City of Cold Lake

Cold Lake Fire-Rescue

# *Rescue Apparatus Request for Proposal*

# Project # 2025-05-3220

# Table of Contents

# 1 PURPOSE

The City of Cold Lake (COCL) is issuing this Request for Proposal (RFP) to invite qualified proponents to submit proposals for the supply of one (1) Rescue Fire Apparatus that meets the minimum specifications outlined in this document.

This RFP is intended to provide proponents with the necessary information to prepare and submit proposals. Proposals should include detailed comparisons between the specifications requested and those offered by the proponent, serving as the basis for firm pricing.

The capability of the apparatus will be a key factor in the evaluation. Proponents are encouraged to propose cost-saving measures, design enhancements, or alternative options that may lower costs or improve performance. Additionally, “in stock” or “demonstration” models may be considered if they meet the basic requirements and most of the specifications while offering significant cost savings or increased capability.

Completed proposals must be received no later than **Wednesday April 16th, 2025, at 3:00 PM MST**. Late proposals will not be accepted.

## *1.1 Overall Project Concept*

This RFP is for one (1) Rescue Apparatus designed for heavy-duty emergency service use. The apparatus will feature a commercial chassis with a single rear axle and must comply with the current versions of applicable standards.

The Rescue Apparatus must be a versatile and functional vehicle capable of responding to a variety of emergency situations, including firefighting, vehicle extrications, technical rescues, and natural disasters. Its primary function is to deliver advanced rescue capabilities, transport essential equipment and personnel, and support the safety and efficiency of rescue operations. Its secondary functions will include firefighter rehabilitation, serving as a temporary shelter, and functioning as a basic command post.

The apparatus will primarily respond on provincial highways, municipal roads, rural gravel roads. It will be used in light commercial and suburban residential areas for technical rescue and firefighting support operations.

The Rescue Fire Apparatus must comply with the most current version of the following standards and regulations:

- CAN/ULC S515
- NFPA 1901
- Canadian Motor Vehicle Safety Standards (CMVSS)
- Alberta Traffic Safety Act, including all applicable requirements related to commercial vehicles and emergency/firefighting vehicles.

The purpose of this RFP is to allow proponents the greatest opportunity to submit their best proposals, including innovative design concepts and creative solutions, while still meeting the essential specifications and requirements. Only a minimal number of "No Exception" specifications will be required.

## *1.2 Freedom of Information Legislation:*

Proponents should be aware that all submissions are subject to Alberta's Freedom of Information and Protection of Privacy Act (FOIP Act).

# 2 REQUEST FOR INFORMATION

Proponents are responsible for obtaining all necessary information to prepare their RFP and for independently verifying and understanding all requirements, terms, and conditions prior to the submission deadline.

If a Proponent discovers any inconsistencies, errors, or omissions in the RFP documents or requires clarification on any provisions, they may submit their inquiry via email to one of the contacts listed below.

Any changes, interpretations, additions, deletions, or corrections to the RFP will be issued as official addenda by the COCL and provided to all parties registered with the COCL as having received a copy of the proposal documents.

The COCL will not be held responsible for any instructions or information given to Proponents through oral communication.

Any inquiries related to the RFP may be directed to:

| **Technical** | **Contractual** |
|---|---|
| Hugh McKay | Jeff Fallow |
| Deputy Fire Chief | Manager of Protective Services / Fire Chief |
| (780) 826 8430 | (780) 826 0233 |
| hmckay@coldlake.com | jfallow@coldlake.com |

## *2.1 Complete Proposals*

This document outlines the requirements that each Proponent must follow and include in their proposal. The COCL reserves the right, at its sole discretion, to determine if a submitted proposal satisfies these requirements.

# 3 RFP Process

The goal of this RFP is to select a Proponent interested in supplying and delivering one (1) Rescue Fire Apparatus.

## *3.1 Selection Process*

The selection process outlined in this RFP is not a tendering process. Notwithstanding any other information in this RFP or its attachments:

- This RFP is, and shall always be, considered an “invitation to treat.”
- Submission of a proposal to the COCL or its agent does not create any legal obligation, duty, or commitment on the part of the COCL.
- The COCL reserves the right to request clarification from any Proponent at any stage of the evaluation process.
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## 3.2 Proposal Evaluation

All proposals will be evaluated based on the overall value they bring to the COCL.

The evaluation will consider a combination of factors, including operational capability, ergonomics, safety, price, Proponent experience, the ability to meet project objectives and deadlines, and other criteria determined by the COCL at its sole discretion to ensure the best value. The general evaluation criteria will include, but are not limited to, the following:

- Completeness of the proposal package: The extent to which the proposal addresses all specifications, requirements, and options outlined in the RFP.
- Compliance with RFP specifications: The Proponent's detailed written specifications and adherence to the RFP's requirements.
- Design and engineering of major structural components: Including the ease of maintenance of these components.
- Completeness of documentation: Full engineering drawings, performance charts, and related scans.
- Service and warranty information: Data related to service agreements and warranties.
- Delivery timeline: The proposed time for delivery.
- Cost: The overall financial proposal submitted by the Proponent.

## 3.3 Proposal Submission and Opening

Proposals labeled "CLFR Rescue Fire Apparatus" may be submitted electronically in PDF format to Fire Chief Jeff Fallow at jfallow@coldlake.com. Please ensure the email includes both a delivery receipt and a read receipt.

In addition to the electronic submission (as noted above), paper copies of proposals labeled "CLFR Rescue Fire Apparatus" and clearly identifying the Proponent's name will also be accepted at the following address:

CLFR Rescue Fire Apparatus
City of Cold Lake
5513 – 48th Avenue
Cold Lake AB T9M 1A1

Submissions received prior to the proposal deadline **Wednesday April 16th, 2025, at 3:00 PM MST** shall be considered.

## 3.4 Acceptance or Rejection of Proposals

The COCL reserves the sole and absolute right to reject any or all proposals, cancel or withdraw this RFP at any time and for any reason, and to waive any non-conformance or non-compliance with the requirements set forth in this RFP or its associated process.

By submitting a Proposal, the Proponent agrees to waive any right to challenge, through legal action or otherwise, the COCL's right to negotiate with any Proponent and to award the contract to the Proponent the COCL determines, at its sole discretion, has submitted the most advantageous proposal.

## 3.5 RFP Award

The COCL will strive to evaluate the submitted RFPs within 14 days of the closing date and will notify the selected Proponent to begin contract award negotiations.

# 4 GENERAL SPECIFICATIONS

## *4.1 Regulations*

These specifications outline the minimum requirements for the construction and performance of the apparatus and associated equipment.

To ensure a complete and efficient fire apparatus, all necessary components—whether explicitly mentioned or not—must be provided. All parts must adhere to the best engineering practices in design, structure, material quality, and workmanship. Construction and performance must comply with current versions of CAN/ULC S515, NFPA 1901, and industry best practices. In case of any conflict, the more stringent requirements will apply.

Proponents are solely responsible for the design, construction, and performance of the apparatus and equipment.

**COMPLIANCE REQUIREMENTS**

The apparatus must also adhere to:

- Canadian Motor Vehicle Safety Standards (CMVSS)
- Alberta Traffic Safety Act regulations applicable to commercial, firefighting, and emergency vehicles at the time of contract signing.
- Alberta Workers' Compensation Board (WCB) requirements

The delivered apparatus must include a certified Province of Alberta Gross Vehicle Weight Rating (GVWR) sticker to ensure compliance with weight-carrying capacity regulations.

OPTIONAL vs. Mandatory Items

- All items listed in the specifications are mandatory unless identified as OPTIONAL.
- The COCL may choose or eliminate optional items during negotiations.

### 4.1.1 Drawings

The successful proponent must submit detailed drawings for the COCL's approval prior to commencing fabrication of the apparatus. These drawings must accurately designate all component parts and equipment as described and illustrated.

To ensure precision and consistency, the drawings must:

- Be prepared on "D" size paper (36" x 24").
- Use a scale of ½" = 1'-0" for all views.
- Be produced to critical tolerances and detailed specifications.

This standardized format will allow the COCL to compare drawings from all manufacturers on an equal basis. Drawings must be completed by the Manufacturer and conform exactly to the specifications. "Similar to" blueprints or statements indicating later submission of blueprints after contract award will not be considered.

The required views are:

- Driver's side view
- Passenger side view
- Top view (entire apparatus)
- Rear view
- Front of cab view
- Proposed equipment layout for each compartment

### 4.1.2 Compliance

All proponents must complete the General Specification Compliance Table (Annex A), indicating either compliance or non-compliance with each section of the specifications in the designated area.

The intent is to maximize opportunities for manufacturers to propose innovative and novel design concepts while adhering to the basic specifications and performance criteria. Limited "No Exception" specifications are included to ensure essential requirements are met.

### 4.1.3 Exceptions, Variations or Clarifications

These specifications outline the required basic type of fire apparatus. Major exceptions to the specifications will not be accepted. Minor exceptions may be considered at the COCL's discretion, provided they are equal to or superior to the specified requirements.

All exceptions or variations to these specifications must be:

- Noted in the General Specification Compliance Table (Annex A).
- Documented on a separate sheet, referencing the specific section/ID number, and including a clear and detailed explanation of the proposed alternative.

General exceptions will not be accepted for any paragraph. Each exception or variation will be evaluated based on its impact and overall effect on the proposal. Proposals taking total exception to the specifications will not be considered by the COCL.

The COCL reserves the right to determine the acceptability of any exception or variation.

### 4.1.4 Equivalents

When a specific brand, material, device, or equipment is mentioned in these specifications, the COCL may accept an equivalent that, in its opinion, is a recognized equal in terms of quality, workmanship, and operational efficiency, and is suitable for the intended purpose.

However, any proposed equivalent must be clearly defined in the General Specification Compliance Table.

## *4.2 General Construction and Design*

All work shall be executed in a professional, skillful manner. The apparatus and all major components must be manufactured in North America.

### MANUFACTURING STANDARDS

The manufacturing process, including quality control, must adhere to current industry standards. All equipment, materials, and articles used must be new or fabricated from new materials. The term “Heavy Duty” refers to components or systems that exceed standard specifications in terms of durability, strength, and quality, representing the best available option.

### CONSTRUCTION AND WORKMANSHIP

- Welded, bolted, and riveted construction must meet the highest industry standards. All welding must be performed by certified welders.
- Components and units must conform to standard dimensions, ensuring proper fits, clearances, and uniformity.
- The general appearance of the vehicle must reflect high-quality workmanship, free from visible defects.

### MATERIALS

- Materials must conform to the specifications outlined. Where not specifically listed, materials must be of the highest commercial quality, free of defects or imperfections that could affect performance.
- Manufacturers must comply with all basic design requirements, as raw materials and fabrication capabilities are widely available in the industry.

### COMPONENT ACCESSIBILITY AND MAINTENANCE

- Parts and components must be positioned to allow for easy inspection and identification of wear or potential failure.
- Components requiring frequent maintenance must be located for optimal accessibility.
- Cover plates should feature quick-disconnect fastenings or hinged panels for adjustments or removal.
- Drains, filler plugs, grease fittings, hydraulic lines, bleeders, and checkpoints should be easily accessible and serviceable without special tools.

### PROTECTION AND LABELING

- Oil, hydraulic, and air tubing lines, as well as electrical wiring, must be positioned and secured to the frame or body structure with protective looms or grommets where they pass through structural members, except where a through-frame connector is required.
- All nameplates and instruction plates must be engraved, stamped, or etched with necessary data, including make, model, serial numbers, and fluid types/levels. Plates must be mounted in conspicuous locations using appropriate fasteners.

### QUALITY ASSURANCE

- Defective components will not be accepted. Parts, equipment, or assemblies that have been repaired or modified to address deficiencies will not be used without prior COCL approval.
- The COCL or its designate will be the sole judge of the quality, construction, and stability of the apparatus and equipment provided.

### 4.2.1 Construction Schedule

The proposal must include a planned work schedule presented in a Bar Chart/Gantt format, detailing the weeks of construction activity.

While the total delivery period is negotiable, it is preferred that delivery does not exceed a maximum of twenty-four (24) months from the date of contract award.

The Proponent will not be held liable for delivery delays caused by factors beyond their control, including but not limited to delayed shipment of chassis by the chassis manufacturer, accidents, strikes, floods, or other events.

### 4.2.2 Construction Conferences

After contract acceptance, a representative from the Proponent must meet with the COCL to review and discuss all aspects of the specifications and proposal at a pre-construction conference.

The pre-construction conference will ensure a thorough and mutual understanding of the requirements. Ongoing discussions and clarifications over emergent issues are expected.

The COCL will conduct both a mid-build inspection and a pre-delivery inspection at the proponent's manufacturing facility.

For scheduling purposes, the pre-construction conference and inspections should be arranged with a minimum of fourteen (14) days' notice. However, the COCL and proponent may mutually agree to a shorter notice period.

The COCL's inspection team will consist of three (3) personnel, who will conduct both general and technical evaluations of the Rescue Apparatus.

All costs associated with these inspections, including travel, accommodation, and related expenses for the COCL, must be covered by the Proponent and included in the submitted proposal. The COCL may opt to send additional representatives at their own expense.

## *4.3 Acceptance*

Before acceptance of the apparatus and equipment under this RFP, the COCL reserves the right to inspect and evaluate the equipment to ensure full compliance with all specifications and confirm that it is complete, in proper condition, and functioning as required.

The COCL has the right to perform such tests and reserves the ability to conduct additional inspections during the construction period, at the COCL's expense. The COCL will provide the Proponent with a minimum of one (1) week's notice before an inspection. The Proponent must grant the COCL full access to the site and construction facilities, with no additional cost to the COCL.

If any equipment or accessories are found to be non-compliant or are rejected by the COCL, the Proponent must, at their own expense, make necessary repairs or replacements to meet the specifications within thirty (30) days of receiving notice. The COCL's permission to store or keep the equipment in any COCL-owned building during this time does not constitute acceptance of the equipment.

The COCL shall notify the Proponent in writing within seven (7) days after delivery if the vehicle is deemed unacceptable. Such notification will clearly itemize specific deviations in the event of non-acceptance. Non-compliance with the terms and specifications of the contract shall be the sole basis for non-acceptance.

Once the COCL places the apparatus into service, the vehicle shall be considered accepted. After acceptance, the COCL's remedy or recourse against the Manufacturer shall be governed by the warranty terms.

## 4.4 Testing

The manufacturer must be certified to ISO 9001 (No Exceptions). The cost of these tests shall be borne by the Proponent and included in the proposed price.

The completed vehicle shall be tested and labelled in accordance with CAN/ULC S515, NFPA 1901 (current editions), and industry best practices.

The apparatus shall have a full testing period at the factory, meeting all criteria detailed in CAN/ULC S515 and NFPA 1901 (current editions) that are applicable to this apparatus. Results of these tests shall be recorded, signed, and provided to the COCL upon delivery.

If the apparatus fails to meet the requirements of these tests and specifications on first trials, second trials may be performed at option of the Proponent within thirty (30) days of the date of first trials. Such trials are to be witnessed by the COCL and completed at the expense of the Proponent.

Failure to comply with any required adjustments or modifications, as determined by the COCL, and failure to conform to any clause of these specifications within thirty (30) days of written notice of such changes, will result in the rejection of the vehicle.

Prior to delivery, the completed vehicle shall undergo a two (2) hour road test with all applicable emergency equipment activated. A certification outlining the results of this road test shall be provided to the purchaser.

The wiring and permanently connected devices and equipment shall undergo a dielectric voltage withstand test of 900 volts for one minute. This testing shall be conducted after all body work is completed. Additionally, the electric polarity of all permanently wired equipment, cord reels, and receptacles shall be tested to ensure that all wiring connections have been properly made.

## 4.5 Vehicle Performance

The apparatus, when fully equipped and loaded, must achieve the following performance on dry, level, paved roads in good condition:

- The apparatus must be designed and configured (at its estimated in-service weight) to attain a top speed of 120 kph (75 mph).
- The apparatus must be designed and configured (at its estimated in-service weight) to accelerate from 0 to 55 kph (35 mph) within 25 seconds.
- The air service brakes must be capable of bringing the apparatus (at its estimated in-service weight) to a full stop from a speed of 32 kph (20 mph) within 11m (35 feet).

## 4.6 Warranty Information

The entire apparatus and equipment shall be warranted, including parts and labor, for a minimum of one (1) year from the date the COCL places the unit in service. Proponents should also provide details on extended warranties for major components such as the engine, transmission, and other critical parts. Warranties for tires, tubes, batteries, electrical lamps, and other components subject to deterioration are limited to the manufacturer's warranty, with adjustments to be made directly with the manufacturer.

The manufacturer shall warrant to the COCL that this apparatus body (exclusive of paint, finish, hardware, mouldings, windows, and other accoutrements and accessories) is structurally sound and free of all structural defects of both material and workmanship and further warrant that it will maintain such structural integrity for a period of fifteen (15) years from date of manufacture, as designated on the manufacturer's certification plate attached thereto. This warranty terminates upon transfer of possession or ownership from the COCL.

The Proponent shall warrant all materials and accessories used in the vehicle, whether manufactured by the contractor or purchased from an outside source. The Proponent must serve as the "single source" coordinator for all warranties on the vehicle and will manage all warranty work directly with the COCL.

The Proponent shall provide a comprehensive statement of the warranty for the apparatus, assemblies, sub-assemblies, and equipment. This warranty should clearly outline the terms under which the apparatus manufacturer or subcontractors of the manufacturer will assume responsibility for the cost of repairing defects resulting from faulty design, workmanship, or materials. The warranty must cover all associated expenses, including labor and materials.

The warranty will be for a minimum of the following periods:

- Chassis Warranty – Standard Warranty
- Frame Warranty – Lifetime
- Structural Warranty – 15 years
- Sub-frame Warranty – 10 years
- Body Warranty (Corrosion Perforation) – 10 years
- Paint Warranty – 5 years
- Accessories Warranty – 1 year
- Parts and Labour Warranty – 1 year

This warranty shall not apply to items typically considered normal maintenance and repair, including but not limited to routine lubrication or proper adjustment of main functional operating components. All manufacturers' warranties (labor, apparatus, equipment, and materials) shall be provided and specified in the manufacturer's bid. Any standard warranties, including but not limited to engine, transmission, tires, and axles, furnished by the original equipment manufacturer (OEM) or the prime contractor, will be transferred to the COCL. The proponent shall also include any available extended warranties that begin after the initial warranty period.

The proponent must submit their own printed manufacturer warranty forms in compliance with the above minimum standards, without exceptions. All warranties must be submitted and certified by the various manufacturers (warranties provided by sales representatives, manufacturer's representatives, or other agencies will not be accepted).

The proponent shall have the right to make design changes or improvements in its product in the future, without imposing any obligation upon itself, to change or improve the apparatus delivered under these specifications.

## *4.7 Service Requirements*

To ensure the COCL has a reliable source of service and parts throughout the anticipated life of the apparatus, the Proponent shall demonstrate their permanency in the industry. The proposal must include a description of the full-time service center's capabilities and facilities.

The Proponent shall provide a "24-hour", "7-day per week" emergency parts and service toll-free telephone number. This phone number must be listed on a separate statement included in the proposal, along with the contact's name, business name, address, and phone number of the local service agency that will provide service after the vehicle is placed into service.

The service agency must be capable of performing all required service work and should also be able to arrange for any necessary subcontracting work, such as engine or transmission repairs, on behalf of the apparatus manufacturer.

## *4.8 Required Engine, Weight, and Electrical Data*

Engine performance computer scans shall be submitted with the proposal.

GVAW, GVWR, front, rear, and total weight computer analysis, including proposed fire department equipment mounted in noted locations and personnel, shall be submitted with the proposal.

A computer electrical analysis for both "response" and stationery "on-scene" modes of electrical operations and equipment shall be submitted with the proposal.

## *4.9 Manuals*

Two (2) electronic manuals on the operation and maintenance of the complete apparatus shall be provided. These manuals must include a troubleshooting guide and recommended daily, weekly, and annual maintenance procedures.

The manufacturer shall supply a complete wiring diagram for the labeled or color-coded wiring harness.

The manufacturer shall provide one (1) operations and maintenance manual with delivery. The engine and transmission manuals may be excluded from this paper product as they are commonly available online. This manual shall be in three-ring notebook type binders, with reference tabs for each section of the vehicle.

Reference sections shall be:

- Individual component manufacturer instruction and parts manuals.
- Warranty forms for body.
- Warranty forms for all major components.
- Warranty instructions and format to be used in compliance to warranty obligations.
- Electrical wiring diagrams of each body circuit. These drawings must be “as-built,” generic or similar-to drawings will not be accepted. All fuse, strobe power supplies, and circuit locations shall be identified.
- Necessary normal routine service forms, publications, component of body portion of apparatus.
- Technical publications on training and instructions for major body components.
- Warning notices and safety related section for personnel protection.
- Chassis parts, service and maintenance manuals shall be provided.
- “As Built” air brake diagrams.
- Complete recommended maintenance procedures for all components supplied by the manufacturer to meet the requirements of this specification.

## *4.10 Labels and Warning Plates*

### 4.10.1 Driver Warning Labels

A warning label shall be placed in the cab within the driver's line of sight, stating the seating capacity of the cab/crew cab.

A warning label shall be placed in the cab within the driver's line of sight, indicating that all occupants must be seated and belted.

Additionally, a plate visible to the driver shall display the height, length, and Gross Vehicle Weight Rating (GVWR) of the completed vehicle.

### 4.10.2 Lubricant Labels

The Proponent shall provide specifications and a list of approved North American-manufactured products for fuel and all lubricant requirements. A label detailing all lubricant types and fluid quantities shall be installed on the driver's door of the vehicle, in accordance with NFPA 1901 (current edition). The label shall include the following fluid types and amounts:

- Engine Oil
- Engine Coolant
- Chassis Transmission Fluid
- Drive Axle Fluid
- Pump Gear Case Fluid
- Primer Lubricant (if applicable)

## *4.11 Delivery Engineer*

The completed apparatus shall be delivered to the COCL with full instructions provided to COCL personnel on the operation, care, and maintenance of the apparatus at a COCL fire station.

A factory-trained Proponent's representative shall perform delivery. Delivery by drive-away is not acceptable. The Proponent's representative engineer shall remain on-site for a minimum of one (1) day after receipt of the apparatus to train COCL personnel and make any necessary adjustments.

Delivery shall include, but is not limited to:

- Transportation of the fire apparatus
- Conducting day, evening, or weekend classes to instruct COCL personnel on operations, maintenance, and repair

The delivery engineer shall coordinate the delivery and training schedule with the Fire Chief or designate. At least seven (7) days' advance notice shall be provided to the COCL, indicating when the new apparatus will arrive. Time spent enroute to the COCL's facilities shall not be considered part of the training period.

The apparatus shall be cleaned and detailed prior to delivery, with all associated costs borne by the Proponent. Smoking in the apparatus is prohibited.

## *4.12 Regulations*

Manufacturing Standards and Certifications

- ULC CAN-S515 Standard for Automotive Fire Apparatus (current edition)
- National Fire Protection Association 1901, Standard for Automotive Fire Apparatus (current edition)
- Canadian Motor Vehicle Safety Standards (CMVSS),
- Alberta Traffic Safety Act: relating to commercial vehicles as well as to vehicles used for firefighting and emergency vehicles.
- Alberta Workers' Compensation Board (WCB).

# 5 General Rescue Apparatus Specifications

## *5.1 General Specifications*

The proponent shall supply one Rescue Fire Apparatus in accordance with the minimum specifications listed in this RFP. The proponent shall clearly indicate compliance, noncompliance, or a proposed alternative design for each listed specification. Proponents are encouraged to cost requested options and propose alternate solutions that provide better value where reasonable, with respect to the specifications.

The specifications, references, and product names listed in this document are not intended to favour or exclude any proponent. Where necessary, the proponent may propose alternative solutions that meet or exceed the performance and operational intent.

If an alternative is proposed, the proponent must clearly indicate this variation in their comments.

The final configuration and location of some items is negotiable based on sound design considerations, operational requirements, available space, ergonomics, economics, safety, and convenience at the pre-build conference.

The Rescue Apparatus shall be a versatile and functional vehicle capable of responding to a wide range of emergency scenarios, including firefighting, vehicle extrications, technical rescues, and natural disasters. Its primary purpose is to provide advanced rescue capabilities, transport essential equipment and personnel, and ensure the safety and efficiency of rescue operations. Its secondary purpose will be for firefighter rehab and shelter, as well as a simple command post.

A “combination” rescue configuration is desired, which includes a walk-in portion of the body and full-size height and depth compartments.

See Section 8 Exemplars.

# 6 RESCUE FIRE APPARATUS – Chassis Technical Specifications

| ***6.1 Overall Apparatus*** | **Compliance** | |
|---|---|---|
| The cab and chassis shall be manufactured specifically for heavy-duty use in the fire service, incorporating design considerations for emergency vehicle applications. These considerations must include ergonomics, maneuverability, reliability, safety, and maintainability to ensure optimal performance in demanding environments. | Yes | No |
| The cab and chassis shall comply with the current versions of CAN/ULC-S515 and NFPA 1901. In the event of any discrepancies between the two references, the more restrictive language shall apply. | Yes | No |
| The vehicle shall meet the Commercial Vehicle Dimension and Weight Regulation as outlined in the Alberta Traffic Safety Act (Current Version). | Yes | No |
| *Comments:* | | |

| ***6.2 Overall Apparatus Dimensions*** | **Compliance** | |
|---|---|---|
| There are no apparatus dimension limitations. | | |
| Overall, length: No Restrictions | Yes | No |
| Overall, Width: No Restrictions | Yes | No |
| Overall, Height: No Restrictions | Yes | No |
| Minimum angle of approach: 10 degrees | Yes | No |
| Minimum angle of departure: 10 degrees | Yes | No |
| *Comments:* | | |

| | | |
|---|---|---|
| ***6.3 Paint Colour and Decaling*** | | |
| **6.3.1 Paint Colour** | **Compliance** | |
| The chassis and body colour will be (White) PPG# FDG -2185, PPG Delfleet polyurethane enamel paint (or equivalent). | Yes | No |
| *Comments:* | | |
| **6.3.2 Paint Colour – Chassis** | **Compliance** | |
| The chassis shall be painted a single colour by the chassis manufacturer. This shall be the final paint colour and finish for the completed vehicle.<br>**Painted white in colour.** | Yes | No |
| *Comments:* | | |
| **6.3.3 Paint Colour – Body** | **Compliance** | |
| The apparatus body shall be painted a single colour to match the chassis paint finish as provided by the chassis manufacturer.<br>**Painted white in colour.** | Yes | No |
| *Comments:* | | |
| **6.3.4 Apparatus Custom Decaling and Marking (See Exemplars)** | **Compliance** | |
| A custom decaling package shall be designed prior to delivery. The difference between this custom design and the required NFPA striping package shall be negotiated with the choice of outsourcing. | Yes | No |
| *Comments:* | | |

| | | |
|---|---|---|
| ***6.4 Basic Chassis*** | | |
| **6.4.1 Model Year** | **Compliance** | |
| The chassis shall have a vehicle identification number that reflects a 2025 or newer model year. | Yes | No |
| *Comments:* | | |
| **6.4.2 Chassis Type** | **Compliance** | |
| The chassis shall be a commercial Freightliner M2 Business Class model with a raised roof over the crew area.<br>Other Commercial or Custom equivalent proposals may be acceptable. | Yes | No |
| The cab shall be designed for heavy-duty fire service, incorporating superior strength and capacity to ensure the protection of the occupants of the vehicle. | Yes | No |
| *Comments:* | | |
| **6.4.3 Axle Configuration** | **Compliance** | |
| The chassis shall feature a 4 X 2 axle configuration consisting of a single rear drive axle with a single front steer axle. | Yes | No |
| *Comments:* | | |
| **6.4.4 Gross Axle Weight Ratings Axle Configuration** | **Compliance** | |
| The chassis gross axle weight rating (GAWR) shall be sufficient to support a fully laden apparatus, including all equipment and personnel, one hundred (100) percent of the time. | Yes | No |
| The front axle shall have a minimum rating of 6622 kg (14600 lbs) | Yes | No |
| The rear axle shall have a minimum rating of 12247 kg (27000 lbs) | Yes | No |

| | | |
|---|---|---|
| Tire and suspension components shall be employed to match the required speed range, axle weights, and the gross axle weight rating (GAWR) of the apparatus. | Yes | No |
| *Comments:* | | |
| **6.4.5 Engine** | **Compliance** | |
| The chassis engine shall offer a minimum rating of 400 horsepower and meet the vehicle operating parameters. The maximum speed will be governed at 2200 RPM. | Yes | No |
| *Comments:* | | |
| **6.4.6 Brakes** | **Compliance** | |
| The chassis shall come equipped with air disk brakes on the front axle, air drum brakes on the rear axle, and be equipped with an Anti-Lock Braking system. | Yes | No |
| The air service brakes shall be capable of bringing the apparatus (at its estimated in-service weight) to a full stop from a speed of 32 kph (20 mph) within 11m (35 feet). | Yes | No |
| The Parking Brake control will be mounted on the dash or console area. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **6.4.7 Auxiliary Engine Brake** | **Compliance** | |
| An Auxiliary Engine Brake and control device shall be included. The electronic control device will watch various operational conditions and will activate the engine brake only when those conditions require. | Yes | No |
| *Comments:* | | |

| 6.4.8 Alternator | Compliance | |
|---|---|---|
| A minimum heavy duty 270-amp alternator shall be installed. | Yes | No |
| *Comments:* | | |
| **6.4.9 Engine Block Heater** | **Compliance** | |
| A 120-volt engine coolant heater with an automatic thermostat shall be installed. The block heater shall be connected to the shoreline power. | Yes | No |
| *Comments:* | | |
| **6.4.10 Transmission** | **Compliance** | |
| The drive train shall include an Allison EVSP automatic transmission which shall include electronic controls. The transmission, upon start-up, will automatically select a six (6) speed operation. | Yes | No |
| The transmission gear ratios shall be selected for general urban municipal response and highway operations with excellent acceleration and meet the vehicle operating requirements/limits. | Yes | No |
| The apparatus shall be designed and configured, based on its estimated in-service weight, to reach a top speed of 120 km/h (75 mph). | Yes | No |
| The apparatus shall be designed and configured, based on its estimated in-service weight, to accelerate from 0 to 55 km/h (35 mph) within 25 seconds. | Yes | No |
| *Comments:* | | |
| **6.4.11 Exhaust System** | **Compliance** | |
| The exhaust system shall discharge to the passenger side of the apparatus, forward of the rear wheels, and be directed away from the apparatus, the tires, and the ground. | Yes | No |
| *Comments:* | | |

| 6.4.12 Fuel Tank | Compliance | |
|---|---|---|
| The fuel tank shall have a minimum capacity of 189 L (50 US Gal) and shall be filled from the driver's side. | Yes | No |
| *Comments:* | | |
| **6.4.13 Winter Front** | **Compliance** | |
| A custom winter front shall be provided. It shall match the decal package for colour and striping. | Yes | No |
| *Comments:* | | |
| **6.4.14 Front Bumper** | | |
| **6.4.14.1 Siren and Speakers** | **Compliance** | |
| Two (2) Federal model BP200-EF, 200-watt electronic siren speakers (or equivalent), working with one (1) Federal e-Q2B control (or equivalent). The speakers shall be recess mounted within the bumper fascia, outboard of the frame rails and outboard of the air horns (if air horns are bumper installed) on the on the driver and passenger side. | Yes | No |
| *Comments:* | | |
| **6.4.14.2 Low Frequency Intersection Clearing** | **Compliance** | |
| Two (2) Federal “Rumbler” (or equivalent) low-frequency intersection clearing device shall be recess mounted within the bumper fascia, outboard of the frame rails and outboard of the air horn on the driver and passenger side. The device will provide effective low-frequency sound for intersection clearing. | Yes | No |
| *Comments:* | | |
| **6.4.14.3 Air Horns** | **Compliance** | |
| The Air Horns control/activation shall be via the driver’s steering wheel and the Officer’s side push button. | Yes | No |
| *Comments:* | | |

| **6.4.14.4 Air Horns (IF NOT MOUNTED ON CHASSIS HOOD)** | **Compliance** | |
|---|---|---|
| Two (2) air horns mounted in the front bumper face, one (1) on the passenger side of the bumper in the outboard position relative to the right-hand frame rail and one (1) on the driver's side of the bumper in the outboard position relative to the left-hand frame rail. | Yes | No |
| *Comments:* | | |
| **6.4.14.5 Front Bumper Tow Hooks** | **Compliance** | |
| Two (2) heavy-duty tow hooks shall be installed in a rearward position, outside of the approach angle area. They shall be bolted directly to the side of the chassis frame for secure and reliable towing capability. | Yes | No |
| *Comments:* | | |
| **6.4.14.6 Front Bumper Receiver** | **Compliance** | |
| The front bumper shall include a receiver, a cover, and a power connection for a receiver mounted winch. | Yes | No |
| *Comments:* | | |
| **6.4.14.7 Extended Front Bumper - OPTIONAL** (see Exemplar) | **Compliance** | |
| A short extended front bumper is requested. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| 6.4.15 Rear Bumper/Step/Tailboard | | |
|---|---|---|
| **6.4.15.1 Tailboard** | **Compliance** | |
| There shall be tailboard extending the full width of the apparatus. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **6.4.15.2 Two Rear Tow Eyes** | **Compliance** | |
| Two (2) tow eyes will be installed at the rear of the apparatus, positioned above the rear step area. These tow eyes will be bolted to a heavy-duty assembly and welded securely to the frame for added strength and durability. The tow eyes will feature a 65 mm (2-1/2") interior diameter hole and, if visible, will be chrome-plated for enhanced appearance and corrosion resistance. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **6.4.15.3 Rear Receiver** | **Compliance** | |
| The rear tailboard shall include a receiver, a cover, and a power connection for a receiver mounted winch | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| 6.4.16 Chassis Wheels and Tires | | |
|---|---|---|
| **6.4.16.1 Chassis Wheels** | **Compliance** | |
| The chassis wheels shall be supplied with an aluminum polished finish by the chassis manufacturer. | Yes | No |
| *Comments:* | | |
| **6.4.16.2 Chrome Hub and Lug Nut Covers** | **Compliance** | |
| The front wheels shall be equipped with chrome baby moon-type hub covers, while the rear wheels shall feature chromed "Top Hat" type hub covers. Additionally, all front and rear wheel lug nuts will be covered with chrome lug nut covers. Loose nut indicators will also be provided. | Yes | No |
| *Comments:* | | |
| **6.4.16.3 Tires - Front** | **Compliance** | |
| The front tires shall be Michelin XZY 3's (or equivalent), rated for the requested top speed and GAWR of the apparatus. | Yes | No |
| *Comments:* | | |
| **6.4.16.4 Tires - Rear** | **Compliance** | |
| The rear tires shall be Michelin XDN 2's (or equivalent), rated for the requested top speed and GAWR of the apparatus. | Yes | No |
| *Comments:* | | |
| **6.4.16.5 Front and Rear Mud Flaps** | **Compliance** | |
| Four (4) heavy-duty rubber mud flaps shall be provided and installed on the apparatus. The mud flaps shall be positioned behind the front and rear wheels. | Yes | No |
| *Comments:* | | |

| 6.4.16.6 Wheel Chocks & Brackets | Compliance | |
|---|---|---|
| Two (2) aluminum wheel chocks shall be provided, complete with mounting brackets. The brackets shall be installed forward of the rear wheels and underneath the main body on the driver's side. The chocks must be capable of holding the apparatus at its maximum weight on a solid surface with a 20% grade, with the transmission in neutral and the parking brake released. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

## *6.5 Chassis Cab - Interior*

| 6.5.1 Chassis Cab - Interior Style | Compliance | |
|---|---|---|
| The cab interior shall be designed to maximize usable space while prioritizing ergonomics, ensuring generous hip and legroom for all seated occupants. | Yes | No |
| The chassis cab interior shall be designed to accommodate two (2) firefighters, including one (1) driver and one (1) officer. | Yes | No |
| The cab interior shall be designed with minimal fabric surfaces, incorporating an increased number of hard surfaces to facilitate cleaning and disinfecting. | Yes | No |
| *Comments:* | | |

| 6.5.2 Chassis Cab - Console | Compliance | |
|---|---|---|
| A solid centre console shall be provided. It shall provide space for a multiplex electrical system display, a mobile radio install, and various other controls. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| 6.5.3 Seats | Compliance | |
|---|---|---|
| The seats shall limit the amount of fabric employed to increase the number of hard surfaces to ease cleaning and disinfecting. | Yes | No |
| *Comments:* | | |
| **6.5.3.1 Seat – Driver's** | **Compliance** | |
| The driver's seat shall be an H.O. Bostrom Firefighter Sierra model seat (or equivalent). The seat shall feature integral air ride suspension to isolate shock. | Yes | No |
| *Comments:* | | |
| **6.5.3.2 Seats – Officer's** | **Compliance** | |
| The officer's seat shall be a H.O. Bostrom Firefighter series (or equivalent). The seat shall feature a tapered and padded seat, and cushion. The seat shall be a non-adjustable type seat. | Yes | No |
| *Comments:* | | |
| **6.5.4 Shore Power – 110, USB, and 12 Volt** | **Compliance** | |
| 110-Volt, USB, and 12 Volt shore power will be provided in the chassis cab at the center console. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, economics, safety, space available, ergonomics, and convenience at the pre-build conference.*<br>*Comments:* | | |

## *6.6 Auxiliary Electrical-Mechanical Systems*

| **6.6.1 Multiplex Display** | **Compliance** | |
|---|---|---|
| A multiplex electrical system shall include one (1) touch screen display. The display shall be located on the center console. The touch screen display shall feature a full colour LCD screen and incorporate operation of the warning devices. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, economics, safety, space available, ergonomics, and convenience at the pre-build conference.*<br>*Comments:* | | |

| **6.6.2 Interior and Exterior Lighting** | **Compliance** | |
|---|---|---|
| Interior and exterior lighting, including cabinet lights, ground lights, headlights, running lights, and scene/flood lights shall be high quality LED. | Yes | No |
| *Comments:* | | |

| **6.6.3 Battery Charger/Conditioner/Compressor - Auto Eject** | **Compliance** | |
|---|---|---|
| A Kussmaul Pump Plus combination battery charger, 12V air compressor, auto eject 20WP 20-amp automatic power line disconnect and remote bar graph indicator shall be provided. (Or Equivalent) | Yes | No |
| A 110-volt Kussmaul Auto-Eject, 3-prong, straight blade receptacle shall be provided at the driver's cab door area (on the canopy). This receptacle shall have a hinged weatherproof cover (yellow in colour). | Yes | No |
| *Comments:* | | |

| 6.6.4 Communication Antenna | Compliance | |
|---|---|---|
| An antenna base shall be provided by the COCL and mounted on the cab roof so not to interfere with light bars or other roof mounted equipment while not compromising the overall height. | Yes | No |
| The antenna base shall include a cable with no connector at the radio end of the cable. | Yes | No |
| The antenna cable shall be routed from the antenna base mounted on the roof to the area inside the center console. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| | | |
|---|---|---|
| **7 RESCUE BODY** | | |
| ***7.1 Rescue Apparatus Body*** | **Compliance** | |
| All components used in the manufacturing process shall be new. The body shall be engineered and designed to ensure a low center of gravity and proper load distribution. The entire body superstructure and subframe shall feature a full-frame body design, providing extreme strength, maximum durability, and superior resistance to buckling and failure. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.1.1 Entry Doors** | **Compliance** | |
| The rescue apparatus body cab shall include one (1) entry door. The door is preferably on the passenger side. | Yes | No |
| *Comments:* | | |
| ***7.2 Midship Crew Compartment*** | **Compliance** | |
| **The Rescue Apparatus body shall be a walk-in type with seating for four (4) firefighters in SCBA-equipped seats.** | | |
| **7.2.1 Climate Control** | **Compliance** | |
| The rescue apparatus body cab shall also include a heater unit (s). | Yes | No |
| *Comments:* | | |
| **7.2.2 Filtration/Decon - OPTIONAL** | **Compliance** | |
| OPTIONAL - The rescue apparatus body cab shall include a high-efficiency particulate (HEPA) filter, which can trap or filter out toxic particles and contaminants that are airborne in the cab. | Yes | No |

| | | |
|---|---|---|
| OPTIONAL - The rescue apparatus body cab shall include a Spartan Active Air Purification system or equivalent. | Yes | No |
| *Comments:* | | |
| **7.2.3 Cold Weather Package** | **Compliance** | |
| The rescue apparatus body cab shall be equipped with a cold weather package including enhanced insulation for the crew compartment area. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.2.4 Seats – Crew** | **Compliance** | |
| The crew seats shall be a H.O. Bostrom Firefighter series (or equivalent). The seat shall feature a tapered and padded seat, and cushion. The seat shall be a flip up non-adjustable type seat. | Yes | No |
| Firefighter seats shall incorporate an SCBA storage and locking system designed to store most U.S. and International SCBA brands and sizes while in transit or for storage within the seat back. H.O. Bostrom Firefighter Sierra model seat (or equivalent). | Yes | No |
| The SCBA storage and locking system will be conjured to store MSA G1 SCBAs with the MSA SP 10915-4500 bottles (the thick 4500s) | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.2.5 Shore Power – 110, USB, and 12 Volt** | **Compliance** | |
| 110 Volt, USB, and 12 Volt shore power will be provided in the walk-in rescue cab for portable radios, rechargeable flashlights, thermal imaging cameras, gas detectors, batteries, and other accessories. | Yes | No |

| | | |
|---|---|---|
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.2.6 Midship Crew Compartment – Storage – EMS (see Exemplar)** | **Compliance** | |
| The rescue apparatus body cab shall include an EMS Storage compartment for an EMS Bag and AED. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.2.7 Midship Crew Compartment – Storage – Miscellaneous** | **Compliance** | |
| The rescue apparatus body cab shall include a miscellaneous storage compartment. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.2.8 Midship Crew Compartment – Command Table (see Exemplar)** | **Compliance** | |
| The rescue apparatus body cab shall include a small Command Table with storage below and a slide out tray. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.2.9 Midship Crew Compartment – Mini Fridge** | **Compliance** | |
| The rescue apparatus body cab shall include a small mini fridge. | Yes | No |

| | | |
|---|---|---|
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| ***7.3 External Apparatus Compartments*** | **Compliance** | |
| Compartments will be designed to utilize all available space efficiently, minimizing wasted areas and ensuring easy access. Major exterior compartments will be equipped with weather-resistant, heavy-duty roll-up doors and will be configured based on operational needs to allow quick access without obstruction. | Yes | No |
| Shelves and trays shall be supplied with plastic floor matting and corner drain holes. | Yes | No |
| Each body compartment will be properly vented in a manner that will reduce the amount of dirt and water that may enter the compartment. Venting will be directly to the atmosphere. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.1 Shelves, Tool Boards, and Tray(s)** | **Compliance** | |
| In general, heavy duty *Slide Master* roll-out trays shall be provided in the bottom of each standard body compartment. The tray will utilize a device to hold the tray in both the opened and closed position. | Yes | No |
| Heavy duty *Slide Master* tip-down trays shall be provided in each standard body compartment. The tray will utilize a device to hold the tray in both the opened and closed position. | Yes | No |
| Heavy duty *Slide Master* pull-outs shall be provided. The pull out will utilize a device to hold the tray in both the opened and closed position. | Yes | No |
| Two (2) Adjustable shelves per cabinet will be provided as well as the ability to add and adjust the shelve heights. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.* | | |

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|---|---|---|
| *Comments:* | | |
| **7.3.2 Roll Up Doors – *AMDOR*** | **Compliance** | |
| There shall be *AMDOR* brand roll up door(s) installed on the apparatus. The back surface of the door will be smooth and flat to eliminate hang-up on compartment contents. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.2.1 Compartment Lighting – AMDOR** | **Compliance** | |
| All body compartments shall have *AMDOR* LumaBar LED lights activated by a push button switch. The LED compartment lights shall be flush mount and provide a consistent 120-degree wide beam pattern. There shall be a minimum of two (2) strip lights installed in each compartment. | Yes | No |
| **7.3.2.2 Lift Bar – AMDOR** | **Compliance** | |
| All roll up doors shall have *AMDOR* full width stainless steel lift bar latching system. | Yes | No |
| **7.3.2.3 Flex - HD Pull Strap – AMDOR** | **Compliance** | |
| All roll up doors shall have AMDOR Flex- - HD Pull straps. | Yes | No |
| **7.3.3 Major Compartments – Driver's Side (forward of rear wheels) – See Exemplars** | **Compliance** | |
| This compartment will be designed to store: Paratech Heavy Struts and related accessories. | Yes | No |
| Struts must be stored vertically on slide out tray(s). | Yes | No |
| Four struts should have baseplates attached. | Yes | No |
| Space for a tool bag(s) with hooks and ratchet straps. | Yes | No |

| | | |
|---|---|---|
| Space for removable bins for chains and hooks. | Yes | No |
| Space for removable Pelican Case for air controller accessories. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.4 Major Compartment – Driver's Side (over rear wheels) – See Exemplars** | **Compliance** | |
| This compartment will be designed to store forcible entry hand tools, heavy rescue equipment and SCBA bottle storage. These will be on heavy duty slide out or tip down trays. | Yes | No |
| One or more heavy duty *Slide Master* tip-down tray are anticipated. | Yes | No |
| One or more heavy duty Slide Master pull-outs tray are anticipated. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.5 Fender Area – Driver's Side** | **Compliance** | |
| Stainless steel (or equivalent) Fenderettes will be installed. | Yes | No |
| There shall be a minimum of two (2) preferably four (4) air bottle storage compartment(s) installed in the rear fenders. The air bottle storage compartment(s) shall be sealed and have a hinged access door with a positive door latch and conform to the design of the apparatus. | Yes | No |
| The Fender area shall include a receiver, a cover, and a power connection for a receiver mounted winch. | Yes | No |
| The fender area and any doors will be the same colour as the apparatus. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.* | | |

| | | |
|---|---|---|
| *Comments:* | | |
| **7.3.6 Major Compartment – Driver's Side (Aft of rear wheels) – See Exemplars** | **Compliance** | |
| This compartment will be designed to store an electric cord reel, extension cords, small portable lighting and a 120 v shoreline receptacle for battery charging. | Yes | No |
| One (1) heavy duty *Slide Master* tip-down tray is anticipated. | Yes | No |
| One (1) heavy duty Slide Master pull-outs tray is anticipated. | Yes | No |
| This compartment will be designed to have one (1) 120-volt shore power outlet to charge battery operated equipment and batteries. | Yes | No |
| OPTIONAL/PREFERRED - The Inverter box will be located here. | Yes | No |
| OPTIONAL/PREFERRED - The breaker box will be located here. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.6.1 Cord Reel - Electric Rewind** | **Compliance** | |
| A Hanney ECR1600 electric rewind cord reel (or equivalent) shall be supplied and installed on the fire apparatus. The cord reel shall be powered by an electric motor and have the capacity to hold 200' of 12/3 wire. | Yes | No |
| 200' of black 12/3 SOOW cabled wire shall be supplied and installed with the cord reel. A straight blade 15-amp female receptacle shall be supplied on the wire. A round cable stop shall be provided on the wire. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| 7.3.7 Major Compartment – Passenger's Side (forward of rear wheels) | Compliance | |
|---|---|---|
| This compartment will be designed to store miscellaneous extrication, machinery rescue, and manual rescue equipment and related accessories. | Yes | No |
| One (1) heavy duty *Slide Master* tip-down tray is anticipated. | Yes | No |
| One (1) heavy duty Slide Master pull-outs tray is anticipated. | Yes | No |
| Two (2) fixed shelves are anticipated. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| 7.3.8 Major Compartment – Passenger's Side (over rear wheels) | Compliance | |
|---|---|---|
| This compartment will be designed to store miscellaneous extrication, pneumatic, and manual rescue equipment and related accessories. | Yes | No |
| One vertical divider is anticipated. | Yes | No |
| Two (2) heavy duty *Slide Master* tip-down tray are anticipated. | Yes | No |
| Two (2) heavy duty Slide Master pull-outs tray are anticipated. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| 7.3.9 Fender Area – Passenger's Side | Compliance | |
|---|---|---|
| Stainless steel (or equivalent) Fenderettes will be installed. | Yes | No |
| There shall be a minimum of two (2) preferably four (4) air bottle storage compartment(s) installed in the rear fenders. The air bottle storage compartment(s) shall be sealed and have a hinged access door with a positive door latch and conform to the design of the apparatus. | Yes | No |
| The Fender area shall include a receiver, a cover, and a power connection for a receiver mounted winch. | Yes | No |
| The fender area and any doors will be the same colour as the apparatus. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.10 Major Compartment – Passenger's Side (Aft of rear wheels)** | **Compliance** | |
| This compartment will be designed to store heavy hydraulic rescue equipment. | Yes | No |
| This compartment will be designed to have a 120-volt shore power to charge battery operated equipment. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.11 Major Compartment – Rear** | **Compliance** | |
| There will be a single compartment at the rear of the apparatus and will be designed to store wooden cribbing. | Yes | No |
| Two (2) heavy duty *Slide Master* tip-down trays are anticipated. | Yes | No |
| One (1) heavy duty Slide Master pull-out tray is anticipated. | Yes | No |

| 7.3.12 Major Compartment – Top Coffin Storage | Compliance | |
|---|---|---|
| There shall be coffin storage boxes on top of the apparatus. Configured in a “U” shape from the command light area. | Yes | No |
| There shall be an ALCO light model ladder installed on the driver’s side rear of the apparatus to access the top storage area. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.3.13 Rescue Body – Miscellaneous** | | |
| **7.3.13.1 Rear – Traffic Control Directional Light** | **Compliance** | |
| One (1) *Federal* model SMLED8 directional light (or equivalent) shall be mounted at the rear of the vehicle as high as possible for best visibility (or equivalent). | Yes | No |
| *Comments:* | | |
| **7.3.13.2 Rear – Back up camera** | **Compliance** | |
| One (1) backup camera integrated with the VMUX shall be mounted at the rear of the vehicle providing best visibility fore backing up. | Yes | No |
| *Comments:* | | |
| **7.3.13.3 Flexible Marker Lights** | **Compliance** | |
| Two (2) flexible marker lights shall be installed on the rear of the apparatus (one each side) | Yes | No |
| *Comments:* | | |

| 7.3.14 Rub Rails | Compliance | |
|---|---|---|
| Rub rails shall extend to the outside edges of the side running boards for protection of the body from impact damage. | Yes | No |
| Rub rails shall have reflective decaling. | Yes | No |
| *Comments:* | | |
| ***7.4 NFPA Lighting Packaging*** | | |
| An emergency vehicle LED lighting package; shall be provided. | **Compliance** | |
| It shall meet CAN/ULC S515 and NFPA 1901 standards (current versions). *Federal Signal* brand is preferred. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| ***7.5 Electrical Outlets and Scene Lighting*** | | |
| **7.5.1 Generator – Hydraulic** | **Compliance** | |
| A hydraulic generator shall be provided on the completed vehicle. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.5.2 Scene and Body Area Lighting** | **Compliance** | |
| Dual purpose or combination flood and beam lights shall be employed. | Yes | No |
| OPTIONAL Two (2) Whelen PCPSM2C flood/scene light(s) or equivalent shall be brow mounted facing forward front cab roof. | Yes | No |

| | | |
|---|---|---|
| Two (2) Whelen PCPSM2C flood/scene light(s) or equivalent shall be installed on the driver's upper side | Yes | No |
| Two (2) Whelen PCPSM2C flood/scene light(s) or equivalent shall be installed on the passenger upper side | Yes | No |
| Two (2) Whelen PCPSM2C flood/scene light(s) or equivalent shall be rear mounted facing aft. | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| **7.5.3 Command Light (See Exemplar)** | **Compliance** | |
| One (1) LED Command Scene Light with the minimum specs as shown in the exemplar (or equivalent) | Yes | No |
| *The final configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |
| ***Miscellaneous Equipment and Mounting*** | | |
| **7.6.1 Equipment Mounting Budget (See detailed list in exemplars)** | **Compliance** | |
| A mounting solution budget shall be included for various struts, hand tools (axes, halligans, and pry bars), jacks, corded Holmatro hydraulic rescue tools, etc. | Yes | No |
| The equipment mounting budget must be developed and priced separately from the apparatus. | Yes | No |
| *The final item list and the configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

| 7.6.2 Loose Equipment | | |
|---|---|---|
| The following loose equipment will be priced separately from the apparatus. All loose equipment will be installed on the apparatus before placed in emergency service. | **Compliance** | |
| One (1) handheld 12000-pound winch receiver mounted.<br>Pickets (16) | Yes | No |
| *The final item list and the configuration/location shall be negotiable based on sound design considerations, operational requirements, space available, ergonomics, economics, safety, and convenience, at the pre-build conference.*<br>*Comments:* | | |

# 8 Exemplars

The following exemplars, references and product names are not intended to favour or exclude any proponent. The intent is to provide exemplar guidance to the proposed forms and functions of the rescue Apparatus. Where necessary, the proponent may propose alternative solutions that meets or exceeds the performance and operational intent.

*The final configuration/location shall be negotiable based on sound design considerations, operational requirements, economics, space available, ergonomics, safety, and convenience at the pre-build conference.*

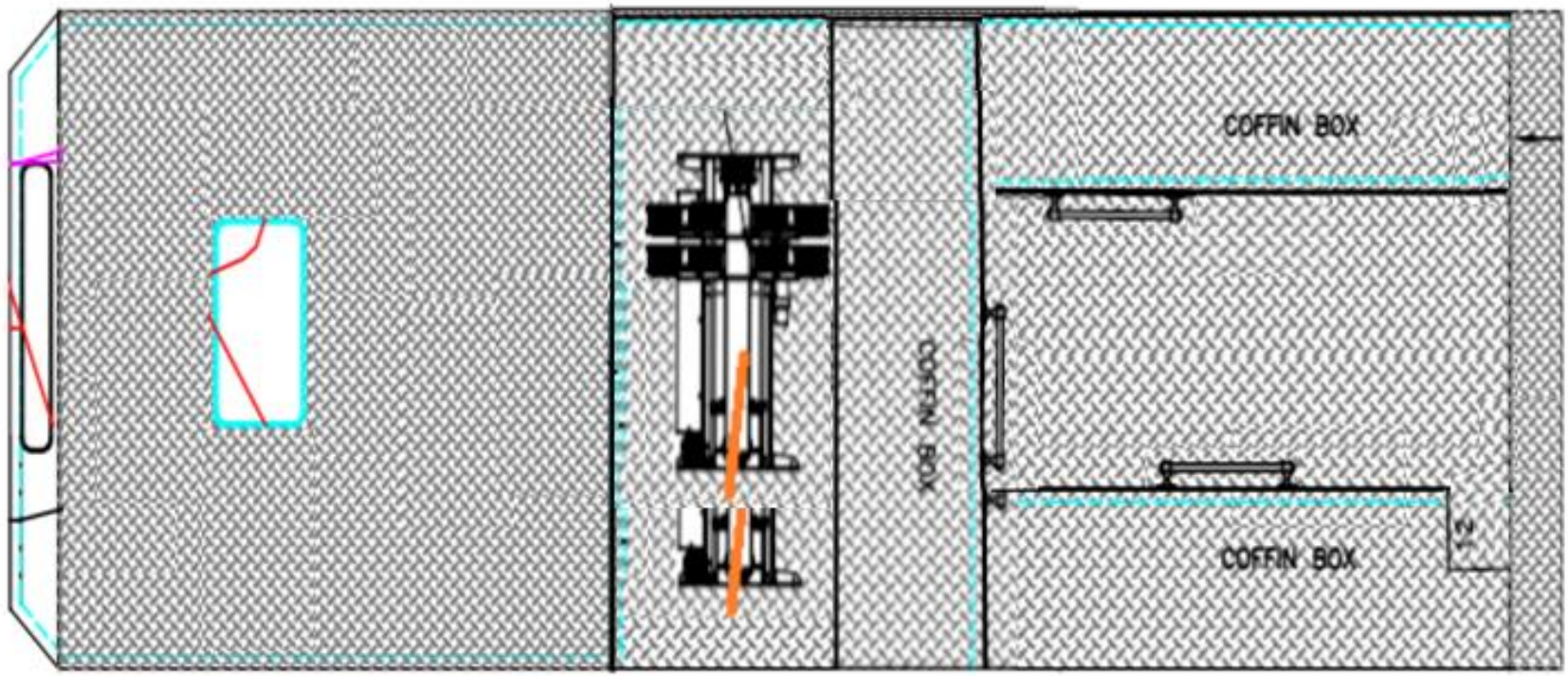
## *8.1 Overall Concept*

### 8.1.1 General Driver's Side

### 8.1.2 General Passenger Side

### 8.1.3 Rear

### 8.1.4 Top Storage



## *8.2 Decal Package*

### 8.2.1 General Decaling - Exemplars

## *8.3 Other Exemplars*

### 8.3.1 Front Bumper - Exemplars

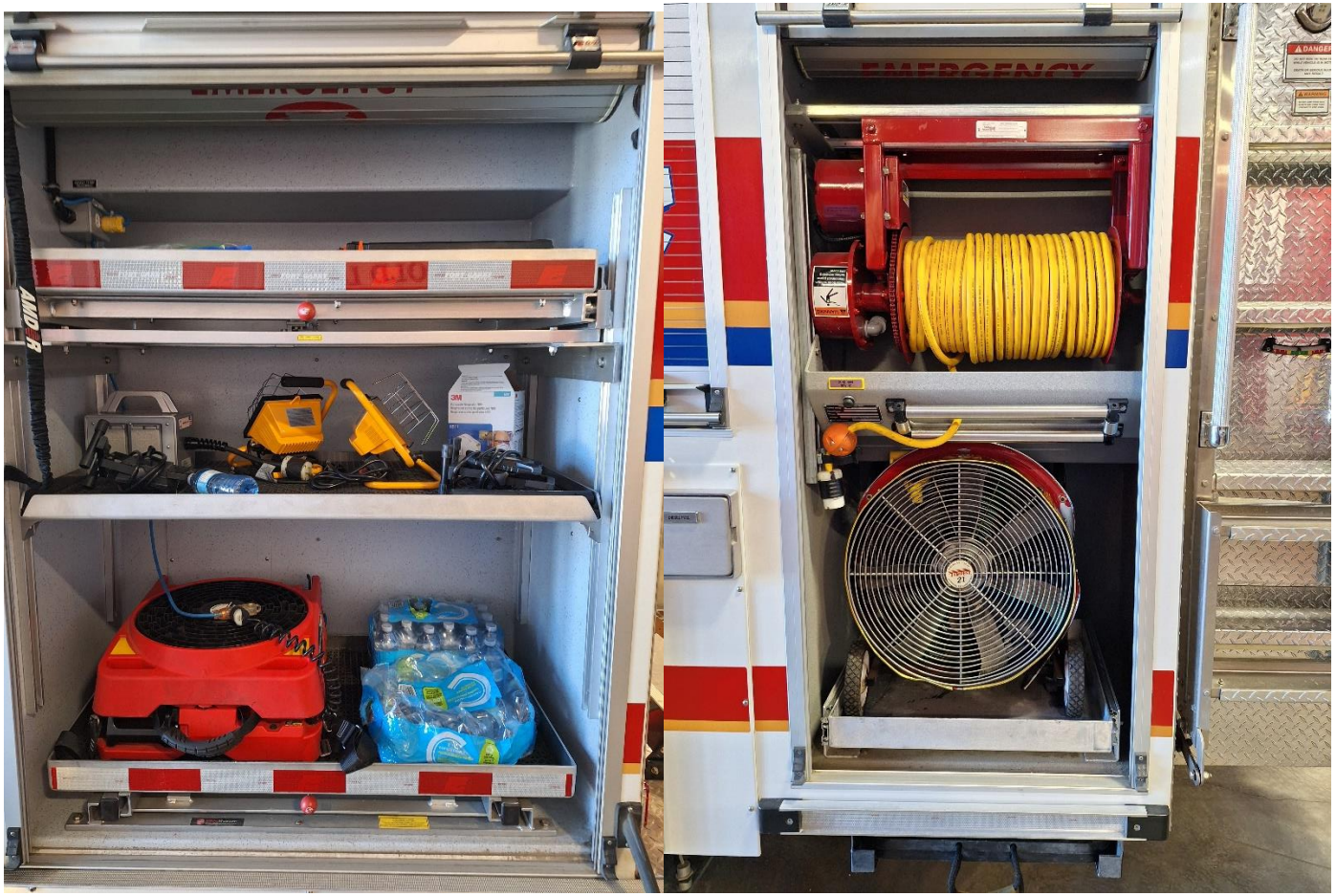
## *8.4 Rescue Body*

### 8.4.1 Command Table

### 8.4.2 Major Compartments – Driver's Side (forward of rear wheels)

### 8.4.3 Major Compartment – Driver's Side (Over rear wheels)

### 8.4.4 Major Compartment – Driver's Side (Aft of rear wheels)



### 8.4.5 Major Compartments – Passsenger Side (forward of rear wheels)

### 8.4.6 Major Compartments – Passenger Side (over rear wheels)


NOTE: SCBA Bottle Storage moved to Driver's Side Storage Above Wheels.

### 8.4.7 Major Compartments – Passenger Side (aft of rear wheels)

### 8.4.8 Major Compartments – Rear Compartment

## *8.5 Command Light*

### 8.5.1 Command Light KL415A-W2 LIGHT TOWER (or equivalent)

A Knight 2 Command Light, part number KL415A-W2.

The Command Light shall come equipped with the following bank of floodlights:

| | |
|---|---|
| Floodlight manufacturer: | Whelen Engineering |
| Number of lamp heads: | Six (6) Pioneer Plus PFP2ACB |
| Voltage: | 120 VAC |

The light heads shall come mounted in three (3) on each side of the light tower, giving two (2) vertical lines of three (3) when the lights are in the upright position. The bottom light bank able to rotate up to 180 degrees opposite of the top two banks of lights. This keeps four lights fixed on the main scene while allowing illumination in other areas.

## *8.6 Equipment Mounting Budget*

### 8.6.1 Paratech - Interstate Vehicle Stabilization Kit (VSK)

### 8.6.2 Various Hand Tools

Two (2) Rescue Jacks
Two (2) 2.7 kg flathead axe(s)
Two (2) 2.7 kg pickhead axe(s)
Two (2) Halligan tools
Two (2) Sledgehammers
One (1) Dry chemical portable fire extinguisher with a minimum of 80BC rating
One (1) 9.5L (2.5 gal) or larger water extinguisher

### 8.6.3 Holmatro – Corded Rescue Tools

Spreader
Cutter
Ram
Combi-Tool
Hoses
Ram Base
Hand Pump


Powerplant