYGEN tank wrench shall be included.

System shall be set up for dual oxygen tanks with two (2) regulators, two (2) solenoids, remote 2-way switch with relay from action area oxygen switch. The 2-way switch shall allow for tank 1 or 2 solenoid/transducer activation to signal the oxygen meter to read individual tank pressures.

5.11 SUCTION PUMP

The unit shall have an electric pump as the source of suction. Control shall be on the Attendant Panel. Suction pump shall be vented to the outside of the vehicle under the module body.

5.12 SUCTION COLLECTOR

A Rico Model RS4X-1001B suction collector with disposable canister and Ohio style suction outlet shall be installed in the Action Area.

One (1) Impact 303K suction unit shall be shipped loose.

5.13 SEATBELTS

Shall be DOT certified and shall be installed with all passenger seating. Three (3) sets shall be installed on the squad bench and

set up for use with sit-up or stretcher patients. The attendant seat and the CPR seat shall each have a single seat belt.

5.14 INSULATION

The module sides, ends, roof, doors, and floor shall be insulated to enhance the interior environment and to prevent heat, cold, and external noise from entering the module. The insulation shall be a non-settling polystyrene foam plank material of 2", 1.5", or 0.75" thickness depending upon location and available space.

The floor shall be insulated with 0.75" polyiso insulation.

In addition, a Norton VHB (very high bond) system shall be utilized on sidewalls and roof to provide a thermal and noise break between the outside skin and structural members.

5.15 MODULE CLIMATE CONTROL SYSTEM

Shall incorporate a combination heating/air conditioning unit with 42,000 BTU heating and 36,000 BTU cooling. The unit shall have a 750CFM fan and have controls independent of the cab system. The module system shall be located in the upper portion of Cabinet #15 and controllable by a digital thermostat located on the action wall. An auxiliary dual fan condenser shall be skirt mounted on module to supplement OEM AC cooling capacity.

HVAC shall include an eight (8) controllable ventilation ports in the ceiling, and one (1) vent off the front of the HVAC unit.

5.16 EXTERNAL AIR INTAKE

To supplement heated or cooled air with fresh air, an external air intake shall be provided on the side of the module. The intake shall consist of three (3) Perko vent on the upper curbside forward corner.

5.17 AIR RETURN

Designed into the front right bulkhead wall shall be an air return which runs from the floor level to the heater A/C unit. The air return vent shall have formed louvers.

5.18 EXHAUST VENT

A motor-powered exhaust vent shall be located in the streetside rear corner of the module.

5.19 NO SMOKING/FASTEN SEAT BELTS SIGNS

Two (2) "No Smoking/ Fasten Seat Belt" signs shall be installed – one (1) each for driver's area and module.

5.20 CLOCK

An Atomic controlled clock shall be installed in the rear passage door head pad. The clock shall be LCD display and show hours

(12/24 selectable), minutes, seconds, date, day, and temperature. Clock shall be powered by one (1) "AA" alkaline battery.

5.21 SHARPS/HAZARDOUS WASTE CONTAINERS

One (1) Sharps Container shall be provided and installed on a tip out door at the forward end of the squad bench. One (1) Waste Container shall be installed in a rollout drawer at the forward end of the squad bench.

5.22 OXYGEN WINDOW

Shall be a clear, 6" x 10", acrylic window. The window shall be located on the face of the squad bench, have a knob and be mounted with self-closing hinges.

5.23 GLOVE BUTLERS

Two (2) Glove Butlers shall be provided and installed over the rear doors in Cabinet #9.

5.24 BENCH RESTRAINT

Shall be a partial wall at the forward end of the squad bench. The aft side shall have a pad.

5.25 MISCELLANEOUS EQUIPMENT

One (1) five slot map book holder shall be installed in the streetside walk thru area. Exact location and configuration to be determined at pre-construction.

6 ELECTRICAL

All added body and chassis electrical equipment shall be served by circuits separate and distinct from the vehicle chassis circuits. All vehicle wiring shall be copper and conform to all SAE J1128 requirements. The wiring shall be colored, numbered, and function coded every 3" for permanent identification and correspond with the vehicle schematics. Solderless, insulated connectors shall be used. Wiring panduit shall be used in power component module to ensure air circulation throughout power component wiring. The wiring shall be routed in conduit or looms and wiring shall be secured to the underbody or frame with insulated metal cable straps. All power distribution cabling shall be covered with a protective split loom. Where wiring passes over the exhaust, a heat shield shall be installed. The power component module shall be equipped with positive locking plugs to provide easy disconnect for remount or repair of body. All wiring devices, switches, outlets, etc., except circuit breakers, shall be rated to carry 125% of the maximum ampere load for which the circuit is protected.

6.01 OVERLOAD PROTECTION DEVICES

Body electrical wiring shall utilize overload protective devices of the automatic reset, circuit breaker type. In addition, one (1) single pole, 20 amp circuit breaker shall be provided for future use. The circuit breakers, relays, and other electrical items shall be located in the enclosed power component module.

6.02 VOLTMETER

Shall be an OEM component installed in dash. The scale shall be from 8 to 18V D.C.

6.03 IGNITION CONTROL

Chassis electrical circuits will be controlled by ignition switch as provided by the OEM chassis manufacturer. The auxiliary chassis related functions shall be powered by one (1) 100 amp continuous duty solenoid (rear heater/ air conditioner, siren, spot light, etc.).

6.04 MODULE POWER

Shall be controlled by a console-mounted switch which activates one (1) 100 amp continuous duty solenoid located in the power component module.

6.05 WIRING ACCESS

All cabinets at ceiling level shall have removable backs which are screwed in place for access to harnesses. Stack cabinets shall have removable panels for wiring and hose access.

6.06 BACK-UP ALARM

Shall be an ECCO #575 and be installed and have a momentary disable switch in the driver's console. If disabled while in reverse, backup alarm shall automatically reset when shifted out of reverse. The alarm shall have a sound output level of 97dB.

6.07 SERVICE LOOP

A 6" service loop of wire or harness shall be provided at all electrical components, terminals, and connection points.

6.08 DRIVER'S CONSOLE

Made of formed aluminum, shall be installed between the seats. Exact configuration to be determined at pre-build meeting. This panel shall include the following:

SWITCHES

- 1. Module Disconnect
- 2. Emergency Master (Sequencer)
- 3. Lightbar Red
- 4. Lightbar White
- 5. Flashers
- 6. Flashing Headlights
- 7. Fluorescent Lights

- 8. Spare
- 9. Left Scene
- 10. Right Scene
- 11. Rear Scene
- 12. Blank
- 13. Back-up Disable

OTHER CONTROLS AND INDICATORS:

- Ammeter
- Passage Door/ Compartment Open Warning Light
- Siren Head
- Parking brake activated red warning light
- Parking brake not activated amber warning light
- Rear air ride dump warning light

6.09 SWITCHES

Shall be lighted rocker type and permanently marked by function. One (1) spare switch shall be provided.

6.10 MAP LIGHT

One (1) Federal Signal Littlite Model #LF12ER shall be installed on the passenger's side of the driver's console.

6.11 DOOR AJAR WARNING LIGHT(S)/BUZZER

Shall be installed on the driver's console. A red flashing light shall warn the driver of open passenger access doors and exterior compartment doors. The lights shall flash and buzzer shall sound only if the vehicle is placed in gear while doors are open.

The light shall also flash and an additional buzzer shall sound when driver's door is open and the emergency brake is not set.

One (1) red warning light labeled "PARKING BRAKE ACTIVATED WHEN LIT" shall be installed in the driver's console.

One (1) amber warning light labeled "PARKING BRAKE NOT ACTIVATED WHEN LIT" shall be installed in the driver's console.

6.12 ATTENDANT CONTROL PANEL

Shall be located in the action area. Panel shall include one (1) row of switches, as follows:

Dome Hi/ Off/ Lo
 Dome Hi/ Off/ Lo
 Action Area Light
 Suction
 Exhaust Fan
 Action Area Light
 Electric Oxygen

An additional panel shall be located on the curbside wall at the forward end of the squad bench. Panel shall include one (1) row of switches, as follows:

Dome Hi/ Off/ Lo
 Dome Hi/ Off/ Lo
 Action Area Light
 Suction
 Electric Oxygen

A digital thermostat shall be located adjacent to the attendant control panel.

6.13 ACTION WALL AREA LIGHTING (pg. 8)

The entire action wall area shall be lighted utilizing three (3) Grote model #60591 LED lights. Switches shall be located in both attendant panels one on each wall.

6.14 STEPLIGHTS

The side access door step well shall have a light installed.

6.15 MODULE INTERIOR LIGHTING

Shall be designed to keep vehicle height to a minimum without interfering with the structural integrity of the roof. Module interior lighting shall consist of seven (7) Weldon dual intensity recessed lights - one (1) bank of four (4) lights shall be positioned toward streetside and three (3) lights toward curbside. There shall be a switch for each bank of lights on the action wall for Hi/Lo or Off. The three (3) lights on the curbside shall be automatically activated when the rear or side doors are opened.

Three (3) fluorescent lights shall be center mounted one (1) near the front, one (1) near the rear of the module, and one (1) center of module. The fluorescent lights shall be controlled by an On/ Off switch on the curbside wall and driver's console.

6.16 BASIC EXTERIOR LIGHTING

Shall include headlights, parking lights, directional signal lights, tail and stop lights, license plate light, back-up lights, side marker lights, hazard and warning lights, and clearance lights as required by FMVSS 108. Side marker and side clearance lights shall be "Truck-Lite" LED Model 18.

Two (2) Code 3 Model #65STR LED stop/ tail lights, two (2) Code 3 Model #65STA LED amber turn arrow lights, and two (2) Code 3 Model #65RV LED back-up lights shall be installed on the rear kick panel. Lights shall be installed with two (2) CPI LH46118 light housings, one (1) on each side.

Two (2) Innovative Lighting Slimline Brake Light shall be mounted; one (1) on the rear of the module above the drip rail and one (1) mounted on the front of the module.

One (1) Code 3 #OPX6-RR brake light with chrome housing shall be installed below the lower lightbar.

6.17 COMMUNICATIONS EQUIPMENT

Manufacturer shall pre-wire and install "Customer Supplied" cables for two (2) "Customer Supplied and Installed" dual head radios. Radio transceivers shall be located in radio / electrical compartment and have separate 20A clean power and ground

circuits. There shall be a total of three (3) 20A clean power and ground circuits installed in radio / electrical compartment for radio transceivers to allow for system expansion. Radio control heads shall be located one (1) in the driver's center console area and one (1) in the action area for a total of two (2) remote heads in each location. Exact placement shall be determined at preconstruction.

Manufacturer shall install Fire Com Intercom system #3010R with connects for the "Customer Supplied and Installed" Motorola radio with three (3) headset jacks; two (2) HM-10 and one (1) FH-52 single ear. Two (2) FH-10 headsets and jacks shall be mounted in the cab, and one (1) FH-10S headset and jack shall be mounted in the streetside action area 5" below upper cabinets. Exact headset and jack mounting locations to be determined at preconstruction.

6.18 ANTENNA MOUNTS AND CABLES

Three (3) NMO universal thick antenna mounts with KHFUD cables and Larsen HyPer master universal connectors and mini-UHF adapters shall be installed on the cab roof, spaced strategically behind the lightbar. Antenna base access shall be through the dome light openings if possible and the cables shall be labeled and terminate in the radio / electrical cabinet. Exact antenna locations to be determined at pre-construction.

6.19 BLOCK HEATER

A block heater, with On/ Off switch in 120VAC power box, shall be wired to the 120VAC shorepower system and shall be circuit protected (Section 1.01.02 related).

6.20 120VAC/SHORELINE CIRCUIT BOX

Utility power shall be furnished with 120VAC shorepower via a Kussmaul 20 amp Super Auto-Eject with red cover located on driver's side of vehicle and distributed via a formed 0.125" aluminum power box recessed into the streetside front compartment. Power box shall be flush mounted so as to maximize compartment. Shall have easily removable cover.

The box shall contain three (3) 120VAC receptacles for power supply to:

- Interior/ exterior 120VAC power (receptacles, IV warmer, etc.), GFI protected
- Block heater
- Battery charger

Two (2) breakers shall be installed, one for protection of the block heater receptacle, the other for protection of the other 120VAC receptacles.

Four (4) interior 120VAC duplex grounded receptacles shall be mounted, one (1) in cabinet #4, one (1) in cabinet #5, one (1) in the

wall at the forward end of the squad bench, and one (1) in cabinet #18.

6.21 BATTERY GROUNDS

In addition to OEM grounds, the following ground circuits shall be added: 4 ga. ground cable from module power component panel to frame, two (2) braided ground straps from the module body to the chassis to reduce RF interference.

6.22 BATTERY CHARGER (pg. 8)

A 55 amp battery charger shall be provided as part of Vanner 20-1050 CUL inverter system.

6.23 BATTERY MODIFICATIONS

In addition to the three (3) OEM batteries, one (1) additional Group 31 battery shall be provided. All batteries shall be installed in Compartment #4. A roll out battery tray shall be installed with stainless steel slides capable of supporting the tray load, be coated in a polyurethane truck bed liner material, contain battery absorbent mat base and be fitted with a locking device to secure tray movement in the stowed position.

6.24 12VD C RECEPTA CLES

Five (5) 12VDC, 20 amp cigar type receptacles shall be provided; one (1) in the action area, one (1) in the squad bench area, one (1) in cabinet #18, and two (2) on the curbside of the driver's console. Receptacles shall be powered continuously.

Manufacturer shall pre-wire for two (2) flashlight chargers on Compartment #1 adjustable shelf.

6.25 COMPARTMENT LIGHTING

Eight (8) 36" On Scene Night Stick Access LED lights shall be installed; two (2) each in compartments #1, 2, 7 and on the left wall of #3.

Two (2) 18" On Scene Night Stick Access LED lights shall be installed in compartment #6.

One (1) 63" On Scene Night Stick Access LED lights shall be installed on the right wall of compartment #3.

Fourteen (14) Whelen #3SC0CDCR round super-LED surface mount lights with 3FLANGEC shall be installed; two (2) in compartment #1 one (1) above each shelf, three (3) in compartment #2 one (1) above each shelf and one (1) aft of the divider, three (3) in compartment #3 one (1) in each divided section, one (1) in compartment #4, two (2) in compartment #6 one (1) above each shelf, three (3) in compartment #7 one (1) above each shelf and one (1) in cabinet #13.

6.26 EXTERIOR DOOR SWITCHES

Shall be magnetic door switches. All door switch terminals shall have Heatshrink installed. A magnetic switch shall be installed on the squad bench to activate the cabinet light.

7 EMERGENCY WARNING SYSTEMS

7.01 FRONT LIGHTBAR

Shall be Code 3 #RX2769-ALRC-117 lightbar mounted on the cab.

Pattern from curbside to streetside as follows: Rear corner cap Red, Front corner cap Red, Pod #1 Red, Red, Pod #2 GTT Opticom, Center pod Red, Pod #4 Steady Red, Pod #5 Red, Red, Front corner cap Red, Rear corner cap Red.

7.02 REAR LIGHTBARS

There shall be two (2) lightbars mounted on the rear of the module. The top lightbar shall be a Code 3 #FM9049-ALRC-104 located just below the rear drip rail. Lightbar to have nine (9) REF12 LED light heads.

The second lightbar shall be a Code 3 FM9049-ALRC103 LED lightbar installed 1" below upper light bar. Lightbar to have six (6) REF3 lights, three (3) per side, two (2) REF12 lights, one (1) per side, and four (4) LED load lights in the center.

Flash patterns to be determined at pre-construction.

7.03 FLASHERS

Four (4) Red lens Red Super LED flashers shall be mounted two (2) on each side of module in upper corners. Lights shall be Whelen #90RR5SRR. Shall be mounted with CPI housings.

Two (2) Code 3 #798ABZ-75 Amber flashers with chrome bezels shall be mounted on the rear of the vehicle at window height.

Two (2) Red Code 3 #4612RBZ-75 flashers shall be installed; one (1) on the lower portion of compartment #1 door and one (1) on the lower portion of compartment #7 door.

7.04 SCENELIGHTS

Four (4) parabolic scenelights, mounted two (2) on each side, shall be installed. The scenelights shall be flush mounted and have internal optics to deflect the light down at 8-32 degree angles. The lights shall be Whelen Model #9SC0ENZR LED lights. The side door shall activate the curbside scenelights. A disable switch shall be installed at the rear doors. Lights shall be installed in Cast housings.

7.05 INTERSECTION LIGHTS

Two (2) Red Intersection lights shall be installed, one (1) on each side of hood above fender in front of air horn. These shall be Code 3 #3712RBZ with chrome bezels.

Two (2) Red Intersection lights shall be installed, one (1) above each side wheel well on module. These shall be Code 3 #4612RBZ-75 with chrome bezels.

7.06 GRILLE LIGHTS

Shall be two (2) Red Code 3 #461RBZ-75 flashers.

7.07 SIREN

Shall be a Code 3 model #3992F with 2nd amp installed in the electrical cabinet.

7.08 SIREN SPEAKERS

Shall be one (1) CPI SAD3805 and one (1) CPI SAP3805 100 watt speakers.

7.09 SEQUENTIAL SWITCHING SYSTEM

A Kussmaul sequential switching system shall be installed to control emergency lighting.

7.10 FLASHER CONTROL

A 50 amp per terminal Vanner 3250 GCP flasher shall be provided to control LED flashers.

7.11 INVERTER

Shall be a Vanner 20-1050 CUL, 1000 watt inverter with a 55 amp battery charger installed in Compartment #1. A remote inverter control panel shall be installed adjacent to the attendant panel. System shall be installed with an ignition override. Exact panel location to be determined at pre-construction.

7.12 FOG LIGHTS

Two (2) Grote model #6416-5 Amber fog lights with #68460-S wiring kit shall be installed in the front bumper.

7.13 MODULE SPEAKERS

Two (2) Kenwood model #KFC-1362S speakers shall be installed in the module and connected for use with the cab radio. A fader switch shall be installed at on the curbside wall.

7.14 ELECTRIC DOOR LOCKS

Shall be installed on compartments #1, 2, 3, 6, 7, module and chassis access doors. A combination touch pad shall be installed on the aft side of the side passage door. Each passage door shall have a switch. A switch shall be installed on the interior at the forward end of the bench.

8 SUPPORTING DOCUMENTATION

8.01 OWNERS MANUAL

Two (2) sets of owner's manuals shall be provided with vehicle and consists of the following items:

- 1. Chassis owner information packet.
- 2. Lifetime module warranty.
- 3. Factory warranty on Chassis.
- 4. 7-Year/75,000 miles limited electrical warranty.
- 5. 5-Year/ 30,000 mile Conversion Warranty.
- 6. 6-Year Paint Warranty.
- 7. Module remount engineering check list.
- 8. Climate control information and warranty.
- 9. Main schematic.
- 10. Electrical Load Test.
- 11. Wire coding list.
- 12. Schematics for systems: (As Built)
 - Driver switch console
 - Attendant switch console
 - Climate control system
 - Chassis electrical system
 - Module electrical system.
 - Module harness routing
 - Interior and exterior lights
- 13. Operations manual
- 14. Schematics for individual options.
- 15. Warranty and parts list for emergency lighting and electrical components, etc.

8.02 CHASSIS MANUFACTURER'S MANUALS

Two (2) sets of Workshop Manuals shall be provided with the vehicle. Two (2) sets of Parts Manuals shall be provided with the vehicle. One (1) Workshop Manual and One (1) Parts Manual shall be provided for the vehicle on CD.

9 <u>MISCELLANEOUS REQUIREMENT</u>

9.01 LOOSE EQUIPMENT

The following equipment shall be shipped loose with the vehicle:

- 1. Touch Up Paint
- 2. Cord End for Shoreline (20 amp)
- 3. Oxygen cylinder Wrench
- 4. Antenna Coax Ends
- 5. Two (2) 5lb. fire extinguishers
- 6. One (1) Impact 303K Suction Unit
- 7. Two (2) Perko IV Clips

9.02 WARRANTY LOCATIONS

Miles

BIDDER'S EXCEPTION

Indicate closest location for chassis warranty:

Dealership Name:

Dealership Address:

Distance to BHFD:

Miles

Indicate closest location for rescue-module warranty:

Dealership Name:

Dealership Address:

Distance to BHFD:

SECTION IV – BID FORM Must be completed by Vendor

The undersigned proposes to furnish all materials, supplies, equipment or services set forth herein subject to all conditions outlined in the Bid Document, including the general instructions and information to bidders, at prices indicated below:

Amount of Bid Deposit Required:		\$ NONE			
Amount of Performar	nce and Payment Bond Required:	\$NONE			
Bid Proposal:	\$				
Payment Terms:					
Warranty:					
Exceptions or Deviati	ions attached (Check Box)	YES	NO		
Delivery (Number of	Days) :				
Company Nam	e:				
Addres	s:				
Telephone:	FAX:	Email:			
Person submitting bid	d:				
(Print Name)		(Title			
	(Signature)				

F.O.B.

All prices of the bid shall be F.O.B. destination Beverly Hill, California; and delivery to any point within Beverly Hills shall be without additional charge.

TAX

All bid proposals shall be exclusive of tax; City staff will compute all tax involved when applicable...

ACCEPTANCE OF PROPOSAL

The City reserves the right to accept or reject any and all bids and reserves the right to waive technicalities where such action best serves the interests of the City. The manufacturer of the proposed materials or equipment may be required to acknowledge by written conformation that the minimum requirements of the specifications are included in the Bidder's proposal before the award of the bid.

EXCEPTIONS

Any bidder's exceptions to these terms or conditions or deviations from the written specifications shall be shown in writing and attached to bid form. However, such exceptions or deviations may result in bid rejection.

AFTER THE ACCEPTANCE AND AWARD OF THE BID BY THE CITY COUNCIL UPON RECEIPT OF A WRITTEN PURCHASE ORDER EXECUTED BY A PROPER OFFICER OF THE CITY, THIS DOCUMENT WILL CONSTITUTE THE LEGAL CONTRACT BETWEEN THE CITY AND THE SUCCESSFUL BIDDER.

PLEASE RETURN TO:

CITY OF BEVERLY HILLS OFFICE OF THE CITY CLERK, ROOM 190 455 NORTH REXFORD DRIVE BEVERLY HILLS, CA 90210

(Attn: BID 12-31)

CERTIFICATE OF INSURANCE

This is to certify that the following endorsement is part of the policy(ies) described below:

NAMED INSURED (CONTRACTOR)

COMPANIES AFFORDING COVERAGE

A. B. C.

ADDRESS

COMPANY (A. B. C.)	COVERAGE	POLICY NUMBER	EXPIRATIO N DATE	B.I.	<u>LIMITS</u> P.D.	AGGREGATE
	□AUTOMOBILE LIABILITY □GENERAL LIABILITY □PRODUCTS/COMPLETED OPERATIONS □BLANKET CONTRACTUAL □CONTRACTOR'S PROTECTIVE □PERSONAL INJURY □EXCESS LIABILITY □WORKERS' COMPENSATION □					

It is hereby understood and agreed that the City of Beverly Hills, its City Council and each member thereof and every officer and employee of the City shall be named as joint and several assureds with respect to claims arising out of the following project or agreement:

It is further agreed that the following indemnity agreement between the City of Beverly Hills and the named insured is covered under the policy: Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right of contribution with insurance which may be available to the City of Beverly Hills.

In the event of cancellation or material change in the above coverage, the company will give 30 days written notice of cancellation or material change to the certificate holder.

Except to certify that the policy(ies) described above have the above endorsement attached, this certificate or verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

DATE:	BY:	
		Authorized Insurance Representative
	TITLE:	
AGENCY:	ADDRESS:	