MEETING DATE
03/01/2021

CITY OF LAKE CITY Report to Council

COUNCIL AGENDA			
SECTION			
ITEM			
NO.			

SUBJECT:

Light-Duty Rescue Fire Apparatus

DEPT / OFFICE:

Fire Department

Originator: Chief R. Burnham		
Rad Bombo		
City Manager	Department Director	Date
Joseph Helfenberger	Chief R. Burnham	2/16/2021

Recommended Action:

Approve a request to award Custom Truck and Body Works, Inc. with building the Lake City Fire Department a new light-duty rescue truck. (see attached exhibits for recommendations).

Summary Explanation & Background:

A new light-duty rescue truck was budgeted for FY2021. Through a competitive bidding process Custom Truck and Body Works, Inc. came in as the most responsive as well as the lowest cost @ \$125,381.00. This is \$381.00 over budget, however funds are available from recent surplus sales on Govdeals.net to cover this overage.

Alternatives:

Continue utilizing our larger apparatus to respond to non-structural emergency calls.

Source of Funds:

Fire Department FY2021 Budget: Acct.#060.64

Financial Impact:

\$ 125,381.00 Non-recurring expense

Exhibits Attached:

Light-Duty Rescue Truck Specifications and Bid Tabulations.

CITY OF LAKE CITY

PURCHASE ORDER (PO) STANDARD TERMS AND CONDITIONS

If this PO is issued pursuant to a competitively procured contract between the Seller and another entity then, except as otherwise stated herein, the terms and conditions of the competitively procured contract shall constitute the terms and conditions of the agreement between the Buyer and Seller hereof." Please direct all questions or concerns to City of Lake City Procurement Department at (386) 719-5818 or procurement@lcfla.com

- 1. DEFINITION: "BUYER" means City of Lake City as identified in the PO; "SELLER" means vendor that sells goods and/or services to BUYER.
- FREIGHT/SHIPPING: Prices stated are FOB Destination, freight prepaid and allowed, to shipping location specified on PO <u>unless</u> another FOB method is agreed upon in writing. Materials/supplies shall be properly packaged and marked with the PO number.
- 3. DELAYS/CANCELLATIONS: If delivery/completion dates cannot be met, SELLER shall inform BUYER immediately. However, such notice shall not constitute a change to the delivery/completion terms of the PO unless BUYER modifies the PO in writing. If any item is not received or if any element of the work is not completed by the date specified, BUYER, at BUYER's option and without prior notice to SELLER, may either approve a revised date or may cancel the PO and obtain such goods or work elsewhere. SELLER also shall be liable to BUYER for compensatory damages arising from such failure to timely perform.
- 4. INSPECTION AND ACCEPTANCE: Will be at final destination, unless otherwise specified. SELLER shall bear risk of loss until delivery and final acceptance of all items or completion of all work. No inspection or test made prior to final acceptance shall relieve SELLER from responsibility for defects or other failure to meet the requirements of this order. Rejected materials will be returned to SELLER at SELLER's risk and expense. "Final acceptance" shall occur when all items have been received, or all work has been completed, and accepted by BUYER, and BUYER has authorized final payment to SELLER.
- 5. INDEMNITY: SELLER shall indemnify and hold harmless the City, its officers, elected and appointed officials, employees and their agents from and against all claims, damages, losses, expenses, and liabilities arising out of the operations of SELLER pursuant to the PO specifically including, but not limited to, those caused by or arising out of a defective condition in the goods, whether patent, copyright, or latent, provided that such defect existed at the time of shipment by SELLER; the negligence of SELLER in the marketing, sale, and/or provision of the goods/ and/or services under the PO. SELLER agrees to pay all damages, costs and attorney's fees incurred in the defense of any such claim.
- VARIATION IN QUANTITY: No variation in the quantity of any item purchased will be accepted unless such variation is otherwise permitted by the terms of the PO or by amendment to the PO.
- 7. CHANGES: No substitutions, quantity changes, price increases, etc. shall be made without a written change order to the PO.
- 8. WARRANTY: SELLER warrants that delivered supplies or equipment, or work performed, shall be free from all defects in material and workmanship for a period of one (1) year after acceptance and shall comply with manufacturer's specifications. All manufacturers' warranties shall be deemed assigned to BUYER.
- 9. SUBMISSION OF A PROPER INVOICE: Invoices may be submitted via (1) E-mail (electronic PDF image): financeadmin@lcfla.com; (2) Mail: Accounts Payable, 205 N. Marion Avenue, Lake City, FL 32055, or (3) Delivery: same address. Any invoice or payment request which is received by the CITY FINANCE DEPARTMENT must conform to the following requirements:
 - A. Complies with all terms of the PO;
 - B. Is an original invoice;
 - C. Is not under dispute;

And must contain the following information:

- A. The name and address of SELLER as reflected on the PO;
- B. The invoice preparation date;
- C. The number of the invoice to facilitate identification;
- D. The authorizing CITY PO number; if PO is issued under a master contract, also include master contract number;
- E. PO line item number, including description, quantity, unit of measure, unit price and extended price of the item;
- F. Terms of any prompt payment discount offered;
- G. Federal Identification Number (if applicable); and
- H. Payment remittance address.
- PAYMENT: Payment of invoices will be made in accordance with the Local Government Prompt Payment Act (Sec. 218.70, et seq., Florida Statutes).
 No C.O.D. shipments will be accepted. Inquiries concerning payment of

- invoices should be directed to the CITY FINANCE DEPARTMENT, telephone (386) 719-5792.
- 11. SELLER's price will be the lowest prevailing market price and under no circumstances will the price be higher than specified herein without express authorization of the CITY.
 - A. All materials, drawings, or other items provided by BUYER to SELLER remain the property of BUYER and will be returned to BUYER upon demand.
 - B. Any and all artwork or typeset photo ready material that has been paid for in the initial set up charge, or has been sent to SELLER for reproduction by BUYER will be returned to BUYER before final payment shall become due.
 - C. All containers, reels, or pallets shipped with supplies by SELLER are to remain the property of BUYER unless otherwise agreed in writing.
- 12. TERMINATION: The CITY may, by giving ten (10) calendar days written notice to the SELLER, terminate this order prior to the designated completion date FOR DUE CAUSE. Due cause for termination shall be, but not limited to, the best interests of the CITY, failure of the products to meet specifications, and/or for reasons of unsatisfactory service. The City may, upon giving thirty (30) calendar days written notice to SELLER, terminate the order with or without cause.
- 13. LAWS: The items and/or services covered by this PO shall comply with all federal, state or local laws relative thereto. All questions of validity, interpretation or performance of any of the terms or of any rights or obligations of the parties to this agreement shall be governed by Florida law; and any action brought by either party to enforce any of the terms of the agreement shall be filed in Columbia County, Florida.
- 14. TAXES: BUYER is exempt from sales and use tax on real property rented, transient rental property rented, tangible personal property purchased or rented, or services purchased. Do not include taxes in pricing. A copy of BUYER's Tax Exemption Certificate is available upon request.
- 15. MATERIAL SAFETY DATA SHEETS (MSDS): Prior to shipping any chemicals or substances to the City or bringing any chemicals or substances onto City property or a City work site, the Contractor shall provide City with copies of current Material Safety Data Sheets (MSDS).
- ASSIGNMENT: SELLER may not assign any portion of the PO without prior consent.
- 17. INSURANCE COVERAGE: Applicable to the purchase of supplies, equipment, and services, including construction, the SELLER, at own cost and expense, shall obtain and maintain in force during the term of this PO, the following minimum insurance coverage:
 - A. Commercial General/Umbrella Liability Insurance \$1,000,000 limit per occurrence for property damage and bodily injury. Service provider should indicate whether the coverage is provided on a claims-made or preferably on an occurrence basis. The insurance shall include coverage for: Premise/ Operations; Explosion, Collapse and Underground Property Damage Hazard (only when applicable to the project); Products/Completed Operations; Contractual; Independent Contractors; Broad Form Property Damage; Personal Injury.
 - B. Business Automobile/Umbrella Liability Insurance with a minimum limit of \$200,000 per occurrence, and \$300,000 for all claims arising out of the same incident or occurrence, for property damage and personal injury. Notice, these limits may change according to Florida law and the protections afforded to the City pursuant to sovereign immunity for liability.
 - C. Workers' Compensation and Employers'/Umbrella Liability Insurance Workers' Compensation coverage with benefits and monetary limits as set forth in Chapter 440, Florida Statutes. This policy shall include Employers'/Umbrella Liability coverage for \$500,000.00 per accident. Workers' Compensation coverage is required as a condition of performing work or services for the City whether or not the Contractor or Vendor is otherwise required by law to provide such coverage.
 - D.If PO is for professional services, professional liability insurance, including errors and omissions, \$1,000,000 or as per project.

NOTE: Additional insurance coverage may be required.



ITB-006-2021 Light Rescue Fire Truck

Received online: Bid Opening 2:00 pm February 16, 2021

Custom Truck and Body Works, Inc.	Georgia Commercial Vehicles
13787 White House Road	879 Pickens Industrial Drive
Woodbury, GA 30293	Marietta, GA 30062
706-655-4300	800-906-9615
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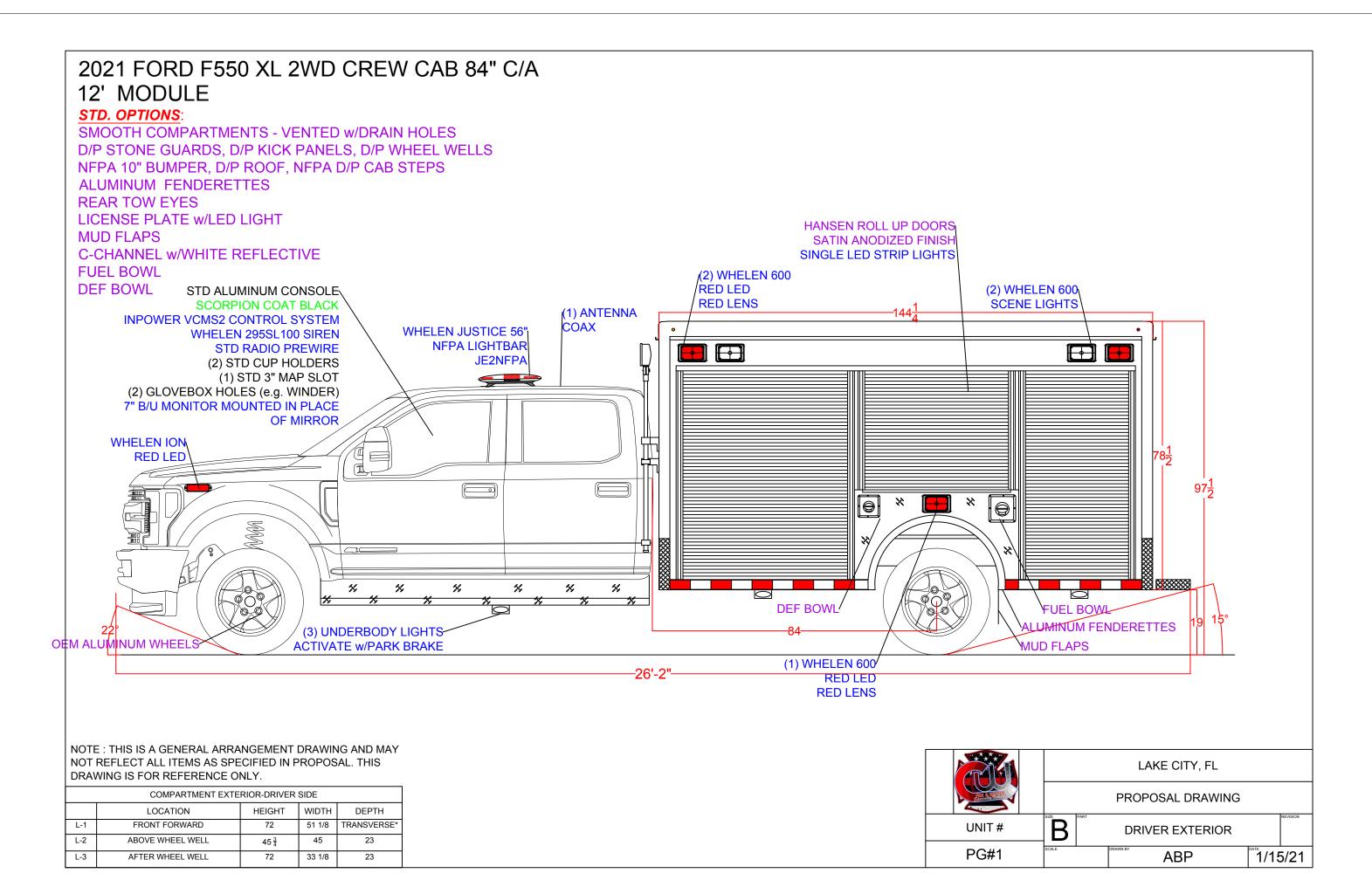
Quantity Total Quantity Total

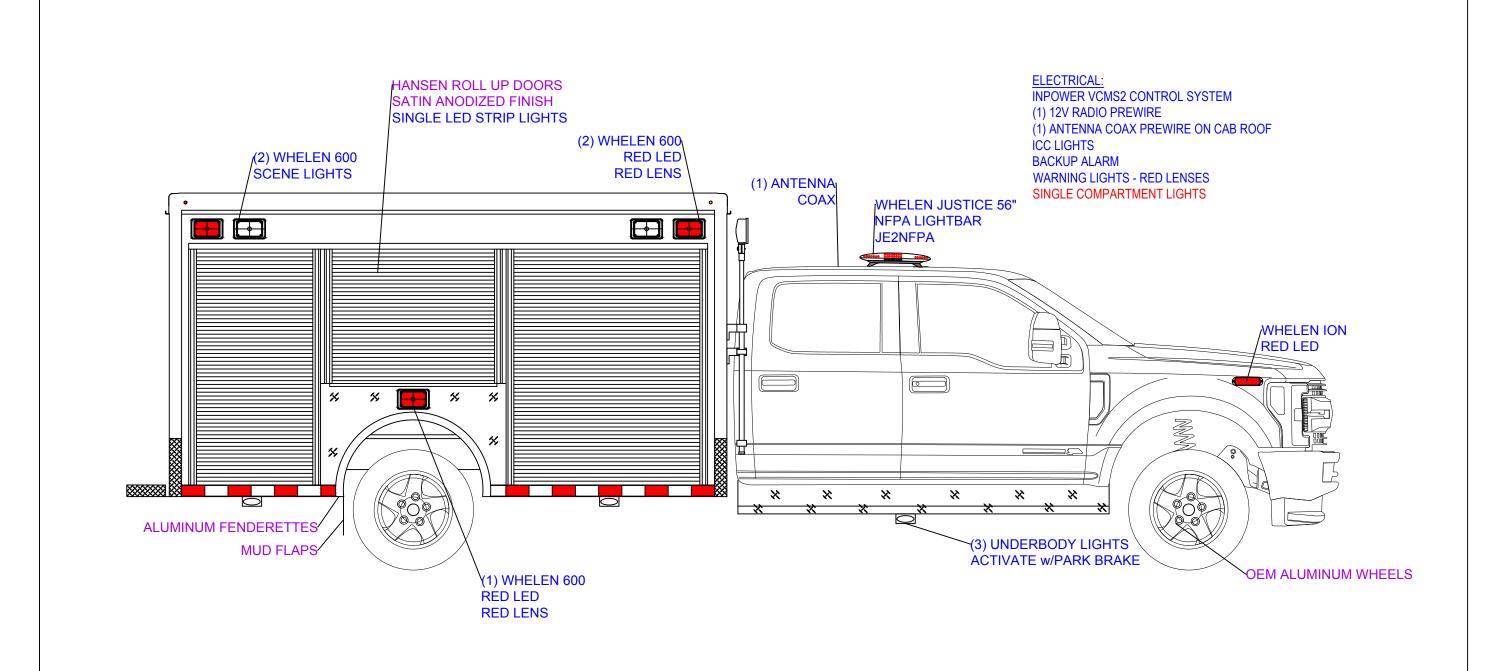
 Ford F550 XL, 4-door Crew Cab, Super Duty Truck

 per the specifications with in or equal
 1
 \$125,381.00
 1
 \$139,988.00

 Total
 \$125,381.00
 \$139,988.00

Recommendation: Custom Truck and Body Works, Inc.

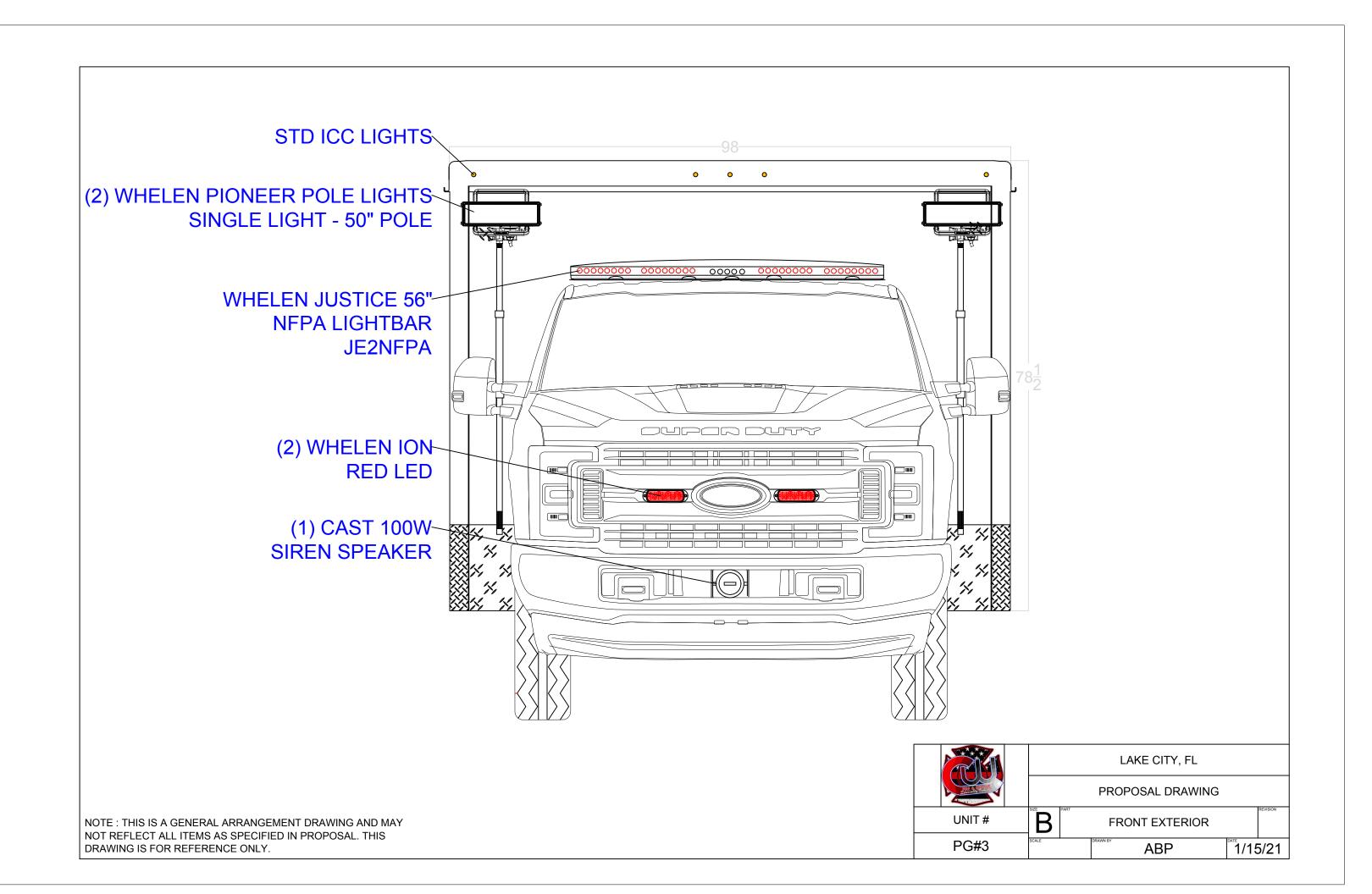


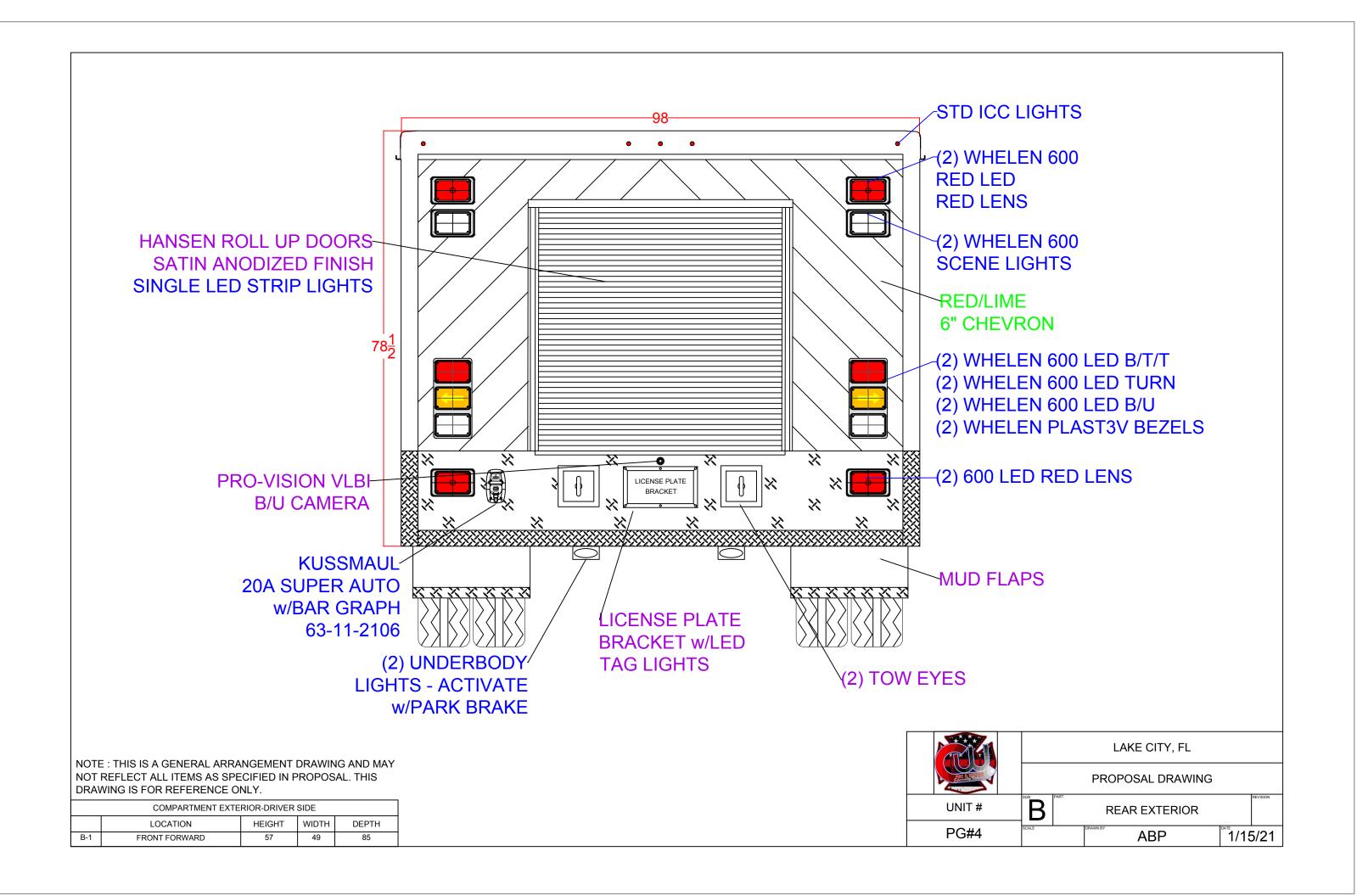


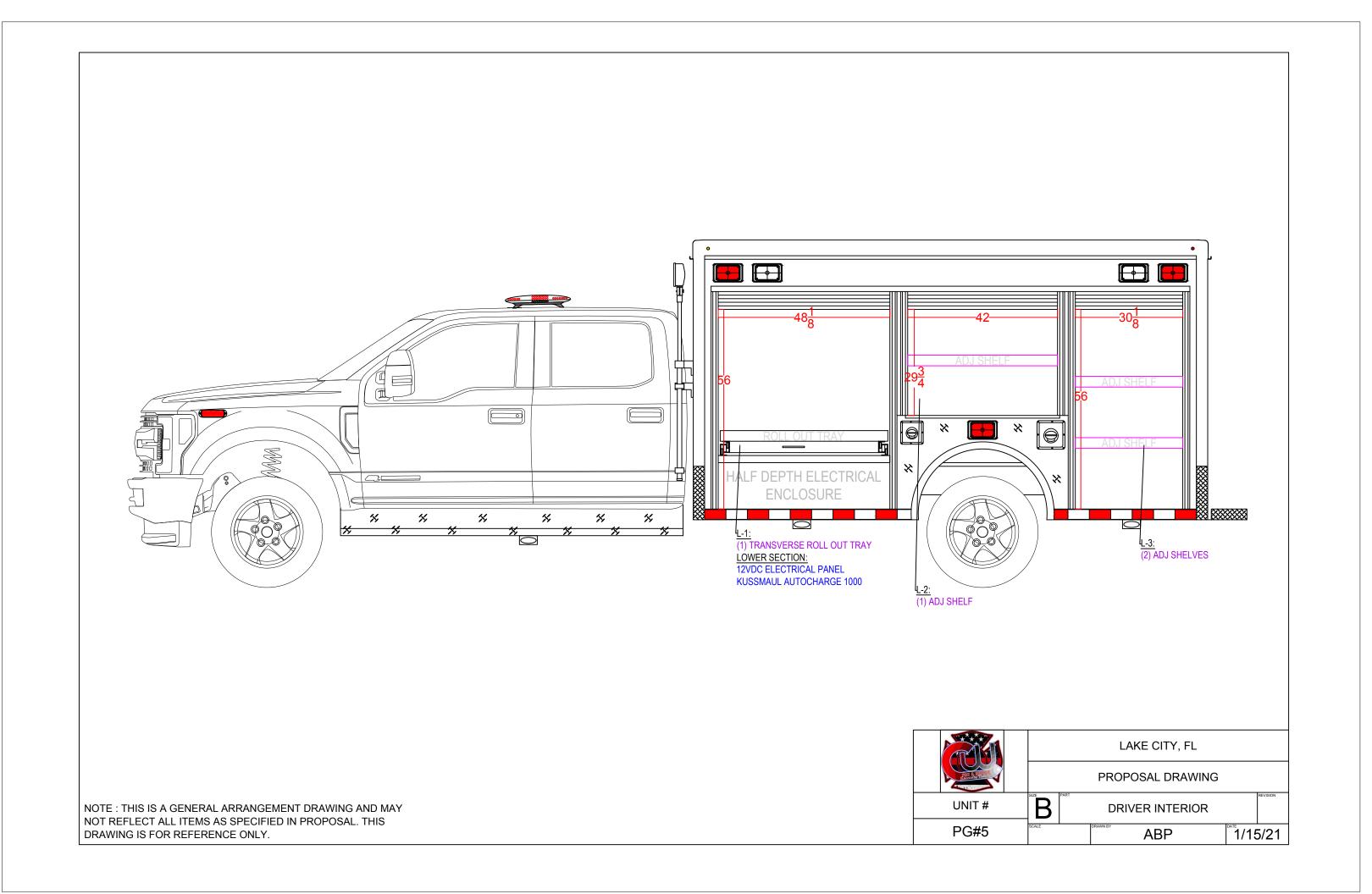
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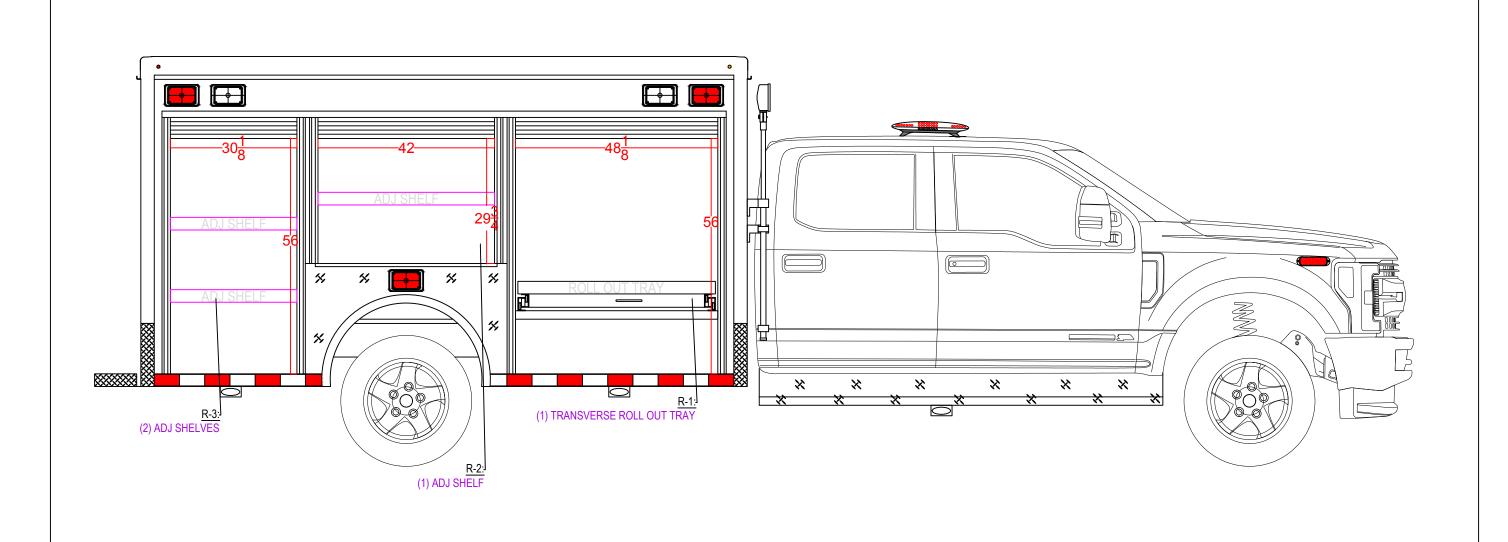
COMPARTMENT EXTERIOR-PASSENGER SIDE				
	LOCATION	HEIGHT	WIDTH	DEPTH
R-1	FRONT FORWARD	72	51 1/8	TRANSVERSE*
R-2	ABOVE WHEEL WELL	45 ³ / ₄	45	23
R-3	AFTER WHEEL WELL	72	33 1/8	23

		LAKE CITY, FL	
Samue Villa		PROPOSAL DRAWING	
UNIT #	PASSENGER EXTERIOR		
PG#2	SCALE	ABP	1/15/21



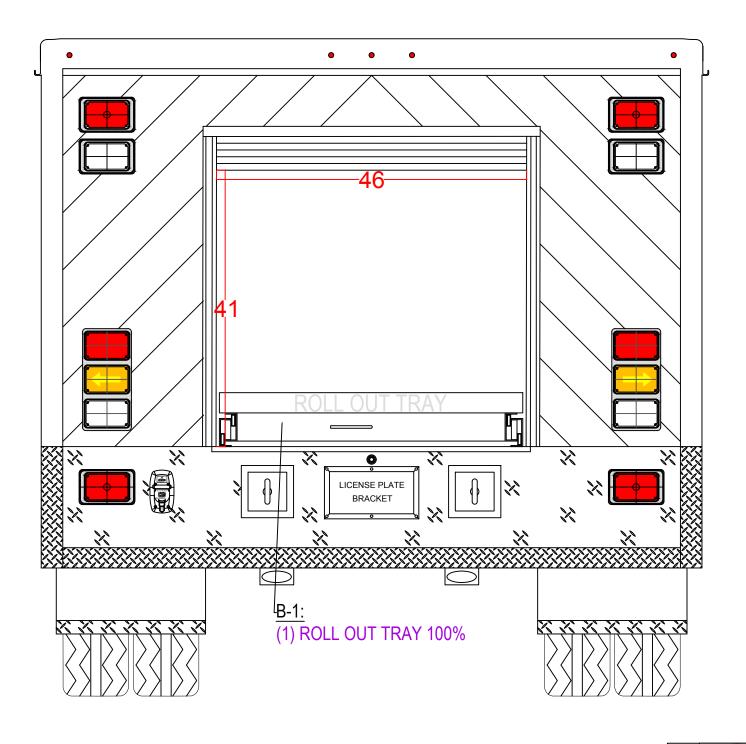






NOTE: THIS IS A GENERAL ARRANGEMENT DRAWING AND MAY NOT REFLECT ALL ITEMS AS SPECIFIED IN PROPOSAL. THIS DRAWING IS FOR REFERENCE ONLY.

		LAKE CITY, FL		
Sualty Will		PROPOSAL DRAWING		
UNIT #	B	PASS INTERIOR		REVISION
PG#6	SCALE	ABP	1/15	5/21



NOTE: THIS IS A GENERAL ARRANGEMENT DRAWING AND MAY NOT REFLECT ALL ITEMS AS SPECIFIED IN PROPOSAL. THIS DRAWING IS FOR REFERENCE ONLY.

		LAKE CITY, FL	
Specially Western		PROPOSAL DRAWING	
UNIT#	B	REAR INTERIOR	REVISION
PG#7	SCALE	ABP	1/15/21

CHASSIS SPECIFICATIONS

2022 Ford F-550, XL, 4-Door Crew Cab, Diesel Engine, Race Red in Color, 4x2 Chassis:

The cab and chassis meeting the requirements of this specification shall be a new, unused 2022-year model or newer, Ford, F-550, XL, 4-door crew cab with the following criteria:

- Ford F-550 Super Duty 4-Door Crew Cab and Chassis
- 19,500 GVWR with Payload Plus Upgrade
- 203-Inch Wheelbase with an 84-Inch Cab-to-Axle Measurement
- 47J Emergency Prep Package
- Two Wheel Drive
- 6.7 Liter Diesel Engine
- Engine Block Heater
- 10 Speed Automatic Transmission
- OEM Heavy Duty Cooling Radiator
- OEM Heavy Duty 397 Amp Alternator
- OEM Heavy Duty Air Conditioner
- Comfort Ride Suspension
- OEM Dual Batteries
- Modified Vehicle Wiring Kit
- Engine Idle Control
- Telescoping Power Tow Mirrors
- Power Steering with Tilt Steering Wheel
- OEM AM / FM / MP3 Stereo Radio with Digital Clock
- Gauge Package: Fuel Level, Water Temperature, Oil Pressure
- Seat Belts, Lap and Shoulder Harness
- Front Stabilizer Bar
- 225 Max Trac Tires
- Four Wheel Anti-Lock Brake System
- Front and Rear Heavy-Duty Shock Absorbers
- Aft-Axle 40 Gallon Capacity Fuel Tank
- Ford XL Trim Level Package
- 4.88 Limited Slip Rear Axle
- Black Mat Floor Covering
- 40/20/40 Front Seats
- Bench Rear Seats
- Front Tow Hooks
- Preferred Equipment Group
- Power Equipment Group
- OEM Polished Aluminum Wheels
- Ford Race Red in Color

Custom Truck and Body Works. Inc.

Commercial Chassis:

The cab and chassis meeting the requirements of this specification shall be a new, unused, 2022-year model or newer, Ford XL, F-550, 4x2, 4-door crew cab, with a 6.7 liter diesel engine and have an 84-inch cab-to-axle measurement and a 203-inch wheelbase measurement.

Apparatus Completion Timeline:

The apparatus shall be completed within 90 to 120 days after the receipt of the cab and chassis from the Ford dealership.

Apparatus Manufactured Location:

To simplify repairs, maintenance, warranties, and to keep with the purchasing department's high standards, this apparatus shall be assembled 100% in one (1) location. This apparatus shall **NOT** be partially constructed at the manufacturer's facility and then finished by a dealer representative at their location.

General Body Construction and Finish:

The body of this apparatus shall be fabricated from the highest quality of materials, using the highest quality of craftsmanship, and shall be designed for use as an emergency apparatus. To keep with the purchasing department's construction methods and high standards for emergency use apparatus, the following shall be followed:

- Plastic, fiberglass, composite, or FRP panels shall **NOT** be used to cover any exterior metal surface in lieu of paint.
- All add-on items such as handrails, steps, lights, brackets, etc. shall be removed prior to prepping for paint.
- All metal surfaces of the body shall be sanded, prepped, primed, and painted to match the job color with the highest level of craftsmanship.
- The painted surfaces shall not have any visible imperfections within the painted finish.
- The front-side of the body, the street-side (left), the curbside (right), and a portion the rear-side of the body shall be painted to match the job color.
- Polished aluminum diamond plate or brushed finish stainless-steel shall **NOT** be used to cover the body in lieu of paint except for where used as stone guard protection on the lower portion of the front body panel below the frame rails, on the four lower corners of the body, over the rear wheel wells, and as a kick plate on the rear of the body.

APPARARTUS BODY

Aluminum Rescue Module:

The body shall be of an all-aluminum built body, using heavy-duty extruded crowns and corner posts. The body shall be specifically engineered, designed, and constructed to meet the severe cycle duties of the fire and rescue industry.

The department should not seek, nor accept; a lesser built, bent or formed aluminum or utility style body. Also, to avoid warranty issues, the department should only purchase the unit complete from a manufacturer who constructs the entire unit, 100%, including the body, electrical harnesses, paint, shelving, slide-out trays, etc. at the manufacturer's facility.

The body shall consist of seven (7) individual, exterior compartments. The compartments shall be individual components within an independent framework of the modular body and no two (2) compartments shall share a common wall. Visible framework of the modular body should not be acceptable.

The body shall be mounted on the before mentioned chassis and shall come with a *Lifetime Structural Warranty*.

Body Construction Overview:

The body shall be constructed of heavy-duty, custom designed, aluminum extrusions and aluminum plate. The body shall be designed and engineered specifically for use as an emergency response apparatus and shall be built to meet the heavy-duty demands of the fire and rescue industry.

The body shall be of a welded style construction for maximum strength and integrity for the entire life span of the apparatus.

The aluminum extrusions shall be custom designed structural shapes that are of an alloy of 6061 and heated to a temper of T-6 hardness. The aluminum shapes shall be designed with a force-fit interlock system that shall eliminate any vibrations to the welded structural members.

The interior structural members shall be spaced at a maximum of 12-inches on center. The floor, compartment roofs, and sides shall be of a cage type construction that is built to form an independent structure which shall be self-standing and rigid. The body shall then be mounted to the before mentioned chassis. No chassis fabrication shall be required or should be permitted.

The exterior walls shall be constructed of 5052 H-32 aluminum with a heat-treated plate that is stretch leveled to a tolerance of \pm 0.003-inches. The exterior walls shall interlock into place.

All exterior compartments shall be separate, individual components, and no two compartments shall share a common wall.

Floor Construction:

The floor structure shall consist of 2-inch x 3-inch structural 6063 T-6 aluminum tubing spaced specifically for each body style as structurally required. Lateral tubing shall extend the full width of the body between the compartment boxes. The floor tubes shall be welded to the side structure channels.

The interior floor surface shall be covered with heavy-duty 0.125-inch-thick, smooth aluminum plate.

Corner Radius:

The corner radius shall be of the same heavy-duty style construction as the compartment roof radius, except there shall be no built-in drip molding. The corner radius shall be a 3-inch radius.

All corners shall be semi-hollow extruded shapes for structural strength and shall give a smooth exterior appearance without the need for bending or forming of the sheet metal.

Body Side Structure:

The body sides shall be constructed with four (4) corner radii. The radii shall be 3-inch arc shapes with interlocking edges on both sides. The extrusions shall be of an alloy of 6063 with a heat-treated temper of T-6.

The corners and compartment roofs shall be designed to work as a system that has a double gusset connector in each corner joint. The compartment roofs, corners, and sides shall be welded as no bolts or rivets are required, permitted or should be acceptable.

The sides shall be of a jig locked style construction. The jig shall hold the corners and body side panels in place while the inner 6063 T-6 structure is welded. The members shall be located at a maximum of 12-inches on center and welded to the compartment roof rails, which shall become the inner structural connector that shall become the roof members.

The exterior panels shall interlock with the compartment roof, corners and specially designed extruded aluminum compartment door frames and shall be constructed of 6063 T-6 aluminum material.

Compartment Roof Radius:

The roof cove radius shall be of an extruded aluminum shape with an alloy and temper of 6061 T-6 with an ultimate strength of 42,000 psi. The shape shall be a 4-inch radius with a built in inner structural connector to form a one-piece side and roof structure.

The radius shall be of a semi-hollow shape for strength, reduced weight, and to also allow passage for the electrical wiring harnesses.

The roof and side sheets shall fit into the roof radius and shall be welded from the inside of the body.

Compartment Roof Construction:

The compartment roofs shall be covered with 0.125-inch-thick, bright finished, aluminum diamond plate. The roof structure shall consist of 2-inch x 3-inch 6063 T-6 aluminum tubing that shall span the full width of the compartments. The roof structure tubes shall be spaced at a maximum of 12-inches on center.

The roof tubes shall be welded to the diamond plate roof and to the inner structural connector of the radius. The aluminum diamond plate sheet roof's perimeter shall be completely welded to the roof radii.

All roof seams and perimeters shall be solid welded. To aid in the prevention of water and dust leakage into the compartment areas, no caulking, screws, or rivets shall be utilized or should be acceptable.

Compartment Construction:

All exterior compartments shall be constructed of 0.250-inch-thick, heavy-duty, smooth aluminum plate. All corners shall be welded.

- Each compartment shall be vented with a minimum of a 4-inch vent.
- Each compartment shall be vented to the atmosphere.
- Each compartment floor shall be of the "sweep out" design for the ease of cleaning.
- Each compartment shall have drain holes in the floor in the rear corners for the ease of cleaning.
- Each compartment shall be finished with a heavy-duty, polyurethane sprayed on "Scorpion" style protective finished coating.

The final color of the sprayed on "Scorpion" style protective finished coating shall be determined by the purchasing department during the pre-construction conference.

Wheel Wells:

The wheel well openings shall be of sufficient size to permit the utilization of tire chains or other traction control devices used by the purchasing department. The wheel well openings shall also be of a sufficient size to permit the removal of the wheel and tire assembly without causing damage to the apparatus body, tires, or wheel assembly.

The wheel wells shall be provided with full 0.125-inch-thick, smooth aluminum fender liners that shall be rolled to eliminate pockets that might trap and collect road dirt. The liners shall

have flanges at the bottom edge.

Outer Wheel Well Trim:

The outer surface area of the wheel wells shall be covered with 0.125-inch-thick, bright finish, aluminum diamond plate for the complete protection from tire or chain kick-back. The diamond plate shall be secured to the modular body using stainless-steel fasteners.

Wheel Well Fenderettes:

Fenderettes shall be of a heavy-duty, polished aluminum material and be securely fastened to the modular body using stainless-steel fasteners. The fenderettes shall extend from the bottom of the forward rub rail to the bottom of the rearward rub rail for a more pleasing appearance and optimal performance.

Body Mounting:

The body structure sills shall be constructed of 1-inch-thick x 3-inch-wide, heavy-duty, aluminum flat bar and shall run the full length of the body structure. The flat bar shall be welded to each lateral structural member on both sides. The chassis and body shall be separated with a 1-inch-thick x 3-inch-wide nonmetal sill.

The body shall be capable of being removed from and transferred to a new chassis, similarly, sized to the old chassis, with minimal modifications. There shall be adequate space left between the cab and body, to prevent damage to the either the cab or body from flexing and normal highway use.

The body shall be attached to the before mentioned chassis using 5/8-inch steel "U" bolts and torsion springs. The body shall be mounted as per the Ford chassis manufacturers' guidelines.

Additionally, an isolator shall be installed on each "U" bolt at the "U" bolt mounting point and the structural sill.

Roll-Up Compartment Doors:

The compartments shall be equipped with six (6) custom-built, Hansen International, Inc., roll-up compartment doors. The doors shall be produced by an ISO-9001 certified company and tested to at least 100,000 cycles. Each door shall have a serial number label and shall carry a *Manufacturer's Warranty* of ten (10) years. To facilitate a 24-hour replacement part service turn around, the doors must be manufactured within the Continental United States.

Roll-Up Door Operating Components:

The easy-opening doors shall be equipped with a pre-tensioned internally lubricated counterbalance spring contained within a 0.060-inch x 4-inch diameter aluminum door roller tube and supported with a 0.625-inch diameter steel center shaft. The roller assembly and shaft shall be supported with two (2) pre-assembled and adjustable mounting plates of 0.090-inch zinc-plated-steel. The mounting plates shall have dual synthetic molded roller wheels that shall support the door above the guide channels as it is fed onto the roller tube counterbalance for storage. The door curtain assembly shall be attached to the roller tube counterbalance with woven nylon straps with quick detach steel mounting clips.

Roll-Up Door Construction-Smooth:

The doors shall be constructed of double walled and concave hard anodized aluminum extrusion laths with a smooth exterior surface. Each door slat shall have dimensions of 1.365-inches in height x 0.310-inches deep x 0.038-inch wall thickness. The "interlocking joint knuckle" extrusion design shall have an integral dual durometer extruded synthetic spacer seal to reduce noise and prevent weather or debris intrusion in a closed position. Each door lath shall have inter-locking and nested polymer slide guides. The slide guides shall be punch dimpled to prevent 'metal-to-metal' contact and shall be replaceable. The sides of the door openings shall be equipped with a single piece, 0.069-inch, hard anodized aluminum extruded vertical guide channel.

Roll-Up Door Finish-Anodized Satin Finish:

The roll-up doors shall be finished with an anodized, Satin finish to meet the high-quality standards and procedures of both the apparatus manufacturer and Hansen International, Inc.

Roll-Up Door Handle and Latching-Handle Bar:

The heavy-duty lift and door handlebar assembly shall be constructed with a double walled hard anodized extruded aluminum lath consisting of two (2) 0.060-inch wall thicknesses. The lift handlebar assembly shall have four (4) roller wheels to reduce friction and for the ease of the opening of the door. The handle assembly shall be equipped with a 2-inch horizontal full width shelf with anti-slip ribbing on the top to assist in the door closing. The shelf shall have two (2) riveted heavy-duty rubber bumpers to prevent a metal-to-metal impact with the overhead drip rail. The latch bar shall consist of a full width 0.750-inch diameter stainless-steel tube handle with centrally located knurled anti-slip sections and have a 1.25-inch hand clearance between the handle and the door surface.

Roll-Up Door Weather Resistance:

The top door drip rail shall be a hard-anodized aluminum extrusion and shall contain a full width strip of weather seal to minimize water ingress along the top of the door. The top door seal shall be of a two (2) piece 'non-contacting design' to prevent damage to the graphics, logos, or

reflective striping. The guide channel seals shall be replaceable and constructed of UV resistant rubber with automotive style flocking material for the smoothness of operation. The bottom of the door curtain shall have an additional full width UV resistant rubber seal.

Drip Rail:

There shall be provided a drip rail molding on the driver's side and the officer's side of the apparatus body over the compartment doors. The drip rail molding shall be continuous and shall aid in the prevention of water runoff from entering the compartments.

Exterior Body Trim:

The exterior of the rear body panel shall be fitted with 0.125-inch-thick, bright finished, aluminum diamond plate, used as a kick panel, above the rear tailboard. The kick panel shall be a minimum of 14-inches in height and be full width.

The lower portion of the front body panel shall be fitted with 0.125-inch-thick, bright finished, aluminum diamond plate used as a rock shield. The rock shields shall be a minimum of 14-inches in height and be located on the lower portion of the front body panel, below the level of the frame rails, on both the left and the right sides of the apparatus.

The four (4) lower corners of the modular body shall be protected using rock shields. The rock shields shall be a minimum of 14-inches in height and shall conform to the radius of the body corner post on each of the four (4) corners. The rock shields shall be 0.125-inches-thick, bright finished, aluminum diamond plate.

The protection panels shall be constructed from 0.125-inches-thick, bright finished, aluminum diamond plate and be secured to the apparatus body using stainless-steel fasteners.

Cab Running Boards:

There shall be provided a set (2) of heavy-duty, NFPA 1901 compliant, formed, bright finished, embossed aluminum diamond plate running boards. The running boards shall be fabricated using 0.125-inch-thick, embossed aluminum diamond plate. The running boards shall come complete with a splash guard at the rearward edge of the stepping surface.

The running boards shall be securely fastened to the chassis cab using stainless-steel fasteners and shall run the full length from the rear of the front wheel well to the back wall of the cab.

Rear Tailboard Construction:

The rear tailboard frame shall extend from the apparatus body with 3-inch x 1-1/2-inch x 1/4-inch-thick, structural "C" channel for strength and integrity. The "C" channel shall be placed as to form a structural matrix to the apparatus chassis and to keep the body in a complete modular

form.

The stepping surface shall be constructed of NFPA 1901 compliant, formed, bright finished, embossed aluminum diamond plate, 0.125-inches-thick, and have a minimum of a 10-inch depth and be full width.

The rear corners of the tailboard shall be angled at an approximate 45° angle to reduce the turning radius of the apparatus.

The rear tailboard, once the apparatus is fully loaded, shall have a minimum of an 18-inch ground clearance.

Mud Flaps:

There shall be provided a set (2) of heavy-duty mud flaps. The mud flaps shall be located, one (1) on the rear-side of each of the two (2) rear wheel-well openings.

The mud flaps shall be made of thick, heavy-duty, rubber material, be black in color, and shall be as wide as the dual rear wheels. To provide the optimum protection, the mud flaps shall be weighted to prevent them from flapping while driving the apparatus.

The mud flaps shall be securely fastened to the modular body using stainless-steel fasteners.

Recessed Tow Eyes:

There shall be provided a set (2), of heavy-duty, chrome plated, recessed tow eyes. The tow eyes shall be recessed in cast aluminum housings and be located on the rear body panel above the rear tailboard and be securely fastened to the chassis frame rails.

No attachment to the body shall be required or should be acceptable, only a frame rail attachment method should be acceptable.

The tow eyes shall have approximately a 3-1/2-inch inside diameter of the eye and the shaft shall have a minimum of a 1-1/4-inch-thick diameter.

Rub Rail:

There shall be provided polished aluminum "C" channel, with reflective tape inserts, solid white in color, used as a rub rail and installed at the lowest edge of the apparatus body between the wheel well openings and the front and rear rock shields which are mounted on the four (4) lower corners of the modular body.

The rub rails shall terminate with an approximate 45° angle on both the forward and rearward edges of each rub rail section. The rub rails shall be spaced away from the modular body using

at a minimum, a 1/2-inch-thick, non-metal spacer to prevent damage to either the rub rails or the modular body and finish.

The exact layout, design, and color of the reflective tape insert within the rub rails shall be determined by the purchasing department during the pre-construction conference.

Exhaust System Modification:

The factory exhaust system shall be modified to extend out the right side of the apparatus, rearward the rear wheel well, and be flush with the side of the apparatus body. The exhaust tip shall extend at a 90° angle with the ground and be capable of accepting an exhaust system tube with minimal modifications to the exhaust pipe.

Chassis Wheels:

The chassis of this apparatus shall be supplied with Ford OEM polished aluminum wheels and come with stainless-steel lug nut and hub covers. The tire and wheel assembly shall be balanced accordingly to maximize the life of the tires.

Apparatus Body:

Prior to applying the first coat of primer, all removable hardware items such as doors, handles, hinges, steps, lights, etc. shall be removed. A portion of the front body panel, the left and right-sides, and a portion of the rear body panel shall be painted to match the job color. The roll-up doors shall have an anodized, Satin finish.

Prior to mounting on the chassis, the entire body shall be fully sanded smooth to eliminate any visible imperfections. The priming and final coat application shall conform to the paint manufacturer's guidelines and recommendations.

The body shall be painted to match the purchasing department's preferred paint color and scheme which shall be one color, being Ford Race Red.

To expedite the chassis order, the exact paint color codes and layout scheme shall be determined by the purchasing department prior to the pre-construction conference and after the award of the contract to the awarding bidder.

Compartment Protective Coating:

There shall be provided a protective sprayed-on coating on the walls, floors, ceilings, slide-out trays, and adjustable shelves, of each exterior compartment of the apparatus' body. The sprayed-on coating shall have a "Scorpion" style protective finish and protect the interior surfaces from being damaged due to normal use.

The exact color of the Scorpion style protective finish shall be determined by the purchasing department during the pre-construction conference.

Rear Chevron Striping:

There shall be provided alternating, diamond print, reflective stripping, or Chevrons, on the rear of the apparatus body. The Chevron stripes shall consist of 6-inch-wide, highly reflective, red and lime yellow stripes and have an inverted "V" pattern toward the center of the apparatus body.

The Chevron striping shall cover at a minimum of 50 % of the rear of the apparatus body to be NFPA 1901 compliant.

The Chevrons shall cover the rear body panel only. No Chevrons shall be on the rear compartment roll-up door.

The exact layout, design, and color of the rear reflective Chevron striping shall be determined by the purchasing department during the pre-construction conference.

Reflective Stripe Package:

There shall be provided a highly reflective striping package applied to both sides of the apparatus chassis and body starting just behind the front wheel wells and going towards the rear corners of the rescue body.

The reflective striping on the cab and body shall be as follows:

- White in color.
- 6-inch-wide, highly reflective.

The striping package shall meet the purchasing department's existing apparatus striping package for department uniformity.

The exact layout, design, and color of the reflective striping package shall be determined by the purchasing department during the pre-construction conference.

Reflective Graphics Package:

There shall be provided a custom computer designed, highly reflective, lettering / graphics package to match the purchasing department's current fleet.

The lettering / graphics package shall meet the purchasing department's existing apparatus' lettering / graphics package for department uniformity. The purchasing department shall receive samples / images of the computer designed lettering / graphics package for final approval prior to applying any lettering or graphics to the apparatus.

The exact color, wording, layout, and design of the reflective lettering and graphics package shall be determined by the purchasing department during the pre-construction conference.

NFPA Compliance Labels:

There shall be provided a complete set of NFPA 1901 compliance labels. The labels shall be permanently attached to the chassis and / or modular body.

A Federal Motor Vehicle Safety Standards weight certification label shall be affixed to the driver's compartment L-1 area by the apparatus manufacturer.

A permanent label shall be affixed to the seating area that states the "Maximum Seating Allowed".

A permanent label shall be affixed to the seating area that states, "Seat Belts are Required."

A permanent label shall be affixed to the fuel fill area that states, "Diesel Only."

A permanent label shall be affixed to the DEF fill area that states, "DEF Only."

A permanent label shall be affixed to the seating area in sight of the driver's seated, belted position that states the "Overall Height, Length, Width, and GVWR".

A permanent label shall be affixed to the rear of the apparatus body that states "Do Not Ride on Tailboard While in Motion".

A permanent label shall be affixed to the area near the auto-eject receptacle that states, "Type of Line Voltage" and "Current Rating in Amps".

The following plate shall be affixed inside the driver's side front cab entry door, that states the Quantity and Type of the following fluids and pressures as a minimum:

Engine Oil Air Conditioning Lubrication Oil

Engine Coolant Transmission Fluid

Brake Fluid Maximum Tire Speed Rating
Drive Axle Lubrication Fluid Front Tire Cold Air Pressure
Power Steering Fluid Rear Tire Cold Air Pressure
Air Conditioning Refrigeration Front and Rear Tire Sizes

The exact number of compliance labels, information contained on the labels, and mounting locations shall be determined by the purchasing department during the pre-construction conference.

COMPARTMENTATION

General Compartment Construction:

The modular body shall have three (3) compartments on the driver's side, three (3) compartments on the officer's side, and one (1) compartment on the rear of the apparatus, for a total of seven (7) individual, exterior compartments. All of which shall have aluminum, anodized, Satin finished, roll-up doors. The compartments shall be of the "sweep-out" design and have drain holes placed in the rear corners of the floors for the ease of cleaning. The compartments shall be vented to allow moisture and toxic gases to vent to the atmosphere. The apparatus body shall be designed to meet the extreme demands of the fire and rescue industry as a severe-duty rescue apparatus.

Compartment A (L-1):

This compartment shall be on the driver's side of the apparatus between the front wall of the body and the rear wheel well and shall have a compartment wall-to-wall / floor-to-ceiling dimension of approximately 72-inches high x 51-inches wide x transverse deep above the frame rails and 23-inches deep below the frame rails. The compartment shall have a door opening dimension of approximately 56-inches high x 48-inches wide.

The compartment shall have the following features:

- One (1) Roll-up compartment door.
 - Roll-up door shall have an anodized, Satin finish.
- Extended floor to the outside edge of the compartment.
- One (1) transverse slide-out tray.
 - > Slide-out tray shall be approximately 46-inches wide x transverse deep.
 - > Slide-out tray shall extend approximately 70 % from the compartment.
 - ➤ Slide-out tray shall have a minimum of a 1,000 lb. rating.
 - ➤ Slide-out tray shall have a 3-inch retaining flange around all edges.
 - o Tray shall have solid welded corners.
 - > Slide-out tray shall be securely fastened to the floor of the compartment.
- One (1) vertically mounted LED light strip.
- One (1) 4-inch, minimum size vent.
 - ➤ Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.
- 12-volt DC electrical panel in bottom area of compartment.
- Electrical components from body manufacturer in bottom area of compartment.

Compartment B (L-2):

This compartment shall be on the driver's side of the apparatus over the rear wheel well and shall have a compartment wall-to-wall / floor-to-ceiling dimension of approximately 45-inches high x

45-inches wide x 23-inches deep. The compartment shall have a door opening dimension of approximately 29-inches high x 42-inches wide.

The compartment shall have the following features:

- One (1) Roll-up compartment door.
 - Roll-up door shall have an anodized, Satin finish.
- One (1) adjustable shelf.
 - Four (4) adjustable, full height shelf tracks.
 - o Two (2) shelf tracks shall be located on each the left and right compartment walls.
 - Adjustable shelf shall have a minimum of a 3-inch retaining flange around all edges.
 - Shelf shall have solid welded corners.
 - Adjustable shelf shall have a minimum of a 600 lb. rating.
- One (1) vertically mounted LED light strip.
- One (1) 4-inch, minimum size vent.
 - ➤ Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.

Compartment C (L-3):

This compartment shall be on the driver's side of the apparatus between the rear wheel well and the rear wall of the body and shall have a compartment wall-to-wall / floor-to-ceiling dimension of approximately 72-inches high x 33-inches wide x 23-inches deep. The compartment shall have a door opening dimension of approximately 56-inches high x 30-inches wide.

The compartment shall have the following features:

- One (1) Roll-up compartment door.
 - Roll-up door shall have an anodized, Satin finish.
- Two (2) adjustable shelves.
 - Four (4) adjustable, full height shelf tracks.
 - o Two (2) shelf tracks shall be located on each the left and right compartment walls.
 - Adjustable shelves shall have a minimum of a 3-inch retaining flange around all edges.
 - o Shelves shall have solid welded corners.
 - Adjustable shelves shall have a minimum of a 600 lb. rating.
- One (1) vertically mounted LED light strip.
- One (1) 4-inch, minimum size vent.
 - > Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.

Compartment D (R-1):

This compartment shall be on the officer's side of the apparatus between the front wall of the body and the rear wheel well and shall have a compartment wall-to-wall / floor-to-ceiling dimension of approximately 72-inches high x 51-inches wide x transverse deep above the frame rails and 23-inches deep below the frame rails. The compartment shall have a door opening dimension of approximately 56-inches high x 48-inches wide.

The compartment shall have the following features:

- One (1) Roll-up compartment door.
 - Roll-up door shall have an anodized, Satin finish.
- Extended floor to the outside edge of the compartment.
- One (1) transverse slide-out tray.
 - ➤ Slide-out tray shall be approximately 46-inches wide x transverse deep.
 - > Slide-out tray shall extend approximately 70 % from the compartment.
 - ➤ Slide-out tray shall have a minimum of a 1,000 lb. rating.
 - ➤ Slide-out tray shall have a 3-inch retaining flange around all edges.
 - o Tray shall have solid welded corners.
 - ➤ Slide-out tray shall be securely fastened to the floor of the compartment.
- One (1) vertically mounted LED light strip.
- One (1) 4-inch, minimum size vent.
 - ➤ Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.

Compartment E (R-2):

This compartment shall be on the officer's side of the apparatus over the rear wheel well and shall have a compartment wall-to-wall / floor-to-ceiling dimension of approximately 45-inches high x 45-inches wide x 23-inches deep. The compartment shall have a door opening dimension of approximately 29-inches high x 42-inches wide.

The compartment shall have the following features:

- One (1) Roll-up compartment door.
 - Roll-up door shall have an anodized, Satin finish.
- One (1) adjustable shelf.
 - Four (4) adjustable, full height shelf tracks.
 - o Two (2) shelf tracks shall be located on each the left and right compartment walls.
 - Adjustable shelf shall have a minimum of a 3-inch retaining flange around all edges.
 - Shelf shall have solid welded corners.
 - Adjustable shelf shall have a minimum of a 600 lb. rating.
- One (1) vertically mounted LED light strip.
- One (1) 4-inch, minimum size vent.

- ➤ Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.
 - ➤ Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.

Compartment F (R-3):

This compartment shall be on the officer's side of the apparatus between the rear wheel well and the rear wall of the body and shall have a compartment wall-to-wall / floor-to-ceiling dimension of approximately 72-inches high x 33-inches wide x 23-inches deep. The compartment shall have a door opening dimension of approximately 56-inches high x 30-inches wide.

The compartment shall have the following features:

- One (1) Roll-up compartment door.
 - Roll-up door shall have an anodized, Satin finish.
- Two (2) adjustable shelves.
 - Four (4) adjustable, full height shelf tracks.
 - o Two (2) shelf tracks shall be located on each the left and right compartment walls.
 - Adjustable shelves shall have a minimum of a 3-inch retaining flange around all edges.
 - o Shelves shall have solid welded corners.
 - Adjustable shelves shall have a minimum of a 600 lb. rating.
- One (1) vertically mounted LED light strip.
- One (1) 4-inch, minimum size vent.
 - ➤ Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.

Compartment G (B-1):

This compartment shall be on the rear-side of the apparatus above the tailboard and shall have a compartment wall-to-wall / floor-to-ceiling dimension of approximately 57-inches high x 49-inches wide x 85-inches deep. The compartment shall have a door opening dimension of approximately 41-inches high x 46-inches wide.

The compartment shall have the following features:

- One (1) Roll-up compartment door.
 - Roll-up door shall have an anodized, Satin finish.
- One (1) single direction slide-out tray.
 - > Slide-out tray shall have a 100 % compartment depth.
 - ➤ Slide-out tray shall be approximately 44-inches wide x 80-inches deep.
 - ➤ Slide-out tray shall extend approximately 100 % from the compartment.
 - ➤ Slide-out tray shall have a minimum of a 1,000 lb. rating.

- ➤ Slide-out tray shall have a 3-inch retaining flange around all edges.
 - o Tray shall have solid welded corners.
- > Slide-out tray shall be securely fastened to the floor of the compartment.
- One (1) vertically mounted LED light strip.
- One (1) 4-inch, minimum size vent.
 - ➤ Vented to the atmosphere.
- Two (2) drain holes in the floor in the rear of the compartment.

Adjustable Shelves:

There shall be provided six (6) aluminum adjustable shelves. The shelves shall be constructed of 0.188-inch-thick, smooth aluminum plate for durability and the ease of mounting equipment.

The adjustable shelves shall be fully adjustable from the top of the compartment to the bottom. Shelving hardware shall be of the Unistrut "C" channel design. The shelves shall have a minimum of a 600 lb. capacity rating.

The shelves shall have a minimum of a 3-inch retaining flange around all edges to prevent equipment from being dislodged while the apparatus is being driven. The corners of each shelf shall be solid welded.

The shelves shall have a Scorpion style protective finished coating to match the compartment interiors.

The exact number, layout, design, and location of the adjustable shelves shall be determined by the purchasing department during the pre-construction conference.

Slide-Out Trays:

There shall be provided two (2) slide-out trays. The slide-trays shall be constructed of 0.188-inch-thick, smooth aluminum plate for durability and the ease of mounting equipment.

The slide-out tray rail assembly shall be bolted into place using 3/8-inch stainless-steel fasteners. The slide-out trays and roller assembly shall have a minimum of a 1,000 lb. capacity rating. The slide-out trays shall have a 3-inch retaining flange around all edges. The slide-out trays shall have solid welded corners.

The slide-out trays shall have a Scorpion style protective finished coating to match the interior coating of the compartments.

The exact location, design, and number of the slide-out trays shall be determined by the purchasing department during the pre-construction conference.

12 VOLT DC ELECTRICAL SYSTEM

Electrical Overview:

The electrical system and associated equipment shall comply with all Federal Motor Vehicle Safety Standards, Federal Motor Carrier Safety Regulations, and shall also conform to all applicable SAE recommended standards and practices and shall meet or exceed NFPA 1901 requirements.

The apparatus body and accessory electrical equipment shall be served by circuits separate and distinct from the chassis circuits. All wiring shall be permanently color coded and marked to identify each wire for its entire length.

The wiring shall be routed in conduit or loom that is rated at a minimum of 300° F and include a service loop of wire that will permit the replacement of the wire terminals if damaged. All conduits, looms, and wiring harnesses shall be secured to the body or frame with insulated metal cable straps.

All electrical system components and wiring shall be located and installed in such a manner that facilitates easy removal and servicing.

The unit shall come with a Load Management System. All wiring shall conform to NFPA 1901 standards and SAE standards.

Electrical Panel:

There shall be provided an electrical panel for the emergency vehicle accessories. The electrical panel shall be located as to ensure the ease of accessibility for future servicing and maintenance.

The electrical components shall be in an accessible, weather resistant location. The area shall come with a removable, vented panel to protect the components from damage.

The exact design, location, and functions of the electrical panel shall be determined by the purchasing department during the pre-construction conference.

Master Battery Switch:

There shall be provided one (1) Cole Hersee master battery switch located conveniently to the driver's seated, belted position. Provided with the switch shall be a single "GREEN" light indicating the master switch is in the "ON" position. The mounting location for the master battery switch shall be on the driver's side of the center console.

The exact layout, location, and functions of the master battery switch shall be determined by the purchasing department during the pre-construction conference.

Battery Charger:

There shall be provided one (1) Kussmaul Auto-Charge 1,000 battery charging system. The battery charger shall be mounted within a protected area in the bottom of the L-1 compartment. The battery charger shall activate when attached to a 110-volt AC shoreline through the auto-eject receptacle.

The exact layout, location, and functions of the battery charging system shall be determined by the purchasing department during the pre-construction conference.

Kussmaul Auto-Eject System:

There shall be provided a Kussmaul Super Auto-Eject system with 110-volt AC, 20-amp shoreline receptacle that shall provide 110-volt AC service when activated. The mounting location for the auto-eject receptacle shall be on the rear body panel of the apparatus on the driver's side of the body.

The auto-eject shall have a weather resistant, yellow in color, cover with a hinged lid. With the battery charger unit, a bar graph is built-in to the auto eject receptacle which lights up when an electrical cord is plugged in to the truck and an external power source to indicate the system is functioning properly and to show the charge of the batteries.

The final location for the auto-eject receptacle shall be determined by the purchasing department during the pre-construction conference.

The exact layout, location, and operations of the auto-eject shoreline receptacle shall be determined by the purchasing department during the pre-construction conference.

Center Console:

There shall be provided a custom designed and fabricated center console. The console shall be fabricated using 0.125-inch-thick, heavy-duty, smooth aluminum plate covered with a heavy-duty polyurethane "Scorpion" style protective finished material, black in color.

The center console shall contain the following items:

- One (1) slot for binders / books
- Two (2) slots for medical gloves.
- Two (2) cup holders
- Warning light controls
- One (1) siren amplifier.
- Department supplied mobile communication's radio
- Any other items required by the purchasing department.
- Electrical power supply for department supplied equipment and the antenna coax cable shall be terminated within the center console.

- Master battery switch.
- Door ajar flashing light.

The switch panel shall contain switches for the following minimum applications:

- Master switch.
- Emergency lights switches.
- Light bar switch.
- Scene light switches.
- Pole light switches.
- All other necessary functions.

All switches shall be lighted and properly identified.

Prior to CAD design and after the award of the contract, all items required to be housed in the center console shall be determined by the purchasing department for approval of final drawings for the center console shall be made prior to fabrication.

The exact design, layout, and equipment housed within the center console shall be determined by the purchasing department during the pre-construction conference.

Marker Lights:

There shall be provided the proper number of LED style ICC / marker lights located on the apparatus body above the drip rails.

All lights and reflectors shall meet or exceed Florida DOT regulations and the Federal Motor Vehicle Safety Standards.

License Plate Bracket:

There shall be provided one (1) cast aluminum license plate bracket with LED light recessed on the rear of the body. The mounting location shall be in the center of the rear body panel just above the rear tailboard and under the rear compartment roll-up door.

The exact mounting location of the tag bracket and LED light shall be determined by the purchasing department during the pre-construction conference.

Back-Up Alarm:

There shall be one (1), back up alarm with a minimum of 97 dB, that automatically activates when the vehicle's transmission is placed in the reverse gear. The back-up alarm shall be mounted under the rear tailboard in a secured area to prevent damage from normal use.

There shall be **NO** back-up alarm cut-off switch as this would be in violation of safety regulations.

The exact mounting location and activation of the back-up alarm system shall be determined by the purchasing department during the pre-construction conference.

Compartment Lights:

There shall be provided one (1), vertically mounted, LED light strip, in each of the exterior compartment openings, in each of the seven (7) exterior compartments.

The LED lights shall activate when the roll-up doors are in the open position.

The exact layout, location, number of lights and activation of the compartment lights shall be determined by the purchasing department during the pre-construction conference.

Door Ajar Light:

There shall be provided, in the cab within sight of the driver's seated, belted position, a red flashing warning light that shall indicate a compartment door is open or a cab door is ajar.

This warning light shall be installed to prevent damage to the apparatus and / or equipment and to comply with NFPA 1901 standards.

The exact layout, location, and activation of the door ajar warning light shall be determined by the purchasing department during the pre-construction conference.

Ground Lights:

There shall be provided six (6) Tecniq LED ground illumination lights under the apparatus body. The lights shall illuminate the ground area around the modular body and shall be activated by applying the apparatus' parking brake.

The lights shall be located as follows:

- Two (2) under the rear tailboard on the rear of the modular body.
- Two (2) under the driver's side compartments, L-1 and L-3.
- Two (2) under the officer's side compartments, R-1 and R-3

Additionally, there shall be provided two (2) Tecniq LED ground illumination lights under the chassis cab. The lights shall illuminate the ground area around the chassis cab and shall be activated by applying the apparatus' parking brake.

The lights shall be located as follows:

- One (1) under the driver's side running board.
- One (1) under the officer's side running board.

The LED ground lights shall be evenly spaced along the perimeter of the apparatus to provide the optimal ground illumination for safe nighttime operations.

The exact layout, location, and activation of the ground illumination lights shall be determined by the purchasing department during the pre-construction conference.

Scene Lights:

There shall be provided six (6) Whelen 600 Series surface mounted LED scene lights. The scene lights shall have clear LED modules, clear lenses, and have chrome flanges.

The scene lights shall be located:

- Two (2) on the driver's side of the apparatus body, one (1) forward and one (1) rearward.
- Two (2) on the officer's side of the apparatus body, one (1) forward and one (1) rearward.
- Two (2) on the rear of the apparatus body, one (1) on the left and one (1) on the right.

The scene lights shall be activated by three (3) individual switches on the center console.

There shall be provided non-metal, molded rubber gaskets between the chrome light bezels and the painted/graphic/diamond plate surfaces of the body to prevent electrolytic reaction between dissimilar metals and to protect the painted/graphic/diamond plate surfaces and the chrome light bezels.

The exact brand, location, and activation options of the scene lights shall be determined by the purchasing department during the pre-construction conference.

Emergency Lighting:

The emergency lighting package as specified shall meet the requirements for "Clearing the Right of Way" and "Blocking the Right of Way" as specified in the current edition of NFPA 1901.

ZONE A UPPER Whelen Justice Series 56" LED light bar.

Red / white LED modules with clear lenses.

ZONE A LOWER Two (2) Whelen Ion Series LED Lights.

Red LED modules with red lenses.

Chrome flanges.

One (1) on each left and right side of the cab grille.

Two (2) Whelen Ion Series LED lights.

Custom Truck and Body Works, Inc.

Red LED modules with red lenses.

Chrome flanges.

One (1) on each left and right-side front fender for

intersection lights.

ZONES B & D UPPER Four (4) Whelen 600 Series LED lights.

Red LED modules with red lenses.

Chrome flanges.

Two (2) on each left and right-side upper body.

ZONES B & D LOWER Two (2) Whelen 600 Series LED lights.

Red LED modules with red lenses.

Chrome flanges.

One (1) over each left and right-side rear wheel well.

ZONE C UPPER Two (2) Whelen 600 Series LED Lights.

Red LED modules with red lenses.

Chrome flanges.

One (1) on each left and right upper side of the rear of

body.

ZONE C LOWER Two (2) Whelen 600 Series LED Lights.

Red LED modules with red lenses.

Chrome flanges.

One (1) on each left and right lower side of the rear of

body.

All exterior emergency warning lights shall meet NFPA 1901 standards for flash patterns.

There shall be provided non-metal, molded rubber gaskets between the chrome light bezels and the painted/graphic/diamond plate surfaces of the body to prevent electrolytic reaction between dissimilar metals and to protect the painted/graphic/diamond plate surfaces and the chrome light bezels.

The exact brand, location, and activation of the emergency lighting package shall be determined by the purchasing department during pre-construction conference.

DOT Taillights:

There shall be provided a set (2) of Whelen 600 Series LED taillights on the apparatus body. The taillights shall be mounted in chrome bezels, one (1) on both the left-side and right-side.

- Two (2) Whelen 600 Series LED brake lights.
- Two (2) Whelen 600 Series LED turn signals.

Custom Truck and Body Works, Inc.

• Two (2) Whelen 600 Series LED back-up lights.

There shall be provided non-metal, molded rubber gaskets between the chrome light bezels and the diamond plate surfaces of the body to prevent electrolytic reaction between dissimilar metals and to protect the diamond plate surfaces and the chrome light bezels.

The exact brand, layout, and location of the LED taillights shall be determined by the purchasing department during the pre-construction conference.

Siren Amplifier:

There shall be provided one (1) Whelen 100-watt self-contained electronic siren amplifier. The siren amplifier shall be located within the center console within reach of the driver's and officer's seated, belted positions and have a hands-free mode with PA function.

The siren shall have the following tones:

- Wail
- Yelp
- Piercer
- Air horn

The exact brand, location, and activation of the electronic siren amplifier shall be determined by the purchasing department during the pre-construction conference.

Siren Speaker:

There shall be provided one (1) 100-watt, electronic siren speaker. The siren speaker shall be mounted in the center of the OEM bumper and have a black in color housing.

The exact brand and mounting location of the electronic siren speaker shall be determined by the purchasing department during the pre-construction conference.

Radio DC Power Pre-Wire:

There shall be provided a 12-volt DC lead for the installation of a department supplied mobile communications radio. The DC lead shall be terminated within the center console.

The exact layout, location, and function of the mobile radio shall be determined by the purchasing department during the pre-construction conference.

Coax Cable:

There shall be installed, one (1) mobile communications radio antenna base, minus the whip, on the cab roof and the coax cable for the mobile radio shall be ran and terminated within the center console.

The purchasing department's mobile communication radio provider shall be responsible for installing the antenna whip, tuning of the antenna, and programming and installing the mobile radio.

Provided the purchasing department provides, prior to fabrication, the mobile communication radio that will be used in the apparatus, Custom Truck and Body Works, Inc. will design and install the radio into the center console. After which, the purchasing department's mobile communication radio provider shall be responsible for programming and activation.

The exact layout and location of the mobile radio antenna and coax cable shall be determined by the purchasing department during the pre-construction conference.

Telescopic Pole Lights:

There shall be provided two (2) Whelen Pioneer LED 12-volt DC telescopic pole lights. The telescopic pole lights shall be wired to the chassis battery system.

The pole lights shall be mounted as follows:

- One (1) on the driver's side, front of the module body.
- One (1) on the officer's side, front of the module body.

The lights shall be activated by a dedicated switch located on the center console. The lights shall be extendable and rotate 360° to give the optimal scene lighting capabilities.

The exact mounting location and operations of the telescopic pole lights shall be determined by the purchasing department during the pre-construction conference.

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MISCELLANEOUS

Ford QVM Certification:

The purchasing department should be concerned that the different bidders have a firm understanding of the chassis electrical hook-ups and tie-ins and the correct procedures concerning the mounting of the body to the Ford chassis are being followed to limit any future warranty issues.

To limit liability and ensure all bidders are qualified, the department should require that all bidders be certified and a member in good standing of the Ford Motor Company, Q.V.M. (Qualified Vehicle Modifier) program for emergency vehicles.

Provided with this bid proposal is a copy of our Ford QVM certification.

FAMA Compliance:

The purchasing department should be concerned that the different bidders have a reputable reputation as an emergency vehicle manufacturer. The purchasing department should require that the apparatus manufacturer be a current member in good standing of the Fire Apparatus Manufacturer's Association (FAMA).

Provided with this bid proposal is a copy of our FAMA certification.

Pre-Construction Conference:

There shall be a **required** pre-construction conference held at Custom Truck and Body Works, Inc.'s facility in Woodbury, Ga. before any construction can commence. Representatives from the purchasing department and members of Custom Truck and Body Works, Inc. shall attend this meeting.

Members in attendance for this meeting shall represent fabrication, electrical, design, paint, project management, sales team, and representatives of the purchasing department.

At this meeting, all parties shall go over the specifications line item by line item to ensure that the apparatus is built to meet or exceed all requirements set forth by the purchasing department.

After this meeting, a representative of Custom Truck and Body Works, Inc. shall present the purchasing department with a copy of the written work order to be used in production and a final set of CAD drawings for the apparatus, center console, and any other specialty item as requested by the department.

No fabricating of the body shall begin until all drawings and work orders have been approved and signed by all parties.

Any additional expenses relating to insuring compliance shall be at the expense of Custom Truck and Body Works, Inc. and be at no additional cost to the purchasing department. This includes all lodging and meals while in the Atlanta area for up to three (3) members of the purchasing department.

Detailed CAD Drawings:

After the pre-construction conference is held, there shall be provided to the purchasing department a detailed set of scaled C.A.D. (computer aided design) drawings to be used in the production process. These drawings shall show all the options and equipment to be mounted on the apparatus.

No fabricating of the body shall begin until all drawings and work orders have been approved and signed by all parties.

Wash and Prep for Final Inspection:

Upon completion and before the final inspection takes place, the entire apparatus' outside, cab interior, and body interior shall be cleaned and in a "READY FOR INSPECTION STATE".

Pre-Delivery Inspection:

There shall be a **required** pre-delivery, 100% complete, inspection trip to the Custom Truck and Body Works, Inc.'s facility in Woodbury, Ga. This inspection trip shall consist of members from the purchasing department, and members of Custom Truck and Body Works, Inc. who shall inspect the apparatus to ensure compliance to all specifications.

Members in attendance for this meeting shall inspect the fabrication, electrical, paint, audible and visual warning devices, scene lights and pole lights, slide-out trays, adjustable shelves, etc. for compliance to the bid specifications.

Any items found to be not meeting the specifications or signed change orders shall be addressed during the final inspection and prior to delivery and the acceptance of the apparatus.

At this meeting both parties shall go over the specifications line item by line item to ensure that the apparatus has been built to meet or exceed all requirements set forth by the purchasing department's specifications.

Any additional expenses relating to insuring compliance shall be at the expense of Custom Truck and Body Works, Inc. and be at no additional cost to the purchasing department. This includes all lodging and meals while in the Atlanta area for up to three (3) members of the purchasing department.

U.S.A. Manufacturer:

The purchasing department should be concerned for the manufacturing location of their apparatus. The entire apparatus shall be assembled, 100%, within the borders of the Continental United States to insure more readily available parts, without costs and delays to service caused by tariffs and customs.

Cooperative Purchasing:

The manufacturer (Custom Truck and Body Works, Inc.) shall be pleased to allow other public agencies to use the purchase agreement for tag-on apparatus. The condition of such use by other agencies shall be that any such agency must make and pursue contact, purchase order / contract, and all contractual remedies with the successful bidder. Such tag-on apparatus shall be done so that the original purchasing department has no responsibility for performance by either the manufacturer or the agency using the contract.

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