National Defence

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Défense nationale

Quartier général de la Défense nationale
Ottawa (Ontario)
K1A 0K2

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À :

By e-mail to: - Par courriel au :
DLP53BidsReceiving.DAAT53Receptiondessoumissions@forces.gc.ca

Attention: - Attention :
Dong Le DLP 5-3-4-2

Solicitation Closes - L'invitation prend fin

At - à :
2:00 PM - 14:00

On - le :
2023 – 10 -31

Time Zone - Fuseau Horaire :
Eastern Daylight Time (EDT)
Heure avancée de l'Est (HAE)

Title - Sujet	**Amendment No. - N° modif.**
Truck Fire Fighting Pumper	003
Solicitation No. N° de l'invitation	**Date of Amendment Date de modification**
W8476-246744/A	2023 – 10 - 04

Address enquiries to: - Adresser toute demande de renseignements à :

Dong Le

E-Mail Address - Courriel

Dong.le@forces.gc.ca

Destination

See herein - Voir aux présentes

Instructions: Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.

Instructions : Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Delivery required Livraison exigée	**Delivery offered Livraison proposée**
See herein - Voir aux présentes	

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Person authorized to sign on behalf of Vendor/Firm (type or print): |
La personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie) :

Name - Nom **Title - Titre**

Signature **Date**

Canada

THIS SOLICITATION AMENDMENT IS RAISED TO:

1. Provide clarification and answers to questions from potential suppliers;
2. Amend the solicitation (Annex A, Requirement – Purchase Description) to clarify and reflect the questions received;
3. Amend the solicitation (Attachment 1 to part 4, Technical Evaluation Matrix) to clarify and reflect the questions received.

QUESTIONS AND ANSWERS:

Question 1	3.4.3 Overall restriction with length and height. Height is conflictual with what you ask point 3.16 b) 20 inches raised roof with cab floor at 84'' inches. A 20'' raised roof will meet the overall height restriction but the interior head clearance will be 75'' inches.(See Stewiacke drawing for reference). Other option for more head clearance will be a 24'' raised roof who will provide 79'' inches of interior head clearance but who will exceed the overall travel height.(see Canada drawing for reference). The dimension can have minor difference between one manufacturer to another but they won't meet your request."
Answer 1	The rear portion of the cab roof ***must*** be raised by a minimum of 20 inches (see amended Purchase Description dated 2023-10-03 attached).

Question 2	3.18 d) Lateral stability system with dual display, the most common standard option now are the electronic stability control (ESC) for this type of vehicle and does not include any display. The current request is more for another type of vehicle.
Answer 2	An electronic stability control system ***must*** be provided (see amended Purchase Description dated 2023-10-03 attached).

Question 3	3.19 b) Interior cab lighting (red and white) ***must*** activate with the opening of a door. It is standard for the White light to be activated with the door opening , RED one is normally activated by an individual switch on each light , this feature is also part of the White light so the personal can control White or Red as needed. Red activated with door opening is not available. Would you please review and accept our standard?
Answer 3	Para 3.19 b) White interior cab lighting ***must*** activate with the opening of a door. Para 3.19 c) will become to 3.19 d) and the following will be the new 3.19 c): "Red interior cab lighting ***must*** be controlled independently at each light." (see amended Purchase Description dated 2023-10-03 attached).

Question 4	3.25.10 e) A ladder at the back must be provided to access the hose bed. Rear intake and rear discharges will be conflictual with a ladder at the back, folding steps will be more accurate with all the requested options. Can you please clarify the intent as the design cannot be made as requested due to conflict with other options?
Answer 4	3.25.10 e) A mean to access the hose bed ***must*** be provided (see amended Purchase Description dated 2023-10-03 attached).

Question 5	3.25.11 a) Removable hose beds. ("Two (2) removable hose beds ***must*** be provided…") With the overall length restriction, a Crosslay design can be made to accommodate the requested hose load and deck gun monitor. Removable trays cannot be done.

	Can you please accept Crosslay design as the overall length create limitation?
Answer 5	3.25.11 a) "Two (2) hose beds ***must*** be provided…" (see amended Purchase Description dated 2023-10-03 attached)

Question 6	3.33 d) Access steps based on body design. Front body should have folding steps to access deck gun monitor so option for pole mounted as requested 3.31 b) cannot be install on the front of the body. Option can be added BROW mount style on rear cab roof above rear cab door, pole light can be install on rear body portion. Can you please accept the suggested options as an alternative?
Answer 6	3.31 b) to be changed to: "Two (2) scene lights ***must*** be mounted, one on each side, on the cab." (see amended Purchase Description dated 2023-10-03 attached)

Question 7	4.3.3 a) Maintenance Manuals must be in English and French. Maintenance manuals are not available in French. Can you please accept the manufacturer standard manuals in English version?
Answer 7	4.3.3 a) Maintenance Manuals must be in English and French. (No change; it is a requirement and will be put into the Technical Evaluation Matrix (TEM); see amended TEM dated 03-10-2023 attached)

THIS SOLICITATION IS HEREBY AMENDED AS FOLLOWS:

2.1 DELETE: "Purchase Description for Truck Fighting Pumper ECC 189212" dated 2023-08-28;

INSERT: "Purchase Description for Truck Fighting Pumper ECC 189212" dated 2023-10-03". See attached.

3.1 DELETE: "Attachment 1 to part 4, Technical Evaluation Matrix, Truck Fire Fighting Pumper" dated 29-Aug-23;

INSERT: "Attachment 1 to part 4, Technical Evaluation Matrix, Truck Fire Fighting Pumper" dated 03-10-2023". See attached.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

National Defence / Défense nationale

2023-10-03

PURCHASE DESCRIPTION

FOR

TRUCK FIRE FIGHTING PUMPER

ECC 189212

NOTICE

This documentation has been reviewed by the Technical Authority and does not contain controlled goods.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées.

OPI DSVPM 5 – DAVPS 5
Issued on Authority of the Chief of the Defence Staff
Publiée avec l'autorisation du chef d'état-major de la Défense

RDIMS # 6116319

Canada

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1. SCOPE

1.1 Scope

a) This Purchase Description describes the requirement for a Triple Combination Pumper with an enclosed top mounted operator's panel, with a minimum 2,650 L (700 US gal) water tank, combined dual foam tanks of 341 L (90 US gal) and a 5,678 L per minute (1,500 US gal/min) pump.

1.2 Instructions

a) Requirements, which are identified by the word "***must***", are mandatory. Deviations will not be permitted.

b) Requirements identified with a "will" define actions to be performed by Canada and require no action or obligation on the Contractor's part.

c) Where "***must***" or "will" are not used, the information supplied is for guidance only.

d) In this document "provided" ***must*** mean "provided and installed".

e) Where a technical certification is referred to in this specification, a copy of the certification or an acceptable Proof of Compliance ***must*** be supplied for the vehicle when requested by the Technical Authority.

f) Metric measurements are used to define the requirement. Other measurements are for reference only and may not be exact conversions.

g) Nominal dimensions reflect a method by which materials or products are generally identified, but which differ from the actual measured dimensions.

1.3 Definitions

a) "**Equivalent**" - Substitutes and alternatives that are ***equivalent*** in product, performance or a standard will be considered for acceptance by the Technical Authority where Proof of Compliance for ***equivalency*** for the respective requirement is provided for evaluation.

b) "**Vehicle**" – The entire vehicle including all systems and sub-systems, in a complete manufactured state in accordance with the requirements in this Purchase Description.

c) "**Road Legal**" **–** Applies to a self-propelled vehicle designed for or capable of transporting persons, property, material or permanently or temporarily affixed apparatus on a highway.

d) **"Gross Axle Weight Rating (GAWR)" -** The value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interfaces.

e) **"Gross Vehicle Weight Rating (GVWR) -** The value specified by the vehicle manufacturer as the loaded weight of a single vehicle.

2. APPLICABLE DOCUMENTS

2.1 Applicable Documents

a) The following documents form part of this Purchase Description. Canada will not be supplying these documents. Sources are as shown:

Motor Vehicle Safety Regulations (MVSR)

CAN/CGSB 3.517 - Diesel Fuel

ULC-S515- 13 - Automobile Fire Fighting Vehicle (latest edition)

NFPA 1901 – Standard for Automotive Fire Vehicle (latest edition)

NFPA 1500 – Standard on Fire Department Occupational Safety, Health, and Wellness Program (latest edition)

Safety Code 6 - Health Canada's Radiofrequency Exposure Guidelines

3. REQUIREMENTS

3.1 Standard Design

a) **Latest Model -** The vehicle design ***must*** be the manufacturer's latest model.

b) **Industry Acceptability** - The vehicle design ***must*** have demonstrated industry acceptability by having been manufactured and sold commercially for at least 2 year, or be manufactured by a company that has at least 5 years' experience in design and manufacturing of a comparable type of equipment of ***equivalent*** or greater complexity.

c) **Engineering Certification** - Original manufacturers engineering certification ***must*** be provided upon request for major drive train components, and major equipment systems and assemblies, to demonstrate that assemblies are used within their design limitations.

d) **Regulations** – The vehicle ***must*** conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and pollution in effect in Canada at the time of manufacture. International ***equivalent*** laws, regulations, and industrial standards will be accepted only if certified for ***equivalency*** by a professional engineer.

e) **Published Ratings** - The vehicle ***must*** have system and component capacities ***equivalent*** to published ratings (i.e. product or component brochures).

f) **Standard Components** - The vehicle ***must*** include all standard components, equipment and accessories for the model offered, although they may not be specifically described in this Purchase Description.

g) **Spare Parts** - The manufacturer ***must*** select components readily available for a minimum period of 10 years from the date of manufacture.

h) **Measurements** – Values for labels and indicators provided with equipment ***must*** be presented in metric units, or ***must*** have both imperial and metric units with metric dominant.

i) **Couplings** – Unless otherwise specified, all inlets, discharges, and hoses ***must*** be provided with Storz couplings, complete with cap and chain where applicable.

j) **Hoses and nozzles -** Unless otherwise specified, all hoses and nozzles will be provided by Canada.

k) **Component locations** – Unless specified exact location of some components will be determined during the pre-build meeting.

3.1.1 **Maintainability**

a) The vehicle ***must*** be designed to permit access to all items required for servicing and maintenance.

b) The vehicle ***must*** be designed to allow the manufacturer's recommended daily maintenance without having to raise the cab.

3.2 Operating Conditions

3.2.1 **Weather**

a) The vehicle ***must*** operate under the extremes of weather conditions found in Canada in temperatures ranging from -40 to 40 C (-40 to 104° F).

3.2.2 **Terrain**

a) The vehicle ***must*** operate on highways, secondary roads and gravel roads.

3.2.3 **Visibility**

a) The vehicle ***must*** operate in day, night, and during periods of artificial obscuration in fire suppression operations.

3.3 Safety Standards

3.3.1 **Vehicle Safety Regulations**

a) The vehicle ***must*** comply with the Motor Vehicle Safety Regulations (MVSR).

b) The completed vehicle ***must*** have Safety Compliance Certification Label with a National Safety Mark (NSM), as a seal of compliance **or** be accompanied by a Vehicle Import Form containing proof of Inspection by the Registrar of Imported Vehicles.

3.3.2 **NFPA 1901 and ULC S515-13**

a) The vehicle ***must*** comply with all of the minimum requirements identified in ULC-S515-13 Automotive Fire Fighting Vehicle.

b) The vehicle ***must*** comply with all of the minimum requirements identified in the National Fire Protection Association (NFPA) 1901 Standard for Automotive Fire Vehicles.

3.3.3 **Human Factors Engineering**

a) The vehicle ***must*** be equipped, with warning and instruction plates, non-slip walking surfaces and heat shields, for operator safety.

3.4 Vehicle Performance, Ratings and Dimensions

3.4.1 **Performance**

a) As a minimum, the vehicle ***must*** meet the fully loaded vehicle performance parameters identified in NFPA 1901 and ULC S515-13, applicable to the vehicle size.

b) Vehicle speed ***must*** be limited to 100 km/h (60 MPH).

3.4.2 **Weight Ratings**

a) The actual gross vehicle weight of a fully staffed, loaded, and equipped vehicle for service ***must*** not exceed the manufacturers tested weight rating as recorded on the vehicle information data plate, in accordance ULC S515-13.

b) IAW Table 12.1.2 of NFPA 1901 unless specified in this purchase description, Canada will reuse the miscellaneous equipment from the unit being replaced while respecting maximum equipment allowance referred on the GVWR tag.

3.4.3 **Dimensions**

a) The overall height of the vehicle ***must*** not exceed a maximum of 3.20 m (10.5 ft).

b) The overall length of the vehicle ***must*** not exceed a maximum of 9.753 m (32 ft).

c) The overall width of the vehicle, excluding mirrors and accessories ***must*** not exceed a maximum of 2.60 m (102 inches).

d) The vehicle ***must*** safely enter and exit the fire hall threw an existing garage door opening of 3.65 m (12 feet) wide by 4.87 m (16 feet) high.

3.5 Frame

a) The frame ***must*** be a purpose-built chassis manufactured for use in all conditions specified in Paragraphs 3.2 and 3.4.

b) Two (2) towing hooks ***must*** be frame mounted at the front of the vehicle, with sufficient strength to permit direct pull during recovery operations of the loaded vehicle.

c) Two (2) towing eyes with shackles ***must*** be frame mounted at the front of the vehicle, with sufficient strength to permit direct pull during recovery operations of the loaded vehicle.

3.6 Front Bumper

a) The vehicle ***must*** be provided with a chrome front bumper and extension to hold plumbing components and trash line.

b) The bumper extension ***must*** be covered top, bottom and sides.

c) The bumper ***must*** be provided with bumper guide visible from the driver's seated position. LED marker lights not required.

d) Storage for trash line ***must*** have a hinged cover held closed with latches.

3.7 Engine

a) The engine ***must*** operate on ultra-low sulphur diesel fuel to the CAN/CGSB Standard 3.517.

b) The vehicle engine(s) ***must*** have the horsepower, torque and speed characteristics to meet and maintain all vehicular performance characteristics specified in NFPA 1901 and ULC S515-13.

3.7.1 Engine Components

a) Replaceable air filter(s) ***must*** be provided.

b) A combustion air cleaning system ***must*** be provided, with an air cleaner restriction indicator visible to the operator.

c) If the engine drain plug is not accessible from underneath an oil drain extension tube ***must*** be provided to ease oil change.

d) A full flow replaceable oil filter ***must*** be provided.

e) An engine shutdown or de-rate system ***must*** be provided, controls accessible from the operator position.

f) Reset of the engine shutdown mechanism ***must*** be automatic.

g) A fast idle system ***must*** be provided, to raise engine speed.

h) Access to engine and coolant levels ***must*** be provided without having to raise the cab.

i) A recovery tank for radiator coolant overflow ***must*** be provided.

3.7.2 Cold Weather Starting Aids

a) The engine ***must*** be equipped with cold weather aids applicable to the operating conditions in section 3.2.

b) A thermostatically controlled water in fuel separator filter ***must*** be provided.

c) A 110-volt engine block heater(s) ***must*** be provided through a single dedicated auto-eject shoreline receptacle located at the side of the vehicle.

3.7.3 **Exhaust System**

a) The vehicle ***must*** be equipped with an exhaust system compliant with NFPA 1901 and ULC S515-13 and shielded to prevent personnel injury from contacting a heated surface.

3.7.3.1. **Vehicle Mounted Diesel Exhaust Filter System**

a) A vehicle mounted, direct source capture, exhaust filter system ***must*** be provided with the vehicle that prevents exposure to, and contamination from, exhaust emissions in addition to the manufacturers after treatment device (ATD) in accordance with NFPA 1500.

b) The system ***must*** be installed after the engine manufacturers ATD and before the diffuser tip in the end tailpipe.

c) The filter system ***must*** work automatically whenever the vehicle exits or returns to the Fire Hall.

d) The filter system ***must*** have the capability to be used while on-scene, outside the Fire Hall.

e) The diesel exhaust removal system ***must*** travel with the vehicle.

f) The system ***must*** not require building modifications or hanging hoses for the system to operate.

g) The installation of the system ***must*** be performed by the exhaust removal system manufacturer.

h) The vehicle mounted exhaust filter system ***must*** meet all NFPA, NIOSH and OSHA standards for preventing exposure to carcinogenic compounds that exist in diesel exhaust.

i) A Ward diesel filter No Smoke 2 system is preferred.

3.8 Drivetrain

a) The vehicle ***must*** be 4x2.

b) The drivetrain ***must*** include a “Park” or “Neutral” starting interlock.

c) The drivetrain ***must*** include limited slip or driver controlled locking differential(s) on the drive axle(s)**.**

3.9 Transmission

a) The vehicle ***must*** be equipped with an automatic transmission.

b) A means to determine oil level without raising the cab ***must*** be provided.

c) An audible back-up alarm ***must*** be installed to alert personnel when the vehicle transmission is in reverse.

3.10 Air System

a) The air system ***must*** be provided with required air pressure gauges, safety over-pressure valve, including low air-pressure warning devices.

b) The air system ***must*** be provided with an air dryer.

c) The air dyer ***must*** allow cartridge replacement.

d) The air dryer and air tanks ***must*** be equipped with automatic and heated moisture injectors (drain valves).

3.11 Braking System

a) The vehicle ***must*** be equipped with a power assisted air braking system, including a parking brake.

b) The vehicle ***must*** be equipped with a braking system compliant with NFPA 1901 and ULC S515-13.

c) The braking system ***must*** include an anti-lock (ABS) brake system.

d) The braking system ***must*** include air couplers (glad hands), service and emergency, in a protected location at the front and rear of the vehicle.

e) An auto-eject air connection for charging the air system ***must*** be provided at the rear of the vehicle.

3.12 Suspension System

a) The vehicle ***must*** be equipped with an air suspension system at the rear axles.

b) A rear suspension Kneel control ***must*** be provided.

c) The vehicle ***must*** be provided with leaf springs at the front axle.

d) Shock absorbers ***must*** be provided on all axles.

3.13 Steering

a) The vehicle ***must*** be provided with a power assisted steering system.

b) The steering system ***must*** be provided with a telescopic and tilting steering column.

3.14 Front Axle

a) The vehicle ***must*** be provided with front axle lube bearing lube including inspection window.

3.15 Wheels, Rims and Tires

a) The vehicle ***must*** be equipped with steel-belted, tubeless radial tires.

b) Rear tires ***must*** be provided with mud and snow treads.

c) Rear tires ***must*** be provided with automatic Onspot or equivalent tire chain traction system.

d) Polished aluminium rims ***must*** be provided.

e) Chrome wheel trim for hub and nuts cover caps ***must*** be provided (known as wheel chrome package).

f) Wheel well liners ***must*** be provided.

3.16 Cab

a) The vehicle ***must*** be equipped with a minimum five (5) person capacity, custom raised roof, aluminium tilt cab, fully enclosed, open interior designed for fire services and compliant with ULC-S515-13.

b) The rear portion of the cab roof ***must*** be raised by a minimum of 20 inches.

c) The rear cab portion ***must*** be provided with a canopy extension to form a pump operation panel hood.

d) The raised roof ***must*** be provided with windows on all sides to maximize the view.

e) Four (4) doors ***must*** be provided and be keyed alike.

f) Cab doors windows ***must*** be powered and open fully.

g) IAW NFPA 1901 cab steps ***must*** be provided to ease entry and exiting of the cab.

h) Entry assist handles ***must*** be provided to ensure proper hand holds while entering and exiting the cab.

i) IAW NFPA 1901 cab ground lights ***must*** activate when a cab door is opened.

j) A mean of turning ground lights off ***must*** be provided.

k) Electric cab tilt system ***must*** be provided.

l) Electric cab tilt system ***must*** be provided with a manual override in the event of an electrical failure.

m) Cab tilt system ***must*** be provided with a positive release safety latch to keep the cab in full tilt-up position.

3.17 Controls

a) Each control ***must*** be permanently marked to identify the function, in both English and French or international symbols.

b) Vehicle controls ***must*** be grouped together in the cab.

c) Firefighting controls ***must*** be grouped together in the cab.

d) Controls ***must*** not restrict the operator's field of view.

e) Control panel lights ***must*** be provided for adequate lighting and for nighttime operations.

3.18 Cab Instruments

a) Instruments ***must*** be metric and visible to the seated operator in all lighting conditions.

b) Manufacturer standard instrument cluster ***must*** be provided.

c) An engine hour meter with numeric display ***must*** be provided.

d) An electronic stability control system ***must*** be provided.

e) A water tank level indicator ***must*** be provided.

f) Class A and Class B foam tank level indicators ***must*** be provided.

3.19 Cab Components

a) Four (4) LED red and white interior cab lighting located above each door ***must*** be provided.

b) White interior cab lighting ***must*** activate with the opening of a door.

c) Red interior cab lighting ***must*** be controlled independently at each light.

d) A master interior cab lighting switch ***must*** be provided allowing to turn them off.

e) A ventilation/heater and defrosting system ***must*** be provided, with a multi-speed fan, applicable for the operating conditions as specified in Paragraph 3.2.1.

f) An air conditioning system ***must*** be provided equipped with all components and controls required for regulation of the cab interior temperature.

g) A cab interior air filtration system with HEPA filter ***must*** be provided.

h) A powered windshield wiper and washer system ***must*** be provided with multi-speed wipers.

i) The cab floor or floor mats ***must*** be weatherproof.

j) The cab floor ***must*** not be carpet.

k) The cab floor ***must*** be a material that reduces absorption of toxins and promotes ease of cleaning.

l) Two (2) rotating (vertically) interior sun visors ***must*** be installed.

m) A back-up camera system ***must*** be installed in the cab with a screen size of at least 17.7 cm (7 inches).

n) An AM/FM stereo radio with an auxiliary port ***must*** be provided.

o) Two (2) main power, ground, ignition sense harness and antenna cable ***must*** be wired into the vehicle, with a service loop terminating in the cab for future installation of radio equipment.

p) Two (2) ¾ inch NMO (Motorola) style antenna mounts ***must*** be mounted high on the cab exterior roof.

q) Two (2) heavy-duty, powered and heated exterior side mirrors, with convex section ***must*** be provided with in-cab controls.

r) Two (2) dedicated USB charging ports ***must*** be installed within reach of the driver and officer seats.

s) Two (2) USB charging ports ***must*** be provided strategically located at the rear seating area.

t) One (1) inverter 110-volt AC type duplex strategically located in the cab ***must*** be provided.

u) Five (5) intrinsically safe LED hand lights including docking station and chargers ***must*** be provided.

v) Five (5) helmet holders ***must*** be provided.

w) Storage space and restraints ***must*** be provided for one medical bag and one automated external defibrillator (AED) in the cab. Canada will supply the components and provide dimensions as required.

x) The cab ***must*** be equipped with a 2.3 kg (5 lb) ULC approved and rechargeable dry chemical fire extinguisher, with a minimum rating of 3A10BC, equipped with a pressure gauge, service inspection tag, and accessible to the operator.

3.20 <u>Cab Seating</u>

a) The Self-Contained Breathing Apparatus (SCBA), MSA G1 model and units will be supplied by Canada.

b) One (1) adjustable (mechanical preferred) driver's seat ***must*** be provided.

c) One (1) adjustable (mechanical preferred) SCBA style officer's seat ***must*** be provided, with a high back.

d) Three (3) SCBA style, rear facing passenger seats with high back ***must*** be provided.

e) Rear passenger seats ***must*** be provided with fold up seat cushion.

f) All seating ***must*** be upholstered with a material that reduces the absorption of toxins, promotes ease of cleaning, repels water, and is wear resistant, applicable to firefighting applications.

g) All SCBA style seats ***must*** be provided with a SmartDock retaining system or equivalent and equipped with a flip-up split headrest for ease of SCBA bottle release.

h) All seating ***must*** be equipped with easily accessible, retractable 3-point seat belt assemblies.

i) A storage area ***must*** be provided below the driver and officer's seat.

3.21 Intercom

a) An intercom system ***must*** be provided.

b) One headset and microphone per seat ***must*** be provided.

c) Dual external speakers ***must*** be provided.

d) The driver's headset ***must*** be operated through a weatherproof, remote foot operated control switch.

e) Push to talk weatherproof remote foot operated switch ***must*** be provided to the driver and officer.

f) One headset and microphone ***must*** be provided at the enclosed pump control panel.

g) Headset at the pump panel ***must*** be provided with a storage hook and extended coiled cord allowing operator movement within the cab.

3.22 Siren

a) The vehicle ***must*** be equipped with a siren system.

b) Siren foot activation switches ***must*** be provided for officer seat.

c) The amplifier unit ***must*** include volume control and selection of ''Radio". "Public Address", "Manual", "Yelp", "Wail" and "Hi-Lo" (European) modes including noise cancelling microphone.

3.23 Horns

a) Dual forward facing horns (electrical/air) ***must*** be provided.

b) Horn control ***must*** be positioned in reach of the driver.

c) A horn activation left foot pedal ***must*** be provided for the officer seat.

3.24 Video Camera

a) A video camera ***must*** be provided to capture emergency scene response and activity for review and training enhancement.

b) The video camera system ***must*** record automatically whenever the emergency lighting switch is activated and when the vehicle is in motion.

c) The process of retrieving such video ***must*** be performed during the Pre-Delivery Inspection and be covered in the operation manual.

3.25 Firefighting System

3.25.1 Plumbing system

a) The vehicle's plumbing system ***must*** be in accordance with ULC-S515-13.

b) IAW NFPA 1901 all nameplates for intake, discharge, controls and gauges ***must*** be colour coded.

c) The plumbing system piping ***must*** be stainless steel.

d) Victaulic couplings with suitable gasket material ***must*** be used for all foam, water pipe and valve connections.

e) Drains ***must*** be provided to allow complete draining of the plumbing system including the water tank.

f) The plumbing system ***must*** be provided with a thermal relieve valve.

3.25.2 Priming system

a) An automatic pump priming system ***must*** be provided.

3.25.3 Water Pump

a) The vehicle ***must*** be provided with a centrifugal type water pump with a minimum discharge rate of 5,678 litres per minute (1,500 US gallons per minute) at 1,034kPa (150 psi).

b) The water pump ***must*** incorporate a mechanical type seal not requiring regular periodic adjustment.

c) The water pump ***must*** be gravity primed from the vehicle water tank.

d) The water pump system ***must*** have a water pressure control valve.

3.25.4 Water Tank

a) The vehicle ***must*** be equipped with a water tank in accordance with ULC S515-13.

b) The water tank ***must*** have a minimum usable capacity of 2,600 L (687 US gal).

c) The water tank ***must*** be equipped with tank baffling appropriate to mitigate vehicle instability during travel.

d) The tank ***must*** be provided with adequate venting to the atmosphere to permit rapid and complete filling without pressure build up and to permit discharge at the maximum design flow rate without danger of tank collapse.

e) The actual capacity ***must*** be clearly indicated with permanently embossed markings near the top fill point.

3.25.5 **Foam Tanks**

a) A Class A foam tank with a minimum capacity of 113 litres (30 US gal) ***must*** be provided.

b) A Class B foam tank with a minimum capacity of 226 litres (60 US gal) ***must*** be provided.

c) The usable capacity ***must*** be clearly indicated with permanently embossed markings on the tank next to fill point.

d) The vehicle ***must*** be delivered without any foam.

3.25.6 **Foam Proportioning System**

a) A foam proportioning system suitable for Class A and Class B foams ***must*** be provided.

b) Water and foam solution ***must*** be provided at the traverse pre connect hoses beds and the front bumper trash line.

c) The foam system ***must*** be provided with a no Foam Kit designed to allow the foam distribution system to be tested without discharging foam.

3.25.7 **Pump Operator Panel**

a) An enclosed transverse operator panel ***must*** be provided.

b) The pump operator panel ***must*** house all firefighting controls.

c) The pump operator panel ***must*** be provided with a mean of capturing pump operating hours.

d) Where available, mechanical valve control levers ***must*** be provided.

e) Control levers ***must*** be provided with rubber barrier to aid with retention of heat, or prevent pump heat from entering the cab.

f) The pump operator panel ***must*** be lighted for night operation, control switch with driver's controls.

g) The pump operator panel gauges ***must*** be both metric and imperial, metric being prominent.

h) All gauges and controls ***must*** be symmetrically and logically laid out to easily enable the pump operator to monitor pump operation.

i) The water pump system ***must*** be provided with an incrementally or infinitely variable discharge flow controller and display (variable pressure governor).

j) The operator panel ***must*** include foam tanks system controller (A/FLUSH/B).

k) A pump access panel with paddle latch/handle assemblies ***must*** be provide below the transverse operator panel.

l) The pump operator panel ***must*** include master gauge test ports.

m) The pump operator panel ***must*** be tillable to access components.

n) The pump operator panel ***must*** include water and foam level indicators.

o) Water and foam tanks indicators ***must*** be provided and include flashing LEDs at 25% of tank volume, down chasing LEDs when the tank is almost empty and have an audio alarm when near empty.

p) A foam tank selector valve ***must*** be mounted at the transverse operator panel.

q) Two (2) independently controlled cooling fans ***must*** be provided near the transverse operator panel.

3.25.8 **Side Pump Panel, Intakes and Discharges**

a) A left and right side pump panels ***must*** be provided.

b) Left and right side panel components (levers/pipes) ***must*** be provided with rubber barrier to retain heat.

c) One 152 mm (6 inch) intake ***must*** be provided at the road side and curb side of the vehicle.

d) One 102 mm (4 inch) intake ***must*** be provide at the front and rear of the vehicle.

e) One 64 mm (2.5 inch) gated intake ***must*** be provided on the road side and curb of the vehicle.

f) One 64 mm (2.5 inch) direct tank fill ***must*** be provided.

g) One 64 mm (2.5 inch) discharge ***must*** be provided on the road side, the curb side and at the rear of the vehicle.

h) Two 45 mm (1.77 inch) pre-connect discharge ***must*** be provided with access from each side of the vehicle.

i) One 102 mm (4 inch) discharge ***must*** be provided at the rear of the vehicle.

j) Pump discharges ***must*** be provided with adapters and required elbows.

k) Intakes/inlets and discharges outlets ***must*** be equipped with Storz couplings, with cap and chain.

l) Storz coupling ***must*** not be provided for the 152 mm (6 inch) intake, OEM standard cap.

m) Left pump panel ***must*** include a tank to pump override lever in the event of an electrical failure “if” an electrical actuator was used at the transverse operation panel.

3.25.9 **Rear Discharge**

a) One 102 mm (4 inch) discharge must be provided at the rear of the vehicle.

3.25.10 **Rear Hose bed**

a) A rear hose bed ***must*** be provided with a minimum of two (2) adjustable hose bed dividers.

b) The rear hose bed ***must*** be sized to hold a minimum of 305 m (1000 feet) of 102 mm (4 inch) fire hoses.

c) A removable hose bed cover ***must*** be provided.

d) Rear hose bed ***must*** be provided with lighting for night operations.

e) A mean to access the hose bed ***must*** be provided.

3.25.11 **Transverse pre-connect hose bed**

a) Two (2) hose beds ***must*** be provided for loading and storage of a minimum of 60 metres (200 ft) of 45mm diameter (1.77 inch) rubber covered fire hoses and nozzle for each hose bed.

b) Connection points to vehicle piping ***must*** be accessible and not require custom hose section length for loading of the hose bed.

c) A removable hose bed cover ***must*** be provided.

3.25.12 **Front Bumper Trash Line and Intake**

a) Storage capable of holding 150 ft X 1.5 in trash line ***must*** be provided.

b) A 4” intake with swivel ***must*** be provided.

3.25.13 **Deck Monitor**

a) IAW NFPA 1901 a 12 volt Akron Deck Master with a Saber Master nozzle or equivalent ***must*** be provided.

b) The deck monitor ***must*** be provided with hardwired controls at the transverse operator panel.

c) The deck monitor ***must*** be provided with a remove control along with storage pocket to be kept on or near the transverse operator panel.

d) The deck monitor ***must*** be provided with manual override lever in the event of an electrical failure.

e) The deck master controls ***must*** include an auto-deploy and auto-stow features.

f) The plumbing design ***must*** allow for deck monitor water drainage following usage.

3.25.14 **Winterization System**

a) The system ***must*** permit operation of the vehicle and firefighting systems for a minimum period of two (2) hours at minus -40ºC with the vehicle fully operational and the engine running.

b) The vehicle ***must*** be provided with pump house heaters, removable lower heat pan(s) to protect the water pump, lines, piping and valves from freezing during cold weather operations as covered in para 3.2.1.

c) Pump house heater switch ***must*** be provided at the transverse operation panel.

3.26 Ladder Rack

a) An electric ladder rack with manual override ***must*** be provided.

b) Operating controls for the electric ladder rack ***must*** be located to provide operator clear view of movement.

c) The electric ladder rack ***must*** be provided with a 4.27m (14 foot) roof ladder.

d) The electric ladder rack ***must*** be provided with a two (2) section 7.32m (24 foot) ladder.

e) The electric ladder rack ***must*** be provided with two (2) 3.08 mm 10’ Pike Pole.

3.27 Accessories

a) Front licence plate holder ***must*** be provided.

b) Rear licence plate holder with LED light ***must*** be provided.

c) Mud flaps ***must*** be provided.

d) Wheel chocks ***must*** be provided with storage mounted on the driver’s side.

3.28 Electrical System

a) The vehicle ***must*** be equipped with a 12-volt electrical system

b) IAW 1901 an alternator with a minimum of 300 amps ***must*** be provided to meet the minimum continuous electrical load of the vehicle.

c) Wiring passing through metal ***must*** be protected by insulating grommets.

d) The electrical system ***must*** be provided with an electrical load system manager that will shed electrical device(s) when the engine is off or the vehicle is not being supplied with shore line power.

e) Wiring ***must*** be protected by insulating grommets, where passing through metal.

3.28.1 Batteries

a) The vehicle ***must*** be supplied with heavy-duty, maintenance free batteries, compliant with ULC-S515-13.

b) Batteries ***must*** be mounted in an accessible, protected and ventilated location.

c) The batteries ***must*** be rated to exceed the draw, in the required operating conditions.

d) Protected battery jumper studs ***must*** be provided to allow jump starting of the engine without having to tilt the cab.

3.28.2 **Battery Charger**

a) The vehicle ***must*** be equipped with a Kussmaul or equivalent auto charging system.

b) The battery charging system power ***must*** be provided through an auto-eject shoreline receptacle.

c) The battery charging system ***must*** provide a visual voltage signal indicator.

d) The shoreline receptacle and remote charge indicator ***must*** be provided at the side of the vehicle exterior.

3.29 Generator System

a) A portable generator ***must*** be provided with sufficient kilowatt to supply power to EDraulic rescue tool system, portable electrical cord reel and portable lights.

3.30 Generator System Components

a) Generator restraint ***must*** be provided.

b) A 15.24 m (50 feet) portable electric cord reel with compartment restraint ***must*** be provided with four (4) 5-15P outlets.

c) A portable 20,000 Lumen LED scene light with compartment restraint ***must*** be provided.

d) A 4.5 litre (1 gallon) Rotopax style jerry can with compartment restraint ***must*** be provided.

e) Location of the generator components will be determined at pre-build meeting.

3.31 Non-Emergency Lights

a) All non-emergency lights ***must*** be LED.

b) Two (2) adjustable pole mounted scene lights ***must*** be provided at the front of the compartment body.

c) Two (2) scene lights ***must*** be provided on each side of the compartment body.

d) All scene lights capable of producing a minimum output of 20,000 Lumen ***must*** be provided.

e) Scene Lights ***must*** be controlled independently (side to side) inside the cab.

f) IAW NAFPA 1901 the vehicle ***must*** be provided with sufficient ground lighting.

g) Ground lighting ***must*** be controllable in the cab.

h) One (1) amber coloured beacon ***must*** be provided for vehicle use on an airfield.

i) An override control ***must*** be provided for the amber colour beacon.

j) All exterior non-emergency lights controls ***must*** be accessible from the driver and officer seat.

3.32 Exterior Emergency Warning Lights

a) Exterior emergency warning lights complying with NFPA 1901***must*** be provided.

b) All exterior emergency warning lights ***must*** be LED.

c) All exterior emergency lights controls ***must*** be accessible from the driver and officer seat.

d) The emergency lighting control system ***must*** be provided with a mean to turn lower lights OFF during nearby operations.

3.33 Body Components

a) The vehicle body ***must*** be provided with “C” channel rub rail.

b) Two (2) seam lights ***must*** be mounted, one on each side, on the cab.

c) IAW NFPA 1901 the vehicle body ***must*** be provided with access hand rails based on body design.

d) IAW NFPA 1901 the vehicle body ***must*** be provided with access steps based on body design.

e) IAW NFPA 1901 the vehicle body ***must*** be provided with a rear tailboard step.

f) The pump house ***must*** be provided with a maintenance side access panel, one on each side.

g) The pump house access panel ***must*** be provided with paddle latch/handle assemblies.

3.34 Storage Compartments

a) The vehicle ***must*** be provided with weatherproof storage compartments.

b) The storage compartments ***must*** maximize the space available (height, width and depth).

c) Three (3) storage compartments including roll-up doors ***must*** be provided on both sides of the vehicle.

d) Storage compartments L1, L3, R1 and R3 ***must*** each be provided with a bottom roll out tray, an adjustable shelf and an adjustable tip down tray.

e) Storage compartments L2 and R2 ***must*** be provided with an adjustable tip down tray.

f) One (1) storage compartment including roll up doors ***must*** be provided at the rear of the vehicle.

g) The rear storage compartment ***must*** be provide with a compartment partition.

h) One compartment side ***must*** be provided with a minimum of three (3) roll out trays.

i) One compartment side ***must*** be provided with two (2) slide out tool boards with Pac Track system or equivalent.

j) Compartment floors and shelves ***must*** be sufficiently thick, and supported to hold the intended equipment capacity without deformation.

k) All electrical junctions or wiring within the compartments ***must*** be protected from damage resulting from equipment stored within the compartment.

l) Storage compartment shelves ***must*** be equipped with PVC compartment matting.

m) Storage compartments ***must*** be equipped with internal LED strip type lighting that is automatically activated when the door is opened and automatically deactivated when the door is closed.

n) SCBA tube storage ***must*** be provide for secure and safe transportation of a minimum of four (4) 60 minutes pressurized SCBA bottles. Storage can be elsewhere on the body.

o) Storage for two (2) 3.05 m (10ft) 152 mm (6 inches) diameter hard suction hoses ***must*** be provided.

p) Storage for two (2) back boards ***must*** be provided.

q) Storage for one (1) 3.08 m (10ft) attic ladder ***must*** be provided.

r) One compartment slide out tray ***must*** include restraints for the following Hurst EDraulic rescue tools (tooling supplied by Canada):

   i. Cutter model S700 E.

   ii. Spreader model SP777 E2.

   iii. Combination tool model SC250 E2.

   iv. Ram model R 421 E2

s) Two (2) Hurst EDraulic spare batteries with charger base compatible to rescue tools ***must*** be provided.

t) One (1) Hurst EDraulic 110V power supply compatible with rescue tool ***must*** be provided.

3.35 <u>Paint</u>

a) All metal surfaces ***must*** be protected.

b) The prime coating ***must*** be a high durability, corrosion resistant type, such as an epoxy.

c) The vehicle cab ***must*** be painted two-tone, consisting of FLNA 4006 White (top), and bottom FLNA 3225 Red Akzo-Nobel Lead free, chromate-free, high-solid acrylic urethane paint.

d) The vehicle body colour ***must*** be FLNA 3225 Red Akzo-Nobel. Roll-up doors can be manufacturer standard colour.

3.36 Decals

a) All lettering ***must*** be applied in the ARIAL BLACK font, sized to accommodate the required text, in the outlined areas.

b) Lettering and identification numbers ***must*** be gold colour with black outline.

c) The text **"FIRE FEU"** in reverse ***must*** applied to the front of the vehicle.

d) IAW NFPA 1901 white reflective striping ***must*** be placed horizontally around the cab and sides of the body. The preferred combination of stripes design to be 100 mm (4 in) high for the centre stripe and 25.4mm (1 in) for top and bottom stripes. Striping to be white on cab and chassis and silver on roll up doors.

e) The vehicle identification number sized 100 mm in height ***must*** be provided on the front of the vehicle applied to the left and right furthermost location.

f) The vehicle identification number sized 150 mm in height ***must*** be provided at the rear of the vehicle.

g) The vehicle identification number sized 300 mm in height ***must*** be provided on both rear door cab.

h) The vehicle identification number sized 300 mm in height ***must*** be provided on the top of the vehicle.

i) The National Defence Fire Service Crest ***must*** be applied to both the driver and officer doors.

j) The National Defence logo ***must*** be applied to each side of the vehicle.

k) A Canadian flag window overlay ***must*** be provided on each side of the vehicle.

l) The rear facing sections of the vehicle ***must*** be provided with red and yellow chevrons in accordance with NFPA 1901.

m) Decals ***must*** be applied using high quality vinyl with a clear polyurethane coating, or equivalent.

3.37 Corrosion Protection

a) The vehicle ***must*** be designed and manufactured to prevent galvanic corrosion.

b) The materials used in the vehicle manufacturing ***must*** resist damage or deterioration as a result of cleaning with hot or cold water, steam, or detergents.

c) A commercial rust prevention coating ***must*** be applied to the vehicle, such as Krown Rust Control or Rust Check.

d) A decal and warranty papers for the rust prevention coating ***must*** accompany the vehicle.

3.38 Warning, Markings and Instruction Plates

a) All identification, instructional, and warning labels ***must*** be in both English and French or International symbols.

b) All indicators and controls ***must*** be permanently labelled.

3.38.1 Vehicle identification

a) The vehicle identification information ***must*** be permanently affixed in a conspicuous and protected location.

b) Identification information ***must*** include the cab and chassis manufacturer's name, model number, serial number, and model year.

c) Identification information ***must*** include the body manufacturer's model and serial number.

d) Identification information ***must*** include the equipment manufacturer's model and serial number.

e) Identification information ***must*** include the GVWR and GAWR ratings.

4. INTEGRATED LOGISTIC SUPPORT (ILS)

4.1 Certification

a) The vehicle ***must*** be certified IAW NFPA, certification documents provided at/or prior to pre-delivery inspection.

4.2 ILS Deliverables

a) The following table indicates the ILS elements that the Contractor ***must*** deliver, including the medium (paper or digital), the expected means of delivery and the reference paragraph.

Element	Format/Medium	Delivered to TA	Supplied with each vehicle/ equipment	Reference Paragraph
Set of Manuals	Digital	X	X	4.3
Warranty Letter	Digital	X	X	4.4
Data Summary	Digital	X		4.5.1
Photographs	Digital	X		a)
Dimensioned Drawing	Digital	X	X	4.5.3

4.3 **Vehicle Manuals**– All manuals required for the description, operation, maintenance and repair of the complete equipment, including sub-systems, ***must*** be provided**.**

4.3.1 **Operator's Manuals**

a) The operator's manuals ***must*** be in both English and French.

b) The operator's manuals ***must*** include instructions for the safe operation of the vehicle.

c) The operator's manuals ***must*** include daily operator maintenance instructions/checks (including lubrication).

d) The operator's manuals ***must*** include safety warnings.

e) The operator's manuals ***must*** include hand signals.

4.3.2 **Parts Manual(s)**

a) The parts manual(s) ***must*** be in English.

b) The parts manual ***must*** have illustrations showing all components of the vehicle including equipment and accessories from other manufacturers that are supplied to meet the requirements of the contract, with numbers for the itemization of the parts.

c) The parts manual ***must*** have a listing for all itemized parts showing the Original Equipment Manufacturers (OEM) part number, the part name and a brief description of the item.

d) The parts manual ***must*** cross reference the OEM part number to the correct illustration and item number.

e) The parts manual ***must*** have a representation of bilingual warning signs and identification labels delivered on the equipment.

4.3.3 **Maintenance Manuals**

a) The maintenance manual ***must*** be in English and French.

b) The maintenance manual ***must*** include a troubleshooting guide, showing the steps and tests required to determine the exact cause of a problem and an explanation of the steps required to correct a problem.

c) The maintenance manual ***must*** include a listing of the necessary tolerances, torque levels, fluid volume, and special tools (including item part numbers).

d) The maintenance manual ***must*** include information on the order of disassembly and assembly of the systems and components of the vehicle.

e) The maintenance manual ***must*** include special tools list.

4.3.4 **Manual Delivery to Technical Authority**

a) Sample manuals ***must*** be submitted to the Technical Authority (TA) prior to the delivery of the vehicle for each model and or sub-system for approval. Sample manuals will not be returned. TA will provide approval or comments on the manuals within 30 calendar days.

b) The contractor must provide responses to the TA comments.

c) One (1) complete set of approved manuals (Operator's, Maintenance, and Parts) in electronic format ***must*** be delivered to the Technical Authority.

4.3.5 **Manual Delivery with Vehicle**

a) One (1) complete set of manuals (Operator's, Maintenance, and Parts) ***must*** accompany each vehicle.

b) The manuals ***must*** be in paper and electronic format.

4.3.6 **Electronic Manuals**

a) Electronic manuals ***must not*** require installation, password and/or Internet connection to be accessed and ***must*** be an unlocked PDF in a searchable format.

4.3.7 **Provisional Manuals**

a) In the event that approved manuals are not available at the time of delivery of the equipment, manuals marked "Provisional" ***must*** be supplied with the equipment.

b) The contractor ***must*** deliver replacement approved manuals to all destinations where Provisional manuals were delivered.

4.3.8 **Manual Supplements**

a) The contractor ***must*** supply manual supplements (Operator's, Maintenance and Parts) to support dealer-installed equipment not covered in the Vehicle Manuals.

b) Manual supplements ***must*** be delivered in accordance with 4.3.4 and 4.3.5.

4.3.9 **Changes to Manuals**

a) During the period of the contract, changes to equipment, which affect the contents of manuals, ***must*** be reflected in the revision of the electronic and paper version of the manuals.

b) Changes to the manuals ***must*** conform to the same format and presentation requirements as the original manuals.

c) The revised electronic version of the manual ***must*** be sent to the Technical Authority by the Contractor.

d) The TA will provide approval or comments on the manuals within 30 calendar days.

4.4 Warranty Letter

a) The warranty letter ***must*** include a list of all Canadian designated warranty service providers that will honour the warranty for the equipment and attachments (if applicable) procured under this contract, including the contact person and phone number at each warranty service provider.

b) The warranty letter ***must*** include additional warranty coverage of sub-systems and a copy of the warranty letter from each sub-system's Original Equipment Manufacturer (OEM).

c) The warranty letter ***must*** include warranty period as negotiated in the contract.

d) The warranty letter ***must*** include Contractor contact information, name and phone number, for warranty support.

4.4.1 Warranty Letter Delivery

a) The Contractor ***must*** provide a warranty letter in both English and French to the Technical Authority and with each vehicle. Canada as required will provide acceptable warranty letter format.

4.5 Other ILS Deliverables to Technical Authority

4.5.1 Data Summary

a) The Contractor ***must*** provide Data Summary in both English and French for each make/model/configuration of vehicle. Canada as required will provide acceptable data summary template.

4.5.2 Photographs

a) The Contractor ***must*** provide photographs in colour, taken against a plain background, and in digital JPEG format with a minimum 10-megapixel resolution.

b) One left front three-quarter view of a completed unit ***must*** be provided.

c) One right rear three-quarter view of a completed unit ***must*** be provided.

4.5.3 Dimensioned Drawing

a) One side and front view sketch showing the dimensions ***must*** be provided.

4.5.4 Major Equipment Serial Numbers

a) The Contractor ***must*** provide a list of serial numbers recorded during manufacturing which contains description, model and serial numbers. Either electronic or work copy will be acceptable.

4.6 Safety Recalls and Servicing Data

a) Safety recalls, and manufacturer's technical service bulletins, or ***equivalent must*** be provided to the technical authority and the final delivery locations on a continuing basis, throughout the life expectancy of the vehicle or for no less than 10 years.

4.7 Training

4.7.1 **Training Deliverables** – The following table indicates the ILS Training elements that the Contractor ***must*** deliver, including the expected means of delivery and the reference paragraph.

Element	Format/ Medium	Delivered to TA by E-mail for approval	Remarks	Reference Paragraph
Course Syllabus	Digital	X	-	4.6.2 d) & 4.6.4 d)
Training Video	Digital	X	-	4.6.7
Maintenance Training	-	-	Delivery in person, at the location specified in the contract.	4.6.2
Operator Training	-	-	Delivery in person, at the location specified in the contract.	4.6.4
Proof of Training Certificate	Digital	X	TA will provide template	4.6.2 e) & 4.6.4 e)

4.7.2 **Maintenance Training**

a) The Contractor ***must*** provide a maintenance training course.

b) The course ***must*** be given at the delivery destination and be available in both English and French.

c) The course ***must*** have a minimum duration of two (2) days to provide training of up to eight (8) maintenance personnel and have the final dates arranged with the Technical Authority.

d) The course ***must*** have a syllabus or course outline and schedule available for review seven (7) days prior to the course commencement date.

e) After completion of the course, the Contractor ***must*** have a "*PROOF OF MAINTENANCE TRAINING*" certificate signed by a Canada Representative for the destination. The Technical Authority will supply the document.

4.7.3 **Maintenance Training Curriculum**

a) Operator's training detailed in Paragraph 4.6.4 below ***must*** be included in the curriculum.

b) Operation and maintenance safety precautions ***must*** be included in the curriculum.

c) Preventive maintenance including servicing schedules ***must*** be included in the curriculum.

d) Trouble shooting, testing, and adjustments ***must*** be included in the curriculum.

e) Special tools and test equipment ***must*** be included in the curriculum.

f) Computer diagnosing equipment ***must*** be included in the curriculum.

4.7.4 **Operator Training**

a) The Contractor ***must*** provide an operator training course.

b) The course ***must*** be given at the delivery destination and be available in both English and French.

c) The course ***must*** have minimum duration of two (2) days to provide training for up to eight (8) operators and have the final dates arranged with the Technical Authority.

d) The course ***must*** have a syllabus or course outline and schedule available for review seven (7) days prior to the course commencement date.

e) Video camera download procedures ***must*** be included in the course outline.

f) After completion of the course the Contractor ***must*** have a "*PROOF OF OPERATOR TRAINING"* certificate signed by a Crown Representative for the destination. The Technical Authority will supply the document.

4.7.5 **Operator Training Curriculum**

a) Safety precautions to be observed while operating and servicing the vehicle ***must*** be included in the curriculum.

b) Vehicle operating characteristics ***must*** be included in the curriculum.

c) Vehicle operating procedures ***must*** be included in the curriculum.

d) Water pump and foam system operating procedures ***must*** be included in the curriculum.

e) Pre-operating and pre-shutdown procedures ***must*** be included in the curriculum.

f) Daily/weekly operator servicing procedures ***must*** be included in the curriculum.

4.7.6 **Training Materials**

a) Training materials ***must*** be provided to each attendee, in French for locations in Quebec.

b) Training materials ***must*** include a list of topics to be covered;

c) Training materials ***must*** include an approximate timetable showing when topics are scheduled to be covered and how much time is scheduled for each topic;

d) Training materials ***must*** list any reference material; and

e) Training materials ***must*** make available any reference material used.

ATTACHEMENT 1 TO PART 4 - EVALUATION CRITERIA

Technical Evaluation Matrix

Title:

Truck Fire Fighting Pumper

Date:

03-10-2023

Technical Evaluation Matrix
Truck Fire Fighting Pumper

Bidder Information

Bidder Name:

Proposal Date:

Proposed Make and Model:

Technical Mandatory Criteria			
PD Reference	**PD Requirement**	**Bid Evaluation Requirement**	**Location in Bid Proposal**
3.1 b)	**Industry Acceptability** The vehicle design ***must*** have demonstrated industry acceptability by having been manufactured and sold commercially for at least 2 year, or be manufactured by a company that has at least 5 years' experience in design and manufacturing of a comparable type of equipment of equivalent or greater complexity.	The Bidder ***must*** provide client information for industry acceptability or experience as specified in the purchase description. Company information must include: - Company name and location - Year the company/requested vehicle was created/acquired.	
3.4.3	**Dimensions** a) The overall height of the vehicle must not exceed a maximum of 3.20 m (10.5 ft). b) The overall length of the vehicle must not exceed a maximum of 9.753 m (32 ft). c) The overall width of the vehicle, excluding mirrors and accessories must not exceed a maximum of 2.60 m (102 inches). d) The vehicle must safely enter and exit the fire hall threw an existing garage door opening of 3.65 m (12 feet) wide by 4.87 m (16 feet) high.	The bidder ***must*** provide a dimensionned drawings of the proposed vehicle.	
3.25.3 a)	**Water Pump** The vehicle must be provided with a centrifugal type water pump with a minimum discharge rate of 5,678 litres per minute (1,500 US gallons per minute) at 1,034kPa (150 psi).	Substantive information.	

3.25.4 b)	**Water Tank** The water tank must have a minimum usable capacity of 2,600 litres (687 US gal).	Substantive information.	
4.3.3 a)	**Maintenance Manuals** Maintenance Manuals must be in English and French.	Substantive information	

Proposed Equivalents			
PD Reference	**PD Requirement**	**Bid Evaluation Requirement**	**Location in Bid Proposal**