

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <div>INTRODUCTION</div> <div>PROPOSAL REQUIREMENTS—2012 or Newer LIGHT RESCUE VEHICLE</div> <div>GENERAL INFORMATION</div> <p>It is the intent of these specifications to secure apparatus constructed to withstand the severe and continuous use encountered during emergency fire fighting services. The apparatus must be of the latest type, carefully designed and constructed with due consideration to the nature and distribution of the load to be sustained.</p> <p>These specifications detail the requirements for general design criteria of cab and chassis components, aerial device, fire pump and related components, water tank, fire body, electrical components, painting, and equipment. In evaluating the bid proposals to determine which proposal is the most advantageous, these major items shall be considered.</p> <p>Apparatus and equipment must meet the specific requirements and intent of the requirements as specified herein. All items of these specifications shall conform to the character of the proposed apparatus and the purpose for which it is intended. Criteria as specified by the National Fire Protection Association Pamphlet No. 1901, latest edition, entitled "Suggested Specifications for Motor Fire Apparatus", as approved by the American Insurance Association and International Association of Fire Chiefs, are hereby adopted and made a part of these specifications the same as if they were written out in full, insofar as they apply and are not specifically modified in the following detailed specifications. Each bidder shall provide only that equipment as required in the following specifications.</p> <p>The fire apparatus and equipment to be furnished in meeting these specifications must be the products of an established, reputable fire apparatus and/or equipment manufacturer. Each bidder shall furnish satisfactory evidence of the manufacturer's ability to construct, supply service parts and technical assistance for the apparatus specified. Each bidder must state the location of the factory and location for post delivery service.</p> <div>BID COMPLIANCE INSTRUCTIONS</div> <p>Each bidder must indicate his compliance with these specifications by marking "YES" or "NO" in the appropriate column for each individual paragraph of this specification. Indicating "YES" to a paragraph shall mean full compliance; indicating "NO" shall mean an exception is being taken. Any deviation from the specification, no matter how small, must be so annotated. All exceptions must be fully explained on a separate page, titled "Exceptions", giving reference to the page and paragraph where the exception is being taken. Failure to comply with this requirement shall result in the bid proposal being rejected.</p> <p>The Monterey Fire Department shall be the sole arbiter as to what exceptions may be allowed or disallowed. In the event a bidder fails to make any indication of compliance for any or all provisions it will be assumed that the bidder is taking total exception to the specification and the bid shall be disallowed.</p> <div>FIRE APPARATUS DOCUMENTATION</div> <p>The contractor shall supply, at the time of delivery, at least one (1) copy of the following documents:</p> <p>The manufacturer's record of apparatus construction details, including the following information:</p> <ul style="list-style-type: none"> <li>Owners name and address</li> </ul> </div> <div> <div>4/12/12</div> <div>Page 1</div> </div>		

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <ul style="list-style-type: none"> <li>Apparatus manufacturer, model and serial number</li> <li>Chassis make, model and serial number</li> <li>Front tire size and total rated capacity in pounds</li> <li>Rear tire size and total rated capacity in pounds</li> <li>Chassis weight distribution in pounds with water and manufacturer mounted equipment, front and rear</li> <li>Engine make, model, serial number, rated horsepower, rated speed and governed speed</li> <li>Type of fuels and fuel tank capacity</li> <li>Electrical system voltage and alternator output in amps.</li> <li>Battery make, model and total capacity in cold crank amps (CCA)</li> <li>Transmission make, model and serial number. If so equipped chassis transmission PTO(s) make, model and gear ratio</li> <li>Paint manufacturer and paint number(s)</li> <li>Company name and signature of responsible company representative</li> <li>Certification of slip resistance of all stepping, standing and walking surfaces.</li> </ul> <p>If the apparatus has a fixed line voltage power source, the certification of the test for the fixed power source.</p> <p>Weight documents from certified scale - showing actual loading on the front axle, rear axle(s) and overall vehicle (with the water tank full but without personnel, equipment and hose) shall be supplied with the complete vehicle to determine compliance with NFPA-1901.</p> <p>Written load analysis and results of electrical performance tests.</p> <p>The chassis shall be certified by the apparatus manufacturer as conforming to all applicable Federal Motor Vehicle Safety Standards in effect at the date of contract. This shall be attested to by the attachment of a FMVSS certification label on the vehicle by the contractor who shall be recognized as the responsible final manufacturer.</p> <p><b><u>VEHICLE RECORDS</u></b></p> <p>The successful bidder shall be responsible for preparing and maintaining a record file of parts and assemblies used to manufacture the apparatus. These records shall be maintained in the factory of the bidder for a minimum of twenty (20) years. File shall contain copies of any and all reported deficiencies, all replacement parts required to maintain the apparatus, and original purchase documents including specifications, contract, invoices, incomplete chassis certificates, quality control reports and final delivery acceptance documents. The Monterey Fire Department shall have access to any and all documents contained in this file upon official written request.</p> <p><b><u>BIDDER INSTRUCTIONS</u></b></p> <p>Bids shall be addressed and submitted in accordance with the advertised "Bid Notice". The words "Fire Apparatus Bid", the date, and the bid opening time must be stated on the face of the bid envelope. It is the bidder's responsibility to see that their proposals arrive on time. Late proposals, telegram, facsimile or telephones bids shall not be considered.</p> <p>Each bid shall be accompanied by a detailed description of the apparatus and equipment it proposes to furnish. It is the intent of these specifications to cover the furnishing and delivery of a complete and soundly engineered apparatus equipped as specified. Minor details of construction and materials, where not otherwise specified, are left to the discretion of the contractor, who shall be solely responsible for the design and construction of all features.</p> </div>		
<div> <div>4/12/12</div> <div>Page 2</div> </div>		

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<p>Brand names or model numbers have been specified for some items. These have been carefully selected because of their reliability and availability for replacement locally. In order to be most responsive, items named, or an item "equal to" the particular item specified by brand name or model, should be contained in the bid proposal. It is the bidder's responsibility to prove to the Monterey Fire Department that an item bid as "equal to" a particular specified item, is truly of equal quality, design, and function. The Monterey Fire Department maintains the right to make a final decision as to the acceptability of an item bid as "equal to" a particular specified item.</p> <p>No exception shall be allowed for any of the aforementioned instructions. Bids not submitted in accordance with these instructions shall be rejected.</p> <p><b><u>TIMELY PROPOSALS</u></b></p> <p>It is the bidder's responsibility to see that their proposals arrive on time. Late proposals, facsimiles, telegrams, or telephone bids shall not be considered.</p>		
<div> <div>4/12/12</div> <div>Page 3</div> </div>		

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>GENERAL CONSTRUCTION</u></b></p> <p>The complete apparatus, assemblies, subassemblies, component parts, etc., shall be designed and constructed with the due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the apparatus is to be subject. All parts of the apparatus shall be designed with a factor of safety, which is equal to or greater than that which is considered standard and acceptable for this class of equipment in fire fighting service. All parts of the apparatus shall be strong enough to withstand general service under full load. The apparatus shall be so designed that the various parts and readily accessible for lubrication, inspection, adjustment and repair. Bidder's specifications must meet minimum requirements of N.F.P.A. Pamphlet #1901; Underwriters Laboratories, Inc.; and all State and Federal Department of Transportation vehicle regulations at time of sale of unit.</p> <p>The apparatus shall be designed and constructed, and the equipment so mounted, with due consideration to distribution of the load between front and rear axles that all specified equipment, including a full complement of specified ground ladders, full water tank, loose equipment, and firefighters shall be carried without overloading or injuring the apparatus.</p> <p><b><u>PRODUCT LIABILITY INSURANCE</u></b></p> <p>Each bidder shall supply proof of product liability and facility insurance equal to or exceeding \$30,000,000.00. This shall be provided as part of the proposal. NO EXCEPTIONS!</p> <p>Garage insurance is not acceptable. NO EXCEPTIONS!</p> <p><b><u>ADDENDA AND INTERPRETATIONS</u></b></p> <p>No interpretation of the meaning of the specifications or other contract documents shall be made to any Bidder verbally. Every request for such interpretation shall be in writing and addressed to the Purchaser, and must be received at least ten days prior to the date fixed for the opening of the bids to be given consideration. Any and all such interpretations and any supplemental instructions shall be in the form of written addenda to the specifications which, if issued, shall be mailed by certified mail to all prospective Bidders not later than five days prior to the date fixed for the opening of bids. Failure of any Bidder to receive any such addendum or interpretation shall not relieve any Bidder from any obligation under his bid as submitted. All addenda so issued become a part of the contract documents.</p> <p><b><u>SERVICE CENTER AND PARTS DEPOT</u></b></p> <p>The successful bidder shall have a service center owned by the manufacturer, with a staff of factory-trained mechanics, well versed in all aspects of service for all major components, of the apparatus within a 100-mile radius of the Monterey Fire Department. In addition, the bidder shall maintain a separate service facility at the manufacturing site, in order to satisfy the need for possible major emergency service work.</p> <p><b><u>SERVICE CENTER INFORMATION</u></b></p> <p>The center must provide a full time staff of experienced technicians with all of the required equipment to provide modern, accurate and efficient service. Bidders shall state the size of their shop and officer area in square feet. They shall state the location of the facility and provide photos of both the exterior and interior of the center. Accuracy of the description of the service center is of great importance.</p> <p><b><u>SPECIAL CONDITIONS</u></b></p>		

## Bidder Complies

**Yes**

**No**

## PRICES AND PAYMENTS

## BID EVALUATION

- Commitment for expedient delivery.
- Commitment to the general conditions contained herein, including warranty.
- Completeness of the proposal, i.e. the degree that it responds to all requirements and requests for information contained herein.
- Manufacturing and delivery schedule.
- Contractor's demonstrated capabilities and qualifications.
- Equipment suppliers and/or local representative's demonstrated capabilities and qualifications.

## EXCEPTIONS TO SPECIFICATIONS

Proposals taking total exceptions to specifications shall not be accepted.

## "OR APPROVED EQUAL" CLAUSE

The result of that demonstration and evaluation shall be of prime importance in the recommendation to the governing body for the final contract award.

## Bidder Complies

**Yes**

**No**

Bidder shall furnish free of charge, upon request, technical information, graphs, charts, photographs, engineering diagrams, steering geometry, drive train certifications, instruction guides, or other documentation as requested to show that the equipment offered fully complies with these specifications.

It is the intention of the Purchaser for all bidder's to furnish the apparatus with major parts commonly used by the heavy-duty truck manufacturers and open market vendors where as replacement parts are more readily available and at reduced cost. The use of proprietary parts such as but not limited to axles, suspensions, engines, transmissions, frontal air bags, electronic controls, multiplexing systems, seats, pumps, gauges, foam systems, etc., may not be acceptable by the purchaser.

Each bidder shall state the completed apparatus delivery time based on the number of calendar days, starting from the date the sales contract is signed and accepted by the apparatus manufacturer.

## BOND REQUIREMENTS

Any bonds or sureties (bid, performance, or other) required by the Purchasing Organization shall be as specified below or as requested in the advertised "Bid Notice".

A bid bond shall be submitted with the bidder's proposal. The bond shall be for an amount equal to 10% of the proposed bid price. Failure to provide an original, acceptable, valid bid bond with the proposal shall result in the immediate rejection of the bidder's proposal.

The apparatus manufacturer must provide all bonds; bonds provided by a sales representative, dealer, distributor, or agent of the apparatus manufacturer are not acceptable.

With respect to the qualifications of proposed bonds or sureties, the bidder's bonding company must meet the following requirements:

- An acceptable surety as outlined by the department of treasury on their most recent federal register at a limit of at least \$10,000,000;
- A.M. Best rating of "A" or better with a financial rating of at least "VIII"; and licensed as a surety in the state where the sale is to be made.

A performance bond shall be supplied by the successful bidder upon acceptance of the signed sales contract for the apparatus. The performance bond shall be for an amount equal to the full contract price (i.e. 100% bond).

In order to ensure fair, ethical, and legal competition, neither original equipment manufacturer (O.E.M.) nor parent company of the O.E.M. shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

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<p><b><u>NON-COLLUSIVE BIDDING CERTIFICATION</u></b></p> <p>By submission of this bid, each bidder and each person signing on behalf of any bidder, certifies, and in the case of a joint bid, each party thereof certifies as to its own organization, under penalty of perjury, that to the best of their knowledge and belief:</p> <ul style="list-style-type: none"> <li>• The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for purpose of restricting competition, as to any matter relating to sale price with any other bidder or any competitor.</li> <li>• Unless otherwise required by law, the prices that have been quoted in this bid have not been knowingly disclosed by the bidder and shall not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor.</li> <li>• No attempt has been made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.</li> <li>• That all requirements of the law including amendatory provisions as to non-collusive bidding have been complied with.</li> </ul> <p><b><u>MATERIAL AND WORKMANSHIP</u></b></p> <p>All equipment furnished shall be guaranteed to be new and of current manufacture, to meet all requirements of these specifications.</p> <p>All workmanship shall be of high quality and accomplished in a professional manner so as to insure a functional apparatus with a pleasing, aesthetic appearance.</p> <p><b><u>CONTRACT AWARD</u></b></p> <p>The Purchaser reserves the right to reject any or all bids deemed to be unresponsive. The Purchaser also reserves the right to waive any informalities, irregularities and technicalities in procedure.</p> <p>The Purchaser reserves the right, before awarding the contract, to require a bidder to submit evidence of his qualifications as may be deemed necessary. Documentation, which may be required, is financial soundness, technical competency, and other pertinent qualifications of a bidder, including past performance (experience) with the Purchaser.</p> <p>Upon award of contract, the sales contract shall be between the Purchaser and the manufacturer of the apparatus. Contracts between the Purchaser and a sales representative, dealer, distributor, or agent of the apparatus manufacturer shall not be acceptable. (No Exceptions.)</p> <p><b><u>SALES ENGINEER</u></b></p> <p>The successful bidder shall designate an individual to perform the contractor's sales engineer functions. The sales engineer shall provide a single point interface between the purchaser and the contractor on all matters concerning the contract.</p> <p><b><u>APPROVAL DRAWING</u></b></p> <p>A detailed drawing of the apparatus shall be provided to the purchaser for approval before construction begins. A copy of this drawing shall also be provided to the manufacturer's representative. Upon purchaser's approval, the finalized drawing shall become a part of the total contract.</p>		
<div>4/12/12</div> <div>Page 7</div>		

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<p>The drawing shall show, but is not limited to, such items as the chassis make and model, major components, location of lights, sirens, all compartment locations and dimensions, special suction, discharges, etc. The drawing shall be a visual interpretation of the apparatus as it is to be supplied.</p> <p><b><u>INSPECTION VISITS</u></b></p> <p>The successful bidder shall provide three (3) factory inspection trips to the apparatus manufacturer's facility. Transportation, meals, lodging, and other requisite expenses shall be the bidder's responsibility.</p> <p>Accommodations shall be for three (3) Fire Department representatives per trip.</p> <p>The factory visits shall occur at the following stages of production of the apparatus:</p> <ul style="list-style-type: none"> <li>• Pre-construction / blueprint review.</li> <li>• Midpoint completion of entire apparatus.</li> <li>• Final inspection upon completion.</li> </ul> <p>Travel arrangements greater than 300 miles from the manufacturing facility shall be via commercial airline transportation.</p> <p>The Monterey Fire Department maintains the right to inspect the apparatus, within normal business hours, at any other point during construction. Expenses incurred during non-specified inspection visits shall be the responsibility of the Monterey Fire Department.</p> <p>During inspection visits, the Monterey Fire Department reserves the right to conduct actual performance tests to evaluate completed portions of the unit. Testing shall be accomplished with the assistance and resources of the contractor.</p> <p><b><u>DELIVERY, DELIVERY ENGINEER, AND TESTING</u></b></p> <p>Delivery of the apparatus to the Monterey Fire Department shall remain the bidder's responsibility.</p> <p>On initial delivery of the fire apparatus, a qualified and responsible representative of the contractor shall demonstrate the apparatus and provide initial instruction to representatives of the customer regarding the operation, care, and maintenance of the apparatus and equipment supplied.</p> <p><b><u>INSTRUCTION MANUALS/DRAWINGS, SCHEMATIC</u></b></p> <p>In accordance with standard commercial practices, applicable to each vehicle (including body and special equipment) furnished under the contract, the following listed manuals and schematics, in the quantity specified, shall be provided at time of delivery of each vehicle.</p> <p>The contractor shall supply at time of delivery, two (2) CD copies of a complete operation and service manual covering the complete apparatus as delivered and accepted.</p> <p>The manual shall contain the following:</p> <ul style="list-style-type: none"> <li>• Descriptions, specifications, and ratings of chassis, pump (if applicable), and aerial device.</li> <li>• Wiring diagrams.</li> <li>• Lubrication charts.</li> </ul>		



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<div> <ul style="list-style-type: none"> <li>Operating instructions for the chassis, any major components such as a pump and any auxiliary systems.</li> <li>Instructions regarding the frequency and procedures recommended for maintenance.</li> <li>Parts replacement information.</li> </ul> </div> <div> <p><b><u>VEHICLE FLUIDS PLATE</u></b></p> <p>As required by NFPA-1901, the contractor shall affix a permanent plate in the driver's compartment specifying the quantity and type of the following fluids used in the vehicle:</p> <p>A permanent plate in the driving compartment shall specify the quantity and type of the following fluids used in the vehicle:</p> <ul style="list-style-type: none"> <li>Engine oil</li> <li>Engine coolant</li> <li>Chassis transmission fluid</li> <li>Drive axle(s) lubrication fluid</li> <li>Air-conditioning refrigerant</li> <li>Air-conditioning lubrication oil</li> <li>Power steering fluid</li> <li>Cab tilt mechanism</li> <li>Transfer case fluid</li> <li>Equipment rack fluid</li> <li>Air compressor system lubricant</li> <li>Generator system lubricant</li> <li>Aerial systems</li> </ul> <p><b><u>PRINCIPAL APPARATUS DIMENSIONS &amp; G.V.W.R.</u></b></p> <p>The bidder shall include the principal dimensions, front G.A.W.R., rear G.A.W.R., and total G.V.W.R. of the proposed apparatus. Additionally, the bidder shall provide a weight distribution of the fully loaded, completed vehicle; this shall include a filled water tank, specified hose load, miscellaneous equipment allowance in accordance with NFPA-1901 requirements, and an equivalent personnel load of 250 lbs. per seating position.</p> <p><b><u>BIDDER TO SUPPLY AND FILL- IN PROPOSED DIMENSIONS:</u></b></p> <ul style="list-style-type: none"> <li>OVERALL LENGTH: _____"</li> <li>OVERALL WIDTH: _____"</li> <li>OVERALL HEIGHT: _____"</li> <li>WHEELBASE: _____"</li> </ul> <p>The axle and total weight ratings of the completed apparatus shall not be less than the following minimum acceptable weight ratings:</p> <ul style="list-style-type: none"> <li>MINIMUM FRONT G.A.W.R.: 6,000 lbs.</li> <li>MINIMUM REAR G.A.W.R.: 13,500 lbs.</li> <li>MINIMUM TOTAL G.V.W.R.: 19,500 lbs.</li> </ul> <p><b><u>BIDDERS BACKGROUND</u></b></p> </div> <div> <div>4/12/12</div> <div>Page 9</div> </div>		

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<p>All bidders shall state the ownership of the organization which shall actually construct the apparatus. Companies which are a division, subsidiary, wholly or partially owned subsidiary or other entity which is wholly or partially owned or controlled by another entity shall state their entire ownership lineage. Bidders from such organizations must have the bid signed by the chief executive of the parent entity.</p> <p><b><u>PRIMARY PLANT CONSTRUCTION</u></b></p> <p>In order to insure top quality construction, maximum assembly line and engineering communication and the highest level of manufacturing supervision the entire apparatus shall be built at the bidders' primary (headquarters) manufacturing facility. Apparatus constructed at satellite plants will not be considered.</p> <p><b><u>REQUIRED PROPOSAL BLUEPRINT</u></b></p> <p>A scale drawing of the specific apparatus being proposed shall be submitted WITH THE BID. Drawings of similar units or demo units shall not be permitted. Bidders should be clear that this provision is requiring a SCALE drawing of the truck which is actually being bid. The drawing shall be done at the manufacturer's facility by the manufacturer's engineering department in order to guarantee the accuracy of the drawing. Failure to comply with this requirement shall be grounds for rejection of the bid!</p> <p><b><u>BODY CONSTRUCTION LIMITATIONS</u></b></p> <p>Apparatus bodies which are either bolted together or make excessive use of adhesives shall not be considered. Similarly, body construction techniques which rely upon space consuming extrusions for structural support shall not be permitted.</p> <p><b><u>FAMA COMPLIANCE</u></b></p> <p>The apparatus manufacturer must be a current member of the Fire Apparatus Manufacturer's Association (FAMA).</p> <p><b><u>U.S.A. MANUFACTURER</u></b></p> <p>The entire apparatus shall be assembled within the borders of the Continental United States to insure more readily available parts (without added costs and delays caused by tariffs and customs) and service.</p> <p><b><u>LINE VOLTAGE ELECTRICAL SYSTEM CERTIFICATION</u></b></p> <p>When the unit successfully meets all the requirements outlined in NFPA 1901, 2009 Edition, UL shall issue a Certificate of Automotive Fire Apparatus Examination and Test stating the unit's compliance with the required line voltage section of NFPA.</p>		
<div> <div>4/12/12</div> <div>Page 10</div> </div>		

Monterey Fire Department Commercial Rescue Specifications		Bidder Complies	
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<b><u>GENERAL APPARATUS DESCRIPTION "SPECIAL SERVICE FIRE APPARATUS"</u></b>  The unit shall be designed to conform fully to the "Special Service Fire Apparatus" requirements as stated in the NFPA 1901 Standard (2009 Revision), which shall include the following required chapters as stated in this revision:  <ul style="list-style-type: none"><li>• Chapter 1 Administration</li><li>• Chapter 2 Referenced Publications</li><li>• Chapter 3 Definitions</li><li>• Chapter 4 General Requirements</li><li>• Chapter 10 Special Service Fire Apparatus</li><li>• Chapter 12 Chassis and Vehicle Components</li><li>• Chapter 13 Low Voltage Electrical Systems and Warning Systems</li><li>• Chapter 14 Driving and Crew Areas</li><li>• Chapter 15 Body, Compartments and Equipment Mounting</li></ul> <b><u>CAB SAFETY SIGNS</u></b>  The following safety signs shall be provided in the cab:  <ul style="list-style-type: none"><li>• A label displaying the maximum number of personnel the vehicle is designed to carry shall be visible to the driver.</li><li>• "Occupants will be seated and belted when apparatus is in motion" signs shall be visible from each seat.</li><li>• "Do Not Move Apparatus When Light Is On" sign adjacent to the warning light indicating a hazard if the apparatus is moved (as described in subsequent section).</li><li>• A label displaying the height, length, and GVWR of the vehicle shall be visible to driver.</li><li>• This label shall indicate that the fire department will revise the dimension if vehicle height changes while vehicle is in service.</li></ul> <b><u>CHASSIS DATA LABELS</u></b>  The following information shall be on labels affixed to the vehicle:  Fluid Data  <ul style="list-style-type: none"><li>• Engine Oil</li><li>• Engine Coolant</li><li>• Chassis Transmission Fluid</li><li>• Drive Axle(s) Lubrication Fluid</li><li>• Air Conditioning Refrigerant</li><li>• Air Conditioning Lubrication Oil</li><li>• Power Steering Fluid</li><li>• Cab Tilt Mechanism Fluid</li><li>• Transfer Case Fluid (if applicable)</li><li>• Equipment Rack Fluid (if applicable)</li><li>• Air Compressor System Lubricant</li><li>• Generator System Lubricant (if applicable)</li><li>• Front Tire Cold Pressure</li><li>• Rear Tire Cold Pressure</li><li>• Maximum Tire Speed Rating</li></ul> Chassis Data			

4/12/12

Page 11

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <ul style="list-style-type: none"> <li>Chassis Manufacturer</li> <li>Production Number</li> <li>Year Built</li> <li>Month Manufactured</li> <li>Vehicle Identification Number</li> </ul> <p>Manufacturers weight certification:</p> <ul style="list-style-type: none"> <li>Gross Vehicle (or Combination) Weight Rating (GVWR or GCWR)</li> <li>Gross Axle Weight Rating, Front</li> <li>Gross Axle Weight Rating, Rear</li> </ul> <p><b><u>ROLLOVER STABILITY</u></b></p> <p>The apparatus shall meet the criteria defined in 4.13.1 for rollover stability as defined in the 2009 NFPA Standard for Automotive Fire Apparatus.</p> <p><b><u>CHASSIS – FORD F-550 2012 or Newer</u></b></p> <hr/> <p><b>Powertrain</b></p> <p>Powerstroke 6.7L V-8 OHV direct diesel injection 32 valve intercooled turbo diesel engine * 357 amp dual alternator * 750 amp (total) 78 amp hours (Ah) (total) battery dual batteries with run down protection * Engine block heater * 6-speed electronic SelectShift automatic transmission with overdrive, lock-up, driver selection * Part-time four-wheel drive with electric transfer case shift, manual locking hubs * Limited slip differential, driveline traction control, power take-off provision * 4.88 axle ratio * Stainless steel exhaust</p> <p><b>Steering and Suspension</b></p> <p>Hydraulic power-assist re-circulating ball steering * 4-wheel disc brakes with front and rear vented discs * Firm ride suspension * Mono-beam non-independent front suspension * Front anti-roll bar * Front coil springs * HD front shocks * Rigid rear axle * Rear leaf suspension * Rear anti-roll bar * HD rear leaf springs * HD rear shocks * Front and rear 19.5" x 6.00" polished forged aluminum wheels with chrome hub covers * LT225/70SR19.5 BSW AT tires for all positions * spare wheel and AT tire</p> <p><b>Safety</b></p> <p>4-wheel anti-lock braking system * Dual airbags, passenger side front-impact cancellable airbag, seat mounted driver and passenger side-impact airbags, curtain 1st row overhead airbag * Front height adjustable seatbelts * SecuriLock immobilizer, panic alarm, security system</p> </div>		
<div> <div>4/12/12</div> <div>Page 12</div> </div>		

# Monterey Fire Department

## Commercial Rescue Specifications

### Bidder Complies

Yes No

### Comfort and Convenience

Air conditioning \* AM/FM stereo, clock, seek-scan, in-dash mounted single CD, MP3 decoder, 4 speakers, fixed antenna \* Cruise control with steering wheel controls \* Power door locks with 2 stage unlock, keyfob (all doors) keyless entry \* 3 12V DC power outlets, retained accessory power, power adjustable pedals \* Analog instrumentation display includes tachometer, oil pressure gauge, engine temperature gauge, turbo/supercharger boost gauge, transmission fluid temp gauge, engine hour meter, exterior temp, systems monitor, trip odometer \* Warning indicators include oil pressure, engine temperature, battery, lights on, key, low fuel, door ajar, service interval, brake fluid \* Steering wheel with tilt and telescopic adjustment \* Power front windows with deep tint, driver 1-touch down \* Variable intermittent front windshield wipers \* Dual vanity mirrors \* Day-night rearview mirror \* Interior lights include dome light with fade, front reading lights, illuminated entry \* Glove box, front cupholder, instrument panel bin, driver and passenger door bins, locking 1st row underseat storage \* Upfitter switches

### Seating and Interior

Seating capacity of 3 \* 40-20-40 split-bench front seat with adjustable head restraints with tilt, center armrest with storage \* 8-way adjustable (6-way power) driver seat includes lumbar support \* 4-way adjustable passenger seat \* Cloth faced front seats with carpet back material \* Full cloth headliner, full vinyl/rubber floor covering, plastic/rubber gear shift knob, chrome interior accents

### Exterior Features

Side impact beams, front license plate bracket, fully galvanized steel body material \* Black fender flares \* Black sidewindow moldings, black front windshield molding \* Black door handles \* Chrome grille \* 2 doors \* Trailer harness, brake controller \* Driver and passenger power remote black heated convex spotter folding manual extendable trailer outside mirrors with turn signal indicators \* Front chrome bumper with front tow hooks \* Aero-composite halogen fully automatic headlamps with delay-off feature \* Additional exterior lights include cab clearance lights, underhood light, remote activated perimeter/approach lights \* Clearcoat monotone paint \* Ambulance

### 2009 NFPA COMPLIANT CHASSIS

### SEAT BELT CUSHION SENSORS AND BELT SENSORS

The apparatus shall be equipped with a seat belt warning system. The system shall consist of a Seat Belt module, cushion sensors, dash mounted display and audible alarm.

The driver and officer seats shall be the only seats connected to the system. The center seat shall be removed as it will not meet NFPA 1901, 2009 compliance.

Each seat belt shall be red in color in order to comply with NFPA.

### VEHICLE DATA RECORDER

A Vehicle Data Recorder (VDR) system shall be provided. The system shall include an NFPA compliant "Black Box" with reporting software that shall be capable of data storage to coincide with the NFPA requirements.

Data storage capabilities shall include interfaces with the following systems:

- Display module (Master Optical Warning Device)
- VDR, date & time stamp
- Max Vehicle speed (MPH)

## Bidder Complies

**Yes**

**No**

- Vehicle acceleration / deceleration (MPH/Sec.)
- Engine Speed (RPM)
- ABS event
- Data password protected
- Data sampled once per second, in 48-hour loop
- Data sampled min by min for 100 engine hours
- Throttle position (% of Throttle)
- Data software
- PC / Mac Compatible
- Data summary reports

Red seat belts shall be provided if available from the chassis manufacturer. The apparatus manufacturer shall not change commercial chassis seat belts.

The apparatus manufacturer shall install a stainless mesh screen ember separator to the commercial chassis air intake system. The ember separator shall prevent matter larger than 0.039 in (1.0 mm) in diameter from reaching the air filter element.

Wheel trim kits consisting of chrome baby moon hubcaps and chrome lug nut covers shall be installed on the front and rear axles of the single rear axle chassis.

Black rubber mud flaps shall be provided on the front fenders.

A Jotto Desk #425-6457 will be provided and installed in the center of the cab for installation of radios, siren and light controls.

Custom tread plate cab running boards shall be provided at each cab entry.

One (1) antenna mounting base(s) model #MATM with 17' of coaxial cable shall be provided and installed on the cab roof. The attached antenna wire(s) shall be run to the right side cab dash area.

The Fire Department is responsible to have the correct antenna whip installed once the apparatus is delivered.

A receiver point shall be provided below the front bumper for a portable winch. The receiver point shall be a 2 1/2" x 2 1/2" x 1/4" seamless steel tube welded and gusseted to 3" x 1 1/2" steel channel directly bolted to the chassis frame rails. A 12 v electrical connection with a quick disconnect



<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<p>Following completion of the preceding tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm is activated.</p> <p>The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts shall be considered a test failure. The battery system shall then be able to restart the engine.</p> <p>At time of delivery, documentation shall be provided with the following information:</p> <ul style="list-style-type: none"> <li>Documentation of the electrical system performance test</li> <li>A written load analysis of the following; Nameplate rating of the alternator Alternator rating at idle while meeting the minimum continuous electrical load Each component load comprising the minimum continuous electrical load. Additional loads that, when added to the minimum continuous load, determine the total connected load. Each individual intermittent load.</li> </ul> <p><b><u>ELECTRICAL MANAGEMENT SYSTEM</u></b></p> <p>A Class 1 ES-Key Electrical Management System shall be utilized on the chassis for all functions applicable. The system shall consist of the following components:</p> <p>The High Density I/O Node (Super Node) shall have the ability to perform the following functions:</p> <ul style="list-style-type: none"> <li>A modem with a RS232 computer interface and standard telephone jack used to not only program the multiplex system but also serve as a factory direct gateway into the vehicle from any Class 1 multiplex authorized service facility.</li> <li>A Universal System Manager (USM), which acts as the main controlling component of the multiplexing system shall be provided and factory programmed to DOT, NFPA, SAE, the manufacturer and Monterey Fire Department specifications. The programming shall be done by the manufacturer's engineering department. The ES-Key system installation shall comply with SAE J 551 requirements regarding Electromagnetic and Radio Frequency interference (EMI, RFI), as well as utilize components and wiring practices that insure the system is protected against corrosion, excessive temperatures, water, excessive physical, and vibration damage by any equipment installed on the vehicle at the time of delivery.</li> <li>A series of Multiplexing Input/Output jacks shall be provided. The Input/Output jacks shall permit the multiplexing system to reduce the amount of wiring and components used as compared to non-multiplexed apparatus. These jacks shall vary in I/O configuration and shall possess individual output internal circuit protection.</li> </ul> <p>The System shall also consist of a Smart Programmable Switch (SPS) panel that shall be installed and allow the operator to control the programmed functions of each individual switch.</p>		
<div> <div>4/12/12</div> <div>Page 16</div> </div>		



<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>CHASSIS DIAGNOSTICS SYSTEM</u></b></p> <p>Diagnostic ports shall be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel shall allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches shall allow engine and ABS systems to provide blink codes should a problem exist.</p> <p>The diagnostic system shall include the following:</p> <p>Engine diagnostic port  Transmission and ABS diagnostic port  Roll sensor diagnostic port (if applicable).</p> <p>Additional diagnostic locations under the officer's side of the dash.</p> <p>Engine diagnostic switch (blink codes)  ABS diagnostic switch (blink codes).</p> <p><b><u>BATTERY DISCONNECT SWITCH</u></b></p> <p>The chassis batteries shall be wired in parallel to a single 12 volt electrical system, controlled through a heavy duty, rotary type, master disconnect switch. The master disconnect switch shall be located within easy access of the driver upon entering or exiting the cab.</p> <p><b><u>120 VOLT SHORELINE CONNECTION - "SUPER" AUTO EJECT</u></b></p> <p>One (1) Kussmaul "Super" Auto Eject model 091-55-20-120, automatic, 120 volt, 20 amp shoreline disconnect shall be provided for the on board, 110 volt battery charging systems.</p> <p>The disconnect shall be equipped with a NEMA 5-20 P male receptacle, which shall automatically eject the shoreline when the vehicle starter is energized. A label shall be provided indicating voltage and amperage ratings.</p> <p><b><u>SHORELINE POWER INLET PLATE</u></b></p> <p>A shoreline power receptacle information plate shall be permanently affixed at or near the power inlet. The plate shall indicate the following;</p> <ul style="list-style-type: none"> <li>• Type of Line Voltage</li> <li>• Current Rating in Amps Power Inlet Type (DC or AC).</li> </ul> <p>The Kussmaul auto-eject connection shall be equipped with a Red or other Department directed color weatherproof cover.</p> <p>The shoreline receptacle shall be located on the driver side body fender forward of the rear axle as directed by the fire department.</p> <p><b><u>BATTERY CHARGER SYSTEM</u></b></p> <p>A Kussmaul model # 091-170-12, "Auto Charge 12 HO" high output, fully automatic battery charger shall be provided for maintaining the vehicle battery system. Remote voltage sensing shall be provided to compensate the charger output for the voltage drop in the charging wires. Output current shall be 20 amperes @ 12 volt DC. A built-in ammeter shall be provided.</p>		

<div> <div> Monterey Fire Department</div> <div>Commercial Rescue Specifications</div> </div>	Bidder Complies	
	Yes	No
<p><b><u>"DO NOT MOVE APPARATUS" WARNING LIGHT WITH AUDIBLE ALARM</u></b></p> <p>A 1" round, red flashing warning light with an integral audible alarm, shall be functionally located in the cab to signal when an unsafe condition is present such as an open cab door or body compartment door, an extended ladder rack, a deployed stabilizer, an extended light tower or any other device which is opened, extended or deployed which may cause damage to the apparatus if it is moved.</p> <p>This light shall be activated through the parking brake switch to signal when the parking brake is released. This light shall be labeled "DO NOT MOVE TRUCK".</p> <p><b><u>FEDERAL SIGNAL REAR CAMERA SYSTEM</u></b></p> <p>A Federal Signal model # CAMSET56-NTSC-2 rear vision camera system shall be provided to allow the driver to visually see the rear of the apparatus while in the cab. The system shall include a Federal 5.6" flat panel LCD color monitor mounted adjacent to the driver and a Federal rear vision color camera that shall be mounted at the rear of the vehicle. The system shall also feature a microphone on the camera and speaker built into the monitor.</p> <p>The rear vision camera system shall be wired to automatically activate when the chassis transmission is placed in reverse.</p> <p>The monitor for the rear vision system shall be mounted ceiling of the cab in easy view of the driver.</p> <p><b><u>DOT MARKER LIGHTS AND REFLECTORS</u></b></p> <p>Truck-Lite Model # 18 red LED marker lights with integral reflectors shall be provided at the lower side rear, one (1) each side.</p> <p>Truck-Lite # 60115Y yellow LED side marker and turn lights shall be provided on the apparatus lower side, forward of rear axle, one (1) each side.</p> <p>Truck-Lite Model #19 red LED clearance lights shall be provided on the apparatus rear upper, one (1) each side at the outermost practical location.</p> <p>Truck-Lite Model # 33740R LED 3-lamp identification bar will be provided on the apparatus rear center. The lights shall be red in color.</p> <p>Truck-Lite # 98034Y yellow reflectors shall be provided on the apparatus body lower side, as far forward and low as practical, one (1) each side if the apparatus is 30' long or longer.</p> <p>Truck-Lite # 98034R red reflectors shall be provided on the apparatus rear, one (1) each side at the outermost practical location.</p> <p><b><u>LED LICENSE PLATE LIGHT - REAR</u></b></p> <p>One (1) Tecniq model #L110 LED license plate light shall be provided above the mounting position of the license plate. The light shall be clear in color and shall have a chrome finish.</p> <p><b><u>TAIL, STOP, TURN AND BACK-UP LIGHTS</u></b></p> <p>Two (2) Code 3, 65STBZ 4" x 6", red LED combination tail and stop lights, shall be mounted one each side at the rear of the body.</p>		
<div>4/12/12</div> <div>Page 18</div>		

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<p>Two (2) Code 3, 65TABZ 4" x 6", amber LED arrow turn signal lights, shall be mounted one each side, on a vertical plane with the tail/stop lights.</p> <p>Two (2) Code 3, 61RVBZ 4" x 6", white halogen backup lights, shall be mounted one each side, on a vertical plane with the turn/tail/stop signals. These lights shall activate when the transmission is placed in reverse gear.</p> <p>Two (2) Code 3 65STK4 mounting flanges, installed one (1) on each side, shall be provided to mount the lights described above in one common mounting flange. The fourth opening shall be for the lower rear warning lights.</p> <p><b><u>AUXILIARY REVERSE LIGHTS</u></b></p> <p>Two (2) Innovative Lighting #580-0200 "Hull" lights shall be provided in the rear wheel well panels, one (1) each side. The lights shall be recessed into the wheel well panel and shall be equipped with a mirror polished housing. The lights shall be activated by the reverse light circuit when the apparatus is operating as an emergency vehicle (Primary Warning Switch On).</p> <p><b><u>BODY STEP LIGHTS</u></b></p> <p>Chrome plated Innovative Lighting, 3-LED surface mounted, body step lights shall be provided and controlled with marker light actuation. Step lights shall be located to properly illuminate all body access steps and walkway areas.</p> <p><b><u>SCENE LIGHTS - REAR OF BODY</u></b></p> <p>Two (2) Code 3 #79SCBZ LED scene lights shall be provided, one on each side of the rear body panel in a chrome plated flange. The scene lights shall be controlled by a rocker switch in the master warning light switch console. All scene lights shall be wired through the load management system.</p> <p><b><u>SCENE LIGHTS - SIDE OF BODY, FRONT</u></b></p> <p>Two (2) Code 3 #79SCBZ LED scene lights shall be provided. The scene lights shall be mounted one each side, to the front, on the upper side body panel in a chrome plated flange. The scene lights shall be controlled by a rocker switch in the master warning light switch console. All scene lights shall be wired through the load management system.</p> <p><b><u>SCENE LIGHTS - SIDE OF BODY, REAR</u></b></p> <p>Two (2) Code 3 #79SCBZ LED scene lights shall be provided. The scene lights shall be mounted one each side, to the rear, on the upper side body panel in a chrome plated flange. The scene lights shall be controlled by a rocker switch in the master warning light switch console. All scene lights shall be wired through the load management system.</p> <p><b><u>REAR SCENE LIGHTS - ADDITIONAL ACTIVATION</u></b></p> <p>In addition to the cab mounted switch for the rear scene lights, the rear scene lights shall illuminate when the transmission is placed in reverse gear and the apparatus is operating as an emergency vehicle (Primary Warning switch on).</p>		
<div>4/12/12</div> <div>Page 19</div>		

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder</b> <b>Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>GROUND LIGHTS - CAB</u></b></p> <p>One (1) ROM V3 12" LED ground light shall be provided under each side cab door entrance step, two (2) total. The lights shall be mounted in ROM standalone aluminum mounting track with mounting slots at each end. The ground lights shall turn on automatically with each respective door jamb switch and also by a master ground light switch in the warning light switch console.</p> <p>Each light shall illuminate an area at a minimum 30" outward from the edge of the vehicle.</p> <p><b><u>GROUND LIGHTS - REAR</u></b></p> <p>One (1) ROM V3 12" LED ground light shall be provided under each rear body corner, two (2) total. The lights shall be mounted in ROM standalone aluminum mounting track with mounting slots at each end. The ground lights shall be activated by a master ground light switch in the cab and shall be wired through the load management system.</p> <p><b><u>GROUND LIGHT SWITCHING</u></b></p> <p>The cab and body ground lights shall be equipped with an activation switch in the cab.</p> <p><b>**** BODY ELECTRICAL SYSTEM ****</b></p> <p><b><u>12 VOLT BODY ELECTRICAL SYSTEM</u></b></p> <p>All electrical lines in the body shall be protected by automatic circuit breakers, conveniently located to permit ease of service. Flashers, heavy solenoids and other major electrical controls shall be located in a central area near the circuit breakers.</p> <p>All lines shall be color and function coded every 3", easy to identify, oversized for the intended loads and installed in accordance with a detailed diagram. A complete wiring diagram shall be supplied with the apparatus.</p> <p>Wiring shall be carefully protected from weather elements and snagging. Heavy duty loom shall be used for the entire length. Grommets shall be utilized where wiring passes through panels.</p> <p>In order to minimize the risk of heat damage, wires run in the engine compartment area shall be carefully installed and suitably protected by the installation of heat resistant shielded loom.</p> <p>All electrical equipment shall be installed to conform to the latest federal standards as outlined in NFPA 1901.</p> <p><b><u>BODY ELECTRICAL JUNCTION COMPARTMENT</u></b></p> <p>A weather resistant electric junction compartment shall be provided in the left side lower front compartment. This compartment shall be recessed through the inside rear wall of the compartment to provide an easily accessible enclosure to house all of the body wiring junction points, terminal strips, solenoids, etc. The design of this compartment shall not decrease the storage capacity area of the compartment in which it is located. A removable panel shall be provided for access to this compartment.</p> <p><b><u>ENGINE COMPARTMENT WORK LIGHTS</u></b></p> <p>Two (2) Peterson model #M391 lights shall be provided inside the engine enclosure that will provide a minimum of 20 candlepower illumination. Each light shall have their own independent switch incorporated into the light head.</p>		

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <div> <div> ROM TRACK MOUNTED COMPARTMENT LIGHTS - LED </div> </div> <p>Each individual, equipment storage compartment shall be equipped with the ROM LED V3 lights on the forward and rear edge of each body door opening. The lights shall be mounted in an anodized aluminum track provided by ROM either as a stand alone unit or an integrated part of the roll up shutter door track. The lights shall be designed and manufactured to be water proof meeting the IPX7 industry standard and shall include a streamline optic lens and a fixed lumen output across 9-16vdc. Each LED module shall be of interlocking design and shall be able to be serviced/replaced without the removal of light assembly or shutter door.</p> <div> <div> <div> NFPA AUDIBLE AND LIGHTING WARNING PACKAGE </div> </div> <p>The following warning light package shall include all of the minimum warning light and actuation requirements for the current revision of the NFPA 1901 Fire Apparatus Standard. The lighting as specified shall meet the requirements for both "Clearing Right of Way" and "Blocking Right of Way" as noted.</p> <div> <div> <div> LIGHT PACKAGE ACTUATION CONTROLS </div> </div> <p>The entire warning light package shall be actuated with a single warning light switch located on the cab switch panel. The wiring for the warning light package shall engage all of the lights required for "Clearing Right of Way" mode when the vehicle parking brake is not engaged. An automatic control system shall be provided to switch the warning lights to the "Blocking Right of Way" mode when the vehicle parking brake is engaged.</p> <div> <div> <div> UPPER LEVEL LIGHTING - CODE 3 </div> </div> <div> <div> <div> NFPA ZONE A, UPPER </div> </div> <p>A Code 3 # 2758NFPA P2 "RX 2700 Prizm II Series", 58" LED cab roof warning light bar shall be furnished and rigidly mounted on top of the cab roof. The lightbar shall be equipped with the following:</p> <ul style="list-style-type: none"> <li>Two Forward Facing White - Eight LED Reflector Prizm II Modules</li> <li>Four Forward Facing Red - Eight LED Reflector Prizm II Modules</li> <li>Four Corners Red - Twelve LED Reflector Prizm II Modules.</li> </ul> <p>The forward facing clear lights shall be disabled automatically for the "Blocking Right of Way" mode.</p> <div> <div> <div> NFPA ZONE C, UPPER </div> </div> <p>Two (2) Code 3 798RBZ-75, PriZm II surface mounted flashing LED lights, shall be furnished and mounted one (1) each side at the rear, upper portion of the apparatus. Each light shall be furnished with a chrome-plated flange. A red lens shall be provided on each light.</p> <div> <div> <div> NFPA ZONES B &amp; D REAR, UPPER </div> </div> <p>Two (2) surface mounted Code 3 798RBZ-75 PriZm II LED light heads shall be furnished and shall be mounted one (1) each side on the upper side face, towards the rear of the body, facing to each side of the unit. Each upper rear LED light head shall be equipped with a red lens and chrome plated flange.</p> </div> </div> </div> </div> </div></div></div>		

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>NFPA ZONES B &amp; D FRONT, UPPER</u></b></p> <p>Two (2) surface mounted Code 3 798RBZ-75 PriZm II LED light heads shall be furnished and mounted; one (1) each side on the upper side face, towards the front of the body, facing to each side of the unit. Each upper front LED light head shall be equipped with a red lens and chrome plated flange.</p> <p><b><u>LOWER LEVEL LIGHTING - CODE 3</u></b></p> <p><b><u>NFPA ZONE A, LOWER</u></b></p> <p>Two (2) Code 3 # 378RBZ-75 PriZm II LED light heads shall be provided and installed one (1) each side. Each light shall be equipped with a red lens and chrome plated mounting flange.</p> <p>The lower zone A warning lights shall be mounted in the commercial chassis grille.</p> <p><b><u>NFPA ZONE C, LOWER</u></b></p> <p>Two (2) Code 3 #468RBZ-75 PriZm II flashing LED light heads shall be provided and installed; one (1) each side directly below the DOT stop, tail, turn and backup lights. Each light shall be equipped with a red lens and chrome plated mounting flange.</p> <p><b><u>NFPA ZONES B &amp; D FRONT, LOWER</u></b></p> <p>Two (2) Code 3 # 378RBZ-75 PriZm II flashing LED light heads shall be provided and installed one (1) each side. Each light shall be equipped with a red lens and chrome plated mounting flange.</p> <p>The lower zone B &amp; D warning lights shall be mounted on the sides of the commercial chassis hood.</p> <p><b><u>NFPA ZONES B &amp; D MIDSHIP, LOWER</u></b></p> <p>Two (2) Code 3 # 468RBZ-75 PriZm II flashing LED light heads shall be provided and installed one (1) each side. Each light shall be equipped with a red lens and chrome plated mounting flange.</p> <p><b><u>NFPA ZONES B &amp; D REAR, LOWER</u></b></p> <p>Two (2) Code 3 # 468RBZ-75 PriZm II flashing LED light heads shall be provided and installed one (1) each side. Each light shall be equipped with a red lens and chrome plated mounting flange.</p> <p><b><u>WARNING LIGHT SYSTEM CERTIFICATION</u></b></p> <p>The warning light system(s) specified above shall not exceed a combined total amperage draw of 45 AMPS with all lights activated in either the "Clearing Right of Way" or the "Blocking Right of Way" mode.</p> <p>The warning light system(s) shall be certified by the light system manufacturer(s), to meet all of the requirements in the current revision of the NFPA 1901 Fire Apparatus Standard as noted in the General Requirements section of these specifications. The NFPA required "Certificate of Compliance" shall be provided with the completed apparatus.</p> <p><b><u>BACK-UP ALARM</u></b></p>		

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder</b> <b>Complies</b>	
	<b>Yes</b>	<b>No</b>
<p>A Code 3, model # D450C, 87dBA back-up alarm, shall be provided and installed at the rear of the apparatus under the tailboard. The back-up alarm shall activate automatically when the transmission is placed in reverse gear and the ignition is "on".</p> <p><b><u>ELECTRONIC SIREN</u></b></p> <p>One (1) Code 3 Model #3672 V-Con electronic siren shall be provided featuring: electronic air horn, hyper yelp siren tones. A hardwired microphone shall provided for the public address feature.</p> <p>The electronic siren and speaker shall meet the NFPA required SAE certification to ensure compatibility between the siren and speaker.</p> <p>One (1) Code 3, model # FM100C chrome plated siren speaker shall be provided, recessed in the front bumper and wired to the electronic siren.</p> <p><b><u>RESCUE BODY DESIGN CONSTRUCTION</u></b></p> <p>The body side and compartment assemblies shall be designed and assembled to provide maximum strength and durability under all operating conditions.</p> <p>Special attention shall be taken to minimize rust on all fabricated parts and structural members of the body. All bolt-on components shall be provided with a dissimilar metals isolation barrier to prevent electric corrosion. The body design shall also incorporate removable panels to access spring hangers, rear body mounts and fuel tank sending units.</p> <p>The body shall be an all Heliarc welded construction for maximum strength and integrity for the entire life of the apparatus. The body assembly shall be a single unit completely isolated from the cab.</p> <p><b><u>BODY AND COMPARTMENT FABRICATION - 1/8" &amp; 3/16" ALUMINUM</u></b></p> <p>All compartment panels and body side sheets shall be 1/8" and 3/16" aluminum (5052-H32). Each side compartment assembly shall be both plug welded and stitch welded to ensure proper weld penetration on all panels while avoiding the possible warping caused by a full seam weld. The side compartments shall be welded on a fixture to ensure true body dimensions of all door openings. The side compartments and body side panels are then set into a body squaring fixture where the super structure is installed and the entire body is aligned to be completely symmetrical. The super structure is then welded to the compartment side panels and reinforcement plates are inserted which allows the compartment panels to become an integral component of the body support structure. A full seam weld shall not be used due to the applied heat which shall distort sheet metal and remove the protective coating from the perimeter of the welded area. All seams shall be caulked prior to finish paint to ensure proper compartment seal.</p> <p><b><u>92" WIDE RESCUE BODY</u></b></p> <p>The rescue body shall be 92" wide to provide the maximum amount of usable compartment space, and to extend the body fenderettes outward for better tire tread coverage.</p> <p><b><u>SUPER STRUCTURE - ALUMINUM</u></b></p> <p>The body super structure shall be an all welded configuration utilizing a combination of 3" x 1-1/2" 6061-T6 thick walled structural tubing and 6061 structural channel.</p>		

Monterey Fire Department Commercial Rescue Specifications	Bidder Complies	
	Yes	No
<p>This structure shall be designed to totally support the full length and width of the body and shall be welded to the body side compartments by use of reinforcement plates to incorporate the compartments into an integral part of the body weldment.</p> <p>The super structure shall be bolted to the sides of the chassis frame at four (4) points.</p>		
4/12/12		
Page 24		



<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <div> <div> STEPPING, STANDING, &amp; WALKING SURFACES </div> </div> <p>All stepping, standing, and walking surfaces on the body shall meet NFPA #1901 anti-slip standards. Aluminum tread plate utilized for stepping, standing, and walking surfaces shall be ALCOA No Slip type. Upon request by the Purchaser, the manufacturer shall supply proof of compliance with this requirement.</p> <p>All vertical surfaces on the body, which incorporate aluminum tread plate material, will utilize the same material pattern to provide a consistent overall appearance.</p> <div> <div> ROOF CONSTRUCTION </div> <p>The apparatus body and roof panel construction shall be integral and reinforced for maximum strength.</p> <p>The roof shall be 3/16" 3003H-12 aluminum tread plate welded to the interior roof members and vertical interior compartment walls. The roof perimeters shall be fabricated to overlap the body side sheets to allow a weather tight seal.</p> <p>All roof seams shall be continuously welded. Heliarc welding shall be used for this process.</p> <p>The roof members shall be 2" x 2" x 1/4" wall square tubing welded in place and supported by the side vertical wall members. Attachment of the roof skin with pop rivets or sheet metal screws, or support of the roof surface with plywood are not acceptable and grounds for rejection.</p> <div> <div> LEFT SIDE COMPARTMENT #1 </div> <ul style="list-style-type: none"> <li>• 60" high x 31-1/4" wide x 24" deep</li> <li>• Roll-Up door</li> <li>• Door opening: 56" high x 28" wide</li> <li>• Clear opening: 50" high x 25" wide</li> </ul> <p>Compartment L-1 shall be transverse over the frame rails.</p> <p>The following accessories shall be installed:</p> <p>One (1) adjustable shelf(s)</p> <p>One (1) #250 floor mounted, half depth, rollout tray(s)</p> <p>One (1) floor extension</p> <div> <div> LEFT SIDE COMPARTMENT #2 </div> <ul style="list-style-type: none"> <li>•35" high x 51-1/2" wide x 24" deep</li> <li>•Roll-Up door</li> <li>•Door opening: 31" high x 47" wide</li> <li>•Clear opening: 25" high x 44" wide</li> </ul> <div> <div> COMPARTMENT L-2 NON-TRANSVERSE </div> <p>The following accessories shall be installed:</p> <p>One (1) rollout, drop down tray(s)</p> </div> </div> </div> </div> </div>		
<div> <div> 4/12/12 </div> <div> Page 25 </div> </div>		

**Monterey Fire Department**  
Commercial Rescue Specifications

**Bidder  
Complies**

**Yes      No**

**LEFT SIDE COMPARTMENT #3**

- 60" high x 38-1/8" wide x 24" deep
- Roll-Up door
- Door opening: 56" high x 36" wide
- Clear opening: 50" high x 33" wide

The following accessories shall be installed.

One (1) floor extension

**RIGHT SIDE COMPARTMENT #1**

- 60" high x 31-1/4" wide x 24" deep
- Roll-Up door
- Door opening: 56" high x 28" wide
- Clear opening: 50" high x 25" wide

Compartment R-1 shall be transverse over the frame rails.

The following accessories shall be installed:

One (1) adjustable shelf(s)

One (1) #250 floor mounted, half depth, rollout tray(s)

**RIGHT SIDE COMPARTMENT #2**

- 35" high x 51-1/2" wide x 24" deep
- Roll-Up door
- Door opening: 31" high x 47" wide
- Clear opening: 25" high x 44" wide

**COMPARTMENT R-2 NON-TRANSVERSE**

The following accessories will be installed:

One (1) half depth adjustable shelf(s)

One (1) rollout, drop down tray(s)

**RIGHT SIDE COMPARTMENT #3**

- 60" high x 38-1/8" wide x 24" deep
- Roll-Up door
- Door opening: 56" high x 36" wide
- Clear opening: 50" high x 33" wide

The following accessories shall be installed:

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p>A cargo net of 2-inch wide webbing will be provided between the floor and the lowest shelf to allow for storage of cribbing.</p> <p>Two (2) adjustable shelf(s)</p> <p>Two (2) adjustable rollout tray(s)</p> <p>One (1) #500, 100%, floor mounted rollout tray(s)</p> <p><b><u>REAR COMPARTMENT</u></b></p> <p>A rear compartment measuring 42" wide with a minimum height of 47-3/4" and a depth equal to the width of the rearmost compartment which is NOT Transverse, approximately 90 inches.</p> <p><b><u>WINCH RECEIVER POINT- REAR OF BODY</u></b></p> <p>A receiver point shall be provided below the rear of the body for a portable winch. The receiver point shall be a 2 1/2" x 2 1/2" x 1/4" seamless steel tube welded and gusseted to 3" x 1 1/2" steel channel directly bolted to four points on the chassis frame rails. A 12v electrical connection with a quick disconnect compatible with the portable winch shall be provided adjacent to the receiver point. A plastic end cap shall be provided for the quick disconnect.</p> <p><b><u>ELECTRIC WINCH</u></b></p> <p>A Warn model # 27550, XD9000i, 9000 lb. portable electric winch shall be provided to mount in the specified winch receivers. The winch shall be equipped with the portable framework, 12v quick connection, an automatic, direct drive cone brake, heavy duty thermally protected series wound industrial electric motor and a hardened steel 3-stage planetary gear train.</p> <p>A 12' remote control head shall be provided with the remote plug mounted directly on the winch housing. The winch shall be equipped with 125' of 5/16" EIPS industrial grade wire rope, including hook. A four way fair lead roller assembly shall be provided at the winch opening.</p> <p>The winch shall meet all SAE J706 requirements as outlined NFPA -1901.</p> <p><b><u>ROLL-UP DOORS</u></b></p> <p>Roll-up doors shall be provided on all compartments. The roll-up doors shall be constructed from aluminum extruded slats which shall have a flexible seal between each slat for proper sealing of the door.</p> <p>A synthetic rubber seal shall be provided at each side, top and bottom edge of the door to prevent entry of dirt into the compartment.</p> <p>The door shall be equipped with a lift bar style latch mechanism which shall latch at the bottom of the door mounting extrusion.</p> <p>The roll-up door assembly shall be furnished with a spring-loaded, counter balance assembly to assist in door actuation.</p> <p>All running board and high side compartments shall be equipped with roll-up doors.</p>		

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder</b> <b>Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>ROBINSON ROLL-UP DOORS</u></b></p> <p>The roll-up doors shall be Robinson (ROM) brand roll-up doors, equipped with a brushed aluminum finish, with a PVC inner seal to prevent metal to metal contact and to repel moisture. The slats shall be double-wall extrusion 1.366" high by .315" thick with interlocking end shoes to prevent the slats from moving side-to-side and binding the door. All slats are to have interlocking joints to prevent penetration by sharp objects.</p> <p><b><u>PROTECTION PANEL(S)</u></b></p> <p>Seven (7) protection panel(s) shall be provided at the top of all body exterior compartments fitted with roll-up doors. The panel(s) shall be installed below the roll-up area to prevent possible damage to the roll-up door by misplaced equipment. Each protection panel shall be bolted in place and have a brushed plain aluminum finish.</p> <p><b><u>SWEEP-OUT COMPARTMENT FLOORS</u></b></p> <p>Compartment floors shall be welded to the compartment walls and have a sweep out design for easy cleaning.</p> <p>Compartment with hinged doors shall have the door opening flanges bend down to produce the sweep-out design.</p> <p>Compartment with roll-up style doors shall have the external floor flange stepped down, 1/2" high x 2" deep, to produce a sealing surface for the roll-up doors below the compartment floor. The sweep out design shall also permit easy cleaning.</p> <p><b><u>COMPARTMENT DRIP MOLDING</u></b></p> <p>Drip molding shall be provided directly over all of the compartment doors.</p> <p><b><u>COATED FASTENERS</u></b></p> <p>All exterior fasteners shall be coated stainless steel screws. Screw threads shall be coated with reusable, self-locking, sealing material to provide vibration resistance. Screw heads shall be coated with a sealing element to prevent galvanic corrosion between dissimilar metals. Non-coated screws shall only be provided as part of vendor supplied component installations.</p> <p><b><u>COMPARTMENT LOUVERS</u></b></p> <p>Ventilation between compartments to atmosphere shall be provided and located to avoid water entry into compartments.</p> <p><b><u>ACCESS PANELS</u></b></p> <p>Removable access panels shall be provided in all lower compartments to access spring pins, fuel tank sender, electrical junction compartment and rear body mounts.</p> <p>Protective panels shall be located in the rear compartments providing access to the lights and associated wiring. The covers shall also serve as protective covers to prevent inadvertent damage to lights or wiring from tools or equipment located in the compartment.</p> <p><b><u>BODY PROTECTION PANELS</u></b></p>		
<p>4/12/12</p> <p>Page 28</p>		

## Bidder Complies

**Yes**

**No**

## BODY PROTECTION PANELS

## BODY RUB RAILS

## REAR BUMPER

## LOWER REAR STEP COMPARTMENT

## GRAB RAILS

### GRAB RAIL LOCATIONS:

**SAFETY SIGN(S) AT REAR STEP AND CROSS WALKWAY(S)**

## REAR WHEEL WELL LINERS

4/12/12

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <div> <div> REAR FENDERETTES </div> <p>The rear fenders shall be equipped with easily replaceable, polished extruded aluminum fenderettes. The fenderettes shall be equipped with a rubber gasket molding between the body panel and the fenderette.</p> </div> <div> <div> AIR BOTTLE STORAGE COMPARTMENTS </div> <p>A total of three (3) SCBA air bottle storage compartments (8" high x 8" wide x 26" deep) shall be inserted into the body fender area on a 5 degree pitch. The compartments shall be located with one (1) on the driver side and two (2) on the officer side of the rear body fender panels. The lower portion of the compartments shall be non-abrasive to absorb shock and help secure the bottle.</p> <p>Each storage compartment shall be equipped with a polished stainless steel door.</p> </div> <div> <div> REAR MUD FLAPS </div> <p>Heavy duty mud flaps shall be provided behind the rear wheels.</p> </div> <div> <div> REAR TOW EYES </div> <p>Two (2) painted tow eyes shall be furnished on the rear of the vehicle. The tow eyes shall be made from plate steel and shall be bolted directly to the chassis frame rails with grade 8 bolts and shall extend below the body. The tow eyes shall be smooth and free from sharp edges, and have a minimum eyelet hole of 2-1/2". The tow eyes shall be painted.</p> </div> <div> <div> <div>**** COMPARTMENT ACCESSORIES ****</div> <div> HALF DEPTH ADJUSTABLE SHELVING </div> <p>Compartment shelving shall be constructed of 3/16" brush finish aluminum with a 2" upward bend at front and rear, and side supports. Shelving shall be vertically adjustable with spring nuts in aluminum strut channel.</p> <p>Half depth adjustable shelves shall be located as indicated at each compartment description.</p> </div> <div> <div> ADJUSTABLE SHELVING </div> <p>Compartment shelving shall be constructed of 3/16" brush finish aluminum with a 2" upward bend at front and rear, and side supports. Shelving shall be vertically adjustable with spring nuts in aluminum strut channel.</p> <p>Adjustable shelves shall be located as indicated at each compartment description.</p> </div> <div> <div> HALF DEPTH SLIDE OUT FLOOR MOUNT SHELVING </div> <p>Half depth slide out floor mount compartment shelving shall be constructed of 3/16" brush finish aluminum with a 2" upward bend at front and rear, and side supports attached to #250 rated slides. The half depth slide out floor mount shelving shall have gas shocks to hold the tray in and out.</p> <p>Half depth slide out floor mount shelving shall be as indicated at each compartment description.</p> </div> </div> </div>		
<div> <div> 4/12/12 </div> <div> Page 30 </div> </div>		

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <div> <div>SLIDE OUT FLOOR MOUNT SHELVING</div> <div> <p>Slide out floor mount compartment shelving shall be constructed of 3/16" brush finish aluminum with a 2" upward bend at front and rear, and side supports attached to #250 rated slides. Slide out floor mount shelving shall have gas shocks to hold the tray in and out.</p> <p>Slide out floor mount shelving shall be as indicated at each compartment description.</p> </div> <div> <div>500 POUND FLOOR MOUNTED ROLL OUT TRAYS</div> <div> <p>Floor mounted roll-out trays shall consist of heavy duty, roller bearing slide tracks with an end load rating of 500 pounds, securely fastened to the compartment floor. The tray shall be fabricated from 3/16" brushed aluminum with a minimum 2" high flange on each of the four sides to assist in retaining the equipment stored on each tray. The slide tracks shall have a 100% extension, allowing the tray to extend out of the compartment completely.</p> <p>The 500 pound floor mounted roll out trays shall be as indicated at each compartment description.</p> <p>One (1) in the rear compartment, measuring approximately 25 inches wide x 89 inches deep.</p> </div> <div> <div>ADJUSTABLE ROLL-OUT TRAY</div> <div> <p>Roll out adjustable compartment shelving shall be constructed of 3/16" brush finish aluminum with a 2" upward bend at front and rear, and side supports attached to 250# rated slides. Slide out adjustable shelving shall be vertically adjustable with spring nuts in aluminum strut channel. Slide out adjustable shelving shall have gas springs to hold in and out.</p> <p>The adjustable roll-out trays shall be as indicated at each compartment description.</p> </div> <div> <div>ROLL-OUT/ DROP DOWN TRAYS</div> <div> <p>The roll out/tilt tray shall consist of a 3/16" brushed aluminum finished aluminum tray with a minimum 2" lip on all four sides. Heavy duty aluminum Unistrut "C" channel tracking material shall be utilized to securely fasten the slide tracks to the compartment walls, while allowing height adjustment.</p> <p>The slide mechanism shall consist of a low-weight high-strength plastic to create a robust front bracket to support the aluminum tray. The rear of the tip down tray shall be mounted on a slider with an integral pivot plate. This slider and pivot plate shall be mounted inside an aluminum rail for maximum strength. The tray shall be released from the stowed position with the use of a push button and shall be capable of auto latching to the stowed position. The front handle/latch shall be designed with a double hand hold to control the tray when deployed or stowed. The roll out/tilt tray shall be rated for 330# capacity.</p> <p>Roll out/Tilt trays be as indicated at each compartment description.</p> </div> <div> <div>COMPARTMENT RETENTION WEBBING</div> <div> <p>A net made from two-inch webbing shall be located in the bottom of the L-1 and R-1 compartments to secure cribbing. The webbing shall be held in place with Velcro and extend from the floor extension to the compartment floor.</p> </div> </div> </div> </div> </div> </div></div>		
<div> <div>4/12/12</div> <div>Page 31</div> </div>		

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>FLOOR EXTENSION</u></b></p> <p>A floor extension constructed of 3/16" aluminum shall be provided to extend the transverse floor area above the frame rails to the door opening. Installed immediately below, shall be a bottom reinforcement to prevent distortion from accessories mounted on the extension.</p> <p>Floor extensions shall be as indicated at each compartment description.</p> <p>One (1) in the left/right compartment #1</p> <p>One (1) in the left side compartment #3</p> <p><b><u>VERTICAL PULL OUT TOOL BOARD</u></b></p> <p>Two (2) vertical pull out tool board(s) shall be provided and mounted in the L-3 compartment as directed by the fire department. The tool board(s) shall be constructed of 3/16" smooth aluminum allowing mounting of equipment on both sides of the tool board(s). The tool board shall be attached to #250 rated slides, one at the top and one at the bottom of the tool board. 3/16" aluminum angles shall attach the slides to tracking to allow horizontal adjustments. A gas shock shall be used to secure the tool board in the stored and deployed position.</p> <p><b><u>ICE SLED STORAGE MODULE</u></b></p> <p>A storage module shall be provided for one (1) ice rescue sled, measuring approximately 40 inches tall x 14 inches wide x 89 inches long. The module shall be constructed from 1/8" aluminum. The location shall be in the rear step compartment, on the officer's side.</p> <p><b><u>STOKES BASKET STORAGE</u></b></p> <p>A storage module shall be provided for one (1) stokes basket(s). The module shall be constructed from 1/8" aluminum. The location shall be in the rear step compartment, suspended from the ceiling.</p> <p><b><u>BACKBOARD STORAGE</u></b></p> <p>A storage module shall be provided for three (3) backboard(s). The module shall be constructed from 1/8" aluminum. The location shall be in the rear step compartment, below the stokes basket.</p> <p><b><u>AIRBAG STORAGE</u></b></p> <p>A storage module shall be provided for six (6) high pressure airbag(s). The module shall be constructed from 1/8" aluminum and custom designed. The location shall be determined by the fire department.</p> <p><b><u>DRI-DEKING</u></b></p> <p>Dri-Dek brand floor material shall be installed on all compartment floors. The Dri-Dek shall be custom installed to provide full floor coverage.</p> <p>Floor matting material shall be provided on eleven (11) specified shelf(s) or roll-out tray(s).</p> <p>The compartment flooring color shall be black.</p>		



## Bidder Complies

**Yes**

**No**

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<p>properly sized main breaker using two (2) of the twelve (12) spaces which leaves a total of ten (10) available spaces.</p> <p>The generator output conductors shall be sized to 115% of the main breaker rating and shall be installed as indicated in the wiring section.</p> <p>Ten (10) appropriately sized, 120 volt, circuit breakers shall be provided.</p> <p>The breaker panel shall be located in an enclosed compartment as directed by the fire department.</p> <p><b><u>120/240 VOLT WIRING METHODS</u></b></p> <p>Wiring/conduit shall not be attached to any chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components or low voltage wiring.</p> <p>All wiring shall be installed at a minimum of 12 inches away from any exhaust piping and a minimum of 6 inches from any fuel lines.</p> <p>All wiring shall be securely clamped within 6 inches of any junction box and at a minimum of every 24 inches of run. All supports shall be of nonmetallic material or corrosion protected metal. All supports shall not cut or abrade conduit or cable and shall be mechanically fastened to the vehicle.</p> <p>All power supply assembly conductors, including neutral and grounding conductors, shall have an equivalent amperage rating and shall be sized to carry not less than 115% of the main breaker rating.</p> <p>All Type SO or Type SEO cable not installed in a compartment shall be installed in wire loom. Where Type SO or Type SEO cable penetrates a metal surface, a rubber or plastic grommet or bushing shall be provided.</p> <p>The installation of all 120/240 wiring shall meet the current NFPA-1901 Standards .</p> <p><b><u>120/240 VOLT WIRING IDENTIFICATION</u></b></p> <p>All line voltage conductors located inside the main breaker panel box shall be individually and permanently identified. When pre-wiring for future power wiring installations, the non-terminated ends shall be labeled showing function and wire size.</p> <p><b><u>120/240 VOLT GROUNDING</u></b></p> <p>The neutral conductor of the power source shall be bonded to the vehicle frame only at the power source.</p> <p>The grounded current carrying conductor (neutral) shall be insulated from the equipment grounding conductors and from the equipment enclosures and other grounded parts. The neutral conductor shall be colored white or gray.</p> <p>In addition to the bonding required for the lower voltage return current, each body and driving/crew compartment enclosure shall be bonded to the vehicle frame by a copper conductor. The conductor shall have a minimum amperage rating of 115 percent of the name plate current rating of the power source specification label.</p>		
<div>4/12/12</div> <div>Page 34</div>		

## Bidder Complies

**Yes**

**No**

## Bidder Complies

**Yes**

**No**

Two (2) Fire Research FOCUS, model #FC530 side mounted, push up scene light, deployable in a full 360 degree rotation. The entire assembly shall be UL listed as Scene light for Fire Service Use, manufactured by Fire Research. The tightening mechanism shall be of a twist lock (concentric ring) design, the use of a knob or latch to release the pole in order to raise and lower the telescoping portion of the pole shall not be accepted.

Each Fire Research light shall be equipped with a 1000 watt model M10, FOCUS™ lamp head. The small, low-profile lamp head shall be no larger than 3.5" high and shall actively direct 50 percent of the light from a quartz bulb onto the action area while still providing 50% illumination in the working area. The bulb shall be easily accessible through the front glass and frame. Changing the bulb should be easily done from the front of the lamp head. The glass and frame must be removable, held onto the lamp assembly by no more than four front screws.

The front of body lights shall be controlled from the following location(s):

- LIGHTING (TRI-POD) - AS DIRECTED**

The lights shall be mounted on the body as directed by the fire department, one (1) each side. Wiring used for the lighting shall be a minimum of 16 gauge three (3) wire cable that is properly supported and protected from damage.

The tripod lights shall be equipped with a pig tail cord equipped with appropriate 120V plug and a weatherproof "on-off" switch on the light head.

4/12/12

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p>The tri-pod lights shall be controlled from the following location(s):</p> <ul style="list-style-type: none"> <li>At breaker panel, with breaker</li> </ul> <p><b><u>COMMAND LIGHT, SHADOW MODEL SL429-RT LIGHT TOWER</u></b></p> <p>The apparatus shall be equipped with an all electric floodlight tower. The unit shall not require tapping into vehicle braking system to be operated, eliminating the chance for vehicle brake problems. Hydraulic or pneumatic type floodlights are not acceptable alternatives to the all electric light tower specified.</p> <p>The light tower shall extend 49" above the mounting surface and shall extend to full upright position in less than 15 seconds. The overall size of nested light tower shall be 42" long x 24" wide x 10" high and weigh approximately 63 pounds.</p> <p>The Command Light assembly shall be of aluminum construction, with stainless steel shafts and bronze bushings for long life and low maintenance.</p> <p>The electrically controlled unit shall not require usage of the vehicle's air supply for operation, thereby eliminating the chance for air leaks in the vehicle braking system. Hydraulic or pneumatic type floodlights are not acceptable alternatives to the specified all electric light tower.</p> <p>The light tower shall be a single-stage device with lighting capable of 355 degree rotation. The light shall be elevated by an electric linear actuator. The actuator shall adjust the light bank angle from 0 to 110 degrees.</p> <p>The light tower shall be controlled with a hand-held 6 foot umbilical line remote control. The storage station for the remote control unit shall be equipped with a button to activate the "Auto-Park" automatic nesting feature.</p> <p>The controls on the remote box shall be:</p> <ul style="list-style-type: none"> <li>One (1) switch for each light bank.</li> <li>One (1) switch for elevating/retracting the arm.</li> <li>One (1) switch for rotation of the light bank.</li> <li>One (1) switch to engage Auto-Park.</li> <li>One (1) indicator light to indicate when light bank is out of roof nest position.</li> <li>One (1) indicator light to indicate when light bank is rotated to proper nest position.</li> </ul> <p>The Command Light shall be equipped with the following bank of floodlights:</p> <ul style="list-style-type: none"> <li>Number of lamp heads: Two (2)</li> <li>Voltage: 240 volt</li> <li>Watts of each lamp head: 1500 watt</li> <li>Total watts of light tower: 3000 watts</li> </ul> <p>The light heads shall be mounted in two (2) on each side of the light tower, giving two (2) vertical lines of two (2) when the lights are in the upright position.</p> <p>The two (2) 1500-watt light heads shall require one (1) 240-volt, two pole 15-amp circuit breaker.</p>		

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>RECESSED WELL FOR HORIZONTAL MOUNTED LIGHT TOWER</u></b></p> <p>A recessed well shall be provided in the roof for light tower installation. The interior of the well shall be painted job color with an aluminum treadplate floor overlay. Water drainage shall be provided.</p> <p><b><u>ADDITIONAL ITEMS SUPPLIED WITH THE VEHICLE</u></b></p> <ul style="list-style-type: none"> <li>• 1 - Pint of touch up paint for each color</li> <li>• 1 -Bag of assorted stainless steel nuts and bolts</li> </ul> <p><b><u>LOOSE EQUIPMENT</u></b></p> <p>The following items shall be provided and shipped loose with the completed apparatus at the time of delivery:</p> <p><b><u>WHEEL CHOCKS</u></b></p> <p>Two (2) ZICO #SAC-44 folding wheel chocks shall be mounted forward of the rear wheels on the driver side below the side running board compartments.</p> <p><b>**** PAINT SECTION ****</b></p> <p><b><u>PAINT, PREPARATION AND FINISH</u></b></p> <p>The PPG Delta, Low V.O.C., polyurethane finishing system, or equal, shall be utilized. A "Clear Coat" paint finish shall be supplied to provide greater protection to the quality of the exterior paint finish.</p> <p>All removable items, such as brackets, compartment doors, etc. shall be painted separately to insure finish paint behind mounted items. All compartment unwelded seams exposed to high moisture environments shall be sealed using permanent pliable caulking prior to finish paint.</p> <p><b><u>BODY PRIMER &amp; PREPARATION</u></b></p> <p>All exposed welds shall be ground smooth for final finishing of areas to be painted. The compartments and doors are totally degreased and phosphatized. After final body work is completed, grinding (36 and 80 grit), and finish sanding shall be used in preparation for priming.</p> <p><b><u>BODY FINISH PAINT</u></b></p> <p>The body shall be finish sanded and prepared for final paint. Upon completion of final preparation, the body shall be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint. Finish paint shall be applied in multiple coats to ensure proper paint coverage with a high gloss finish.</p> <p>The entire body shall be buffed and detailed.</p> <p><b><u>BODY PAINT</u></b></p> <p>The inside and underside areas of the complete body assembly shall be painted black, prior to the installation of the body on the chassis or torque box. The body paint finish will be PPG Delta System in a single color, to match customer furnished paint codes and requirements.</p>		

## Bidder Complies

**Yes**

**No**

The interior of the compartments shall be finish painted with Zolatone #20-63 Marble Stone scuff resistant paint to provide a protective application over all of the compartment interior surfaces.

The body paint finish shall be PPG Delta System in a single color, to match customer furnished paint codes and requirements.

The commercial cab exterior shall be finish painted in a single color by the chassis manufacturer with Purchaser's choice of color as available.

The chassis wheels shall be painted as provided by the commercial chassis manufacturer.

One (1) pint of each exterior color paint for touch-up purposes shall be supplied when the apparatus is delivered to the end user.

Prior to delivery the vehicle, the interior and exterior be cleaned and detailed. The finalization process detailing shall include installation of NFPA required labels, checking fluid levels, sealing and caulking required areas of the cab and body, rust proofing, paint touch-up, etc.

The entire unit shall be thoroughly rust proofed utilizing rustproof and sound deadening materials applied in manufacturer recommended application procedures. Rust proofing shall be applied during the assembly process and upon completion to insure proper coverage in all critical areas.

## COMPUTER GENERATED LETTERING

The lettering and striping shall be custom designed utilizing state of the art computer software and computerized cutting machines. The manufacturer shall employ a full time artist / designer to generate all lettering, decals, and striping to meet the requirements of the Fire Department. The artwork for the lettering and striping shall be kept on record by the apparatus manufacturer to allow for ease in duplication for the Fire Department.

Gold leaf, "Sign Gold", with drop shadow lettering shall be provided on the cab driver's and officer's doors per the fire department requirements. The design of the lettering on the cab doors shall be designed to fit in the 496 sq. inches available.

Lettering provided on the driver's and officer's cab doors shall be 3" high.

<div> <div> Monterey Fire Department Commercial Rescue Specifications </div> </div>	Bidder Complies	
	Yes	No
<div> <div> <div> REAR BODY LETTERING </div> <p>Gold leaf, "Sign Gold", with drop shadow lettering shall be provided on the rear body panel per the fire department requirements. The design of the lettering on the rear of the body shall be designed to fit in the 167 sq. inches available.</p> <p>Lettering provided on the rear body panel shall be 3" high.</p> </div> <div> <div> BODY SIDE SHEET LETTERING </div> <p>Gold leaf, "Sign Gold", with drop shadow lettering shall be provided on the body side sheet per the fire department requirements. The design of the lettering on the body side sheet shall be designed to fit in the 2500 sq. inches available.</p> <p>Lettering provided on the body side sheet shall be 6" high.</p> </div> <div> <div> LETTERING FONT </div> <p>The lettering shall be designed and cut with a basic block type font:</p> <p>"BLOCK TYPE FONT"</p> </div> <div> <div> STANDARD MALTESE CROSS DESIGN 1 </div> <p>A pair of standard Maltese crosses shall be computer generated and will be no larger than the 496 sq. inches available.</p> <p>The standard logo shall be printed on Gold leaf, "Sign Gold", with two computer generated printed colors.</p> <p>The Maltese cross shall be located as directed by the Fire Department.</p> </div> <div> <div> CUSTOM FIRE DEPARTMENT LOGO </div> <p>A pair of custom fire department logos shall be computer generated and will be no larger than the 496 sq. inches available.</p> <p>The standard logo shall be printed on Scotch-Lite with two computer generated printed colors.</p> <p>The custom logo shall be located as directed by the Fire Department.</p> </div> <div> <div> CUSTOM AMERICAN FLAG DECAL </div> <p>One (1) custom made American Flag(s) shall be provided and install as directed by the Fire Department. Reflective Scotch-Lite material shall utilized for the decal.</p> <p>**** NFPA REQUIRED SCOTCH-LITE STRIPING ****</p> </div> <div> <div> SCOTCH-LITE STRIPE </div> <p>A six (6) inch high "Scotch-Lite" stripe shall be provided. The stripe shall be applied on a minimum of 60 percent of each side of the unit, 60 percent on the rear of the unit and 40 percent on the front of the unit. The Scotch-Lite stripe layout shall be determined by the Fire Department.</p> </div> </div>		
<div> <div> 4/12/12 </div> <div> Page 40 </div> </div>		



## Bidder Complies

**Yes**

**No**

A six (6) inch custom fold shall be incorporated into the Scotch-Lite scheme on the body. Final layout of this configuration shall be determined by the Fire Department.

At least 50% of the rear facing vertical surface shall be covered with alternating strips of reflective striping.

The Diamond Grade Scotch-Lite shall be Red #983-72 and Fluorescent Yellow Green #983-23 in color.

**WARRANTY {ONE YEAR}**

The warranty will not apply to any parts or components that are warranted directly by their manufacturers. The warranty will not apply to routine maintenance requirements as described in the service and operators manual. No warranty whether expressed, implied, statutory or otherwise including, but not limited to any warranty of merchantability or fitness for purpose will be imposed.

The manufacturer will either repair or replace any defective components or parts. Repair or replacement of the defective item will be at the sole discretion of the manufacturer. The Basic Vehicle Warranty covers all components and parts unless specifically covered by other descriptions or otherwise excluded herein. Repair or replacement of components will be done without cost to the purchaser when performed within the warranty period. Warranty repairs will not constitute an extension of the original warranty period, either for the entire apparatus or any specific components or parts.

The apparatus will be maintained and serviced, by the purchaser, according to the prescribed schedules outlined in the operators and service manuals. As a condition of the warranty, the

<b>Monterey Fire Department</b> Commercial Rescue Specifications		<b>Bidder Complies</b>	
		<b>Yes</b>	<b>No</b>
<p>manufacturer may require that receipts or other evidence be provided to verify that maintenance and service has been performed.</p>			
4/12/12		Page 42	

<b>Monterey Fire Department</b> <b>Commercial Rescue Specifications</b>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<p><b><u>COMPONENT WARRANTY INTERVALS</u></b></p> <p><b><u>COMMERCIAL CHASSIS</u></b></p> <p>The commercial chassis and all of the chassis related components will only be covered by the Chassis Manufacturer's warranty as provided to the vehicle manufacturer. A copy of the chassis manufacturer's warranty will be supplied to define additional details of the warranty provisions.</p> <p><b><u>ITEMS EXCLUDED FROM WARRANTY</u></b></p> <p>To better understand the warranty, the following is a description of some conditions that are not covered by this warranty.</p> <p>LOOSE FASTENERS: Nuts, bolts and screws may loosen due to road shocks, engine vibration, etc. Maintaining necessary tightness is your responsibility.</p> <p>Glass and lens breakage and scratches.</p> <p>Chrome, aluminum, or stainless components with bright finishes - general rust and/or staining, bluing or yellowing, rust pits and/or nicks caused by road debris, streaks, stains and corrosion caused by severe wash solutions or road salts.</p> <p>OTHER: Some further examples that we are not responsible for are as follows: Traveling expense; Road calls; Unauthorized towing charges; Accident repairs, loss of apparatus use; Communications charges; Cost of rental equipment; Repair or replacement of items not furnished or installed by us. Road tests or Dynamometer testing.</p> <p>Tires are covered by their respective manufacturer's warranty.</p> <p><b><u>MODIFICATIONS TO ORIGINAL EQUIPMENT</u></b></p> <p>If dealers or customers cause any vehicle modifications or equipment installations to be performed and these modifications or installations adversely affect other vehicle components or vehicle performance, we will not accept any product liability or claims under the terms of this warranty. These claims and any required repairs would be the responsibility of the person doing the modification or installation.</p> <p><b><u>CHANGES IN COMPONENT SPECIFICATIONS</u></b></p> <p>Specifications for components (make or model) installed on the apparatus, manufactured by companies other than the apparatus manufacturer are subject to change without notice. Specifications for such components will be as available at the time of manufacture of the apparatus. The apparatus manufacturer will not be held liable for any specification deviations from original contract specifications on such components made by the original component manufacturer.</p> <p><b><u>NEW PRODUCT WARRANTY - COMMERCIAL CHASSIS</u></b></p> <p>The manufacturer shall warrants to the original purchaser (first end users) that any new products manufactured will be free from defects in material and workmanship under normal use, maintenance and service for a period of one (1) year from date of delivery, subject to the conditions and exceptions stated herein.</p>		
<p>4/12/12</p>		

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<p>Under this warranty, the manufacturer's obligation is limited to the repair or replacement at the manufacturer's option, at its factory, by its representative, or by its authorized service facility, of any part found to be defective by the manufacturer. If the manufacturer deems it necessary, all parts for which warranty claim is made, will be returned to the manufacturer, transportation charges prepaid, for examination by the manufacturer's who will be the sole judge as to whether such part was defective in material or workmanship under normal use, maintenance or service.</p> <p><b><u>BODY STRUCTURE WARRANTY</u></b></p> <p>The proposed body will be warranted against structural defects for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.</p> <p><b><u>CORROSION WARRANTY</u></b></p> <p>The proposed body will be warranted against rust-through or perforation, due to corrosion from within, for a period of ten (10) years. Perforation is defined as a condition in which an actual hole occurs in a sheet metal panel due to rust or corrosion from within. Surface rust or corrosion caused by chips or scratches in the paint is not covered by this warranty.</p> <p><b><u>PAINT</u></b></p> <p>The proposed paint finish will be warranted for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.</p> <p><b><u>LETTERING</u></b></p> <p>The manufacturer shall provide a five (5) year warranty against defects in material and workmanship for all graphic processes. Any valid claims must be made in writing within 15 days of the determination of any defects to the manufacturer. the manufacturer will at its option make any necessary repairs either at a local authorized service center or at the factory, if required. the manufacturer will make the final decision as to where the repairs are to be made and any transportation cost are the owners responsibility, the manufacturer will at its option repair or replace any verified defects in workmanship or materials at no cost to the owner provided all the requirements of this warranty have been met.</p> <p>The manufacturer shall not be liable to the original purchaser or anyone else for consequential, incidental, special or direct damages, including, but not limited to, any claims for loss of profits, down time, loss of use or inconvenience. THE COMPANY MAKES NO OTHER WARRANTY, EXPRESSED OF IMPLIED, AND SPECIFICALLY, DISCLAIMS ANY IMPLIED WARRANTY INCLUDING THE WARRANTY OF MERCHANTABILITY.</p> <p>The manufacturer continually strives to improve its products and therefore, reserves the right to make improvements or changes without incurring any obligations to make such changes or additions on equipment previously sold.</p> <p><b><u>GENERATOR</u></b></p> <p>Real Power / CHI warrants to the purchaser of the Real Power chassis integrated AC generation system, will be free of defects in material and workmanship from the date of purchase. for 1 year, (see specific coverage shown on the warranty document attached to this line item).</p>		

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<p><b><u>WARRANTY LOCATION</u></b></p> <p>All possible warranty work shall be performed at the buyer's fire station when possible. If the apparatus must return to the service center then the successful bidder shall supply drivers to transport the vehicle to and from at no additional charge to the Fire District.</p> <p><b><u>EQUIPMENT MOUNTING ALLOWANCE</u></b></p> <p>An equipment mounting allowance in an amount of \$7,500 has been included in this proposal. The allowance will provide either purchased or custom manufactured mounting hardware, to provide mounting of Fire Department or proposed equipment on the completed unit.</p> <p>All of the equipment mounting requirements will be detailed to the manufacturer at or near the time of the final inspection. Any required modifications to existing components or accessories will be charged to this allowance. The manufacturer will maintain a detailed summary of all labor and materials applied to meet the Fire Department requirements and upon completion, will either provide a credit to the Department for labor and materials not consumed by this project or a secondary invoice will be submitted to the Fire Department for all expenditures, which are over and above the original allowance.</p> <p><b><u>OPTION – NOT INCLUDED IN BASE PRICE</u></b></p> <p><b><u>WINCH RECEIVER POINT - EACH SIDE OF THE BODY</u></b></p> <p>A receiver point {will/shall} be provided beneath the rub rail toward each side of the Rescue body for a portable winch. The receiver point {will/shall} be a 2 1/2" x 2 1/2" x 1/4" full width of body seamless steel tube welded and gusseted to 3" x 1 1/2" steel channel directly bolted to four points on the chassis frame rails. A 12v electrical connection with a quick disconnect compatible with the portable winch {will/shall} be provided adjacent to the receiver point. A plastic end cap {will/shall} be provided for the quick disconnect.</p> <p><b><u>NFPA REQUIRED LOOSE EQUIPMENT, PROVIDED BY FIRE DEPARTMENT</u></b></p> <p>The following loose equipment as outlined in NFPA 1901, 2009 edition in accordance with the applicable requirements, will be provided by the fire department. All loose equipment will be installed on the apparatus before placed in emergency service, unless the fire department waives NFPA section 4.21.</p> <p><b><u>Section 10.5 Minor Equipment.</u></b></p> <p>It is the responsibility of the purchaser to ensure that all required equipment has been supplied and installed on the apparatus in order to achieve compliance with the standard prior to placing it in service.</p> <ol style="list-style-type: none"> <li>(1) Two portable hand lights mounted in brackets fastened to the apparatus</li> <li>(2) One approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus</li> <li>(3) One 2 1/2 gal (9.5 L) or larger water extinguisher mounted in a bracket fastened to the apparatus</li> <li>(4) One first aid kit</li> <li>(5) Two or more wheel chocks. Mounted in readily accessible locations, that together will hold the apparatus. When loaded to its GVWR or GCWR, on a hard surface with a 20 percent grade with the transmission in neutral and the parking brake released</li> </ol>		
<div>4/12/12</div> <div>Page 45</div>		

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<p>(6) One traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, Standard for High-Visibility Public Safety Vests, and have a five-point breakaway feature that includes two at the shoulders, two at the sides, and one at the front</p> <p>(7) Five fluorescent. orange traffic cones not less than 28 in. (711 mm) in height, each equipped with a 6 in. (152 mm) retroreflective white band no more than 4 in. (102 111m) from the top of the cone, and an additional 4 in. (102 mm) retroreflective white band 2 in. (51 mm) below the 6 in. (152 mm) band</p> <p>(8) Five illuminated warning devices such as highway flares, unless the live fluorescent orange traffic cones have illuminating capabilities</p> <p>(9) One automatic external defibrillator (AED)</p> <p><u>14.1.8.4 Fire Helmet.</u></p> <p>It is the responsibility of the purchaser to ensure that "Fire helmets shall not be worn by persons riding in enclosed driving and crew areas any time the apparatus is placed in service.</p> <p>14.1.8.4.1 A location for helmet storage shall be provided.</p> <p>14.1.8.4.2 If helmets are to be stored in the driving or crew compartment, the helmets shall be secured in compliance with 14.1.11.2.</p> <p><u>14.1.11 Equipment Mounting.</u></p> <p>It is the responsibility of the purchaser to ensure that any equipment installed on the apparatus by them or their subcontractor meets the following requirements prior to placing it in service.</p> <p>14.1.11.1 All equipment required to be used during an emergency response shall be securely fastened.</p> <p>14.1.11.2 All equipment not required to be used during an emergency response, with the exception of SCBA units, shall not be mounted in a driving or crew area unless it is contained in a fully enclosed and latched compartment capable of containing the contents when a 9 G force is applied in the longitudinal axis of the vehicle or a 9G force is applied in any other direction, or the equipment is mounted in a bracket(s) that can contain the equipment when the equipment is subjected to those same forces.</p> <p><u>Section 15.9.3 Reflective Striping.</u></p> <p>It is the responsibility of the purchaser to ensure that Reflective Striping has been supplied and installed on the apparatus in order to achieve compliance with the standard prior to placing it in service.</p> <p>15.9.3.1" A retroreflective stripe(s) shall be affixed to at least 50 percent of the cab and body length on each side, excluding the pump panel areas, and at least 25 percent of the width of the front of the apparatus.</p> <p>15.9.3.1.1 The stripe or combination of stripes shall be a minimum of 4 in. (100 mm) in total width.</p> <p>15.9.3.1.2 The 4 in. (100 mm) wide stripe or combination of stripes shall be permitted to be interrupted by objects (i.e., receptacles, cracks between slats in roll up doors) provided the full stripe is seen as conspicuous when approaching the apparatus.</p>		