

**PART A**

**BID SUBMISSION**

**FORM A: BID**  
(See B8 )

1. Project Title SUPPLY & DELIVERY OF A 32 FOOT FIRE RESCUE APPARATUS

2. Bidder

\_\_\_\_\_  
Name of Bidder

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

(Mailing address if different)

\_\_\_\_\_  
Street or P.O. Box

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

The Bidder is:

(Choose one)

☐ A sole proprietor

☐ A partnership

☐ A corporation

carrying on business under the above name.

3. Contact Person

The Bidder hereby authorizes the following contact person to represent the Bidder for purposes of the Bid.

\_\_\_\_\_  
Contact Person

\_\_\_\_\_  
Title

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Facsimile Number

4. Definitions

All capitalized terms used in the Contract shall have the meanings ascribed to them in the General Conditions and D2.3 unless the context otherwise requires.

5. Offer

The Bidder hereby offers to perform the Work in accordance with the Contract for the price(s), in Canadian funds, set out on Form B: Prices, appended hereto.

6. Commencement  
of the Work

The Bidder agrees that no Work shall commence until he is in receipt of a Purchase Order authorizing the commencement of the Work.

Template Version: G320040301

7. Contract

The Bidder agrees that the Bid Opportunity in its entirety shall be deemed to be incorporated in and to form a part of this offer notwithstanding that not all parts thereof are necessarily attached to or accompany this Bid Submission.

8. Addenda

The Bidder certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Contract:

No.	_____	Dated	_____
	_____		_____
	_____		_____

9. Time

This offer shall be open for acceptance, binding and irrevocable for a period of sixty (60) Calendar Days following the Submission Deadline except that the availability of goods known as “demos” may be subject to bona fide prior sale.

10. Signatures

In witness whereof the Bidder or the Bidder's authorized official or officials have signed this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Signature of Bidder or  
Bidder's Authorized Official or Officials

\_\_\_\_\_

\_\_\_\_\_  
(Print here name and official capacity of individual whose signature appears above)

\_\_\_\_\_

\_\_\_\_\_  
(Print here name and official capacity of individual whose signature appears above)

**FORM B: PRICES**

(See B8)

**SUPPLY & DELIVERY OF A 32 FOOT FIRE RESCUE APPARATUS**

**UNIT PRICES**

When entering prices into the table below, **prices shall include** Tire tax.

When entering prices into the table below, **do not include**  
Federal and Provincial Taxes (Goods And Services Tax (GST) and Manitoba Retail Sales Tax (PST)).

These taxes shall be extra ( see clause B8.1.1)

<b>I T E M</b>	<b>DESCRIPTION</b>	<b>SPEC. REF.</b>	<b>U N I T</b>	<b>Q U A N</b>	<b>UNIT PRICE</b>
<b>1</b>	<b>32 Foot Fire Rescue Apparatus</b>	05 - 041	Ea	1	<b>\$</b> _____

TOTAL BID PRICE (GST and PST extra) (in figures) **\$** \_\_\_\_\_

(in words) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Name of Bidder

## **FORM N: DETAILED SPECIFICATIONS 05 - 041**

### **32 FOOT FIRE RESCUE APPARATUS**

#### **1.0 INTENT**

- 1.1 It is the intent of these specifications to describe a front engine, rear wheel drive, walk around 32 foot fire rescue apparatus.
- 1.2 The walk around rescue fire apparatus, hereinafter referred to as the apparatus, shall be the manufacturer's latest "demo" model as may be modified by these specifications. The apparatus shall be no older than a 2004 year model with less than 10,000 kilometers.
- The apparatus shall be furnished complete and ready for use. Any parts not specifically mentioned but which are required to complete and place the apparatus in successful operation shall be furnished as though specifically mentioned in these specifications.
- The complete apparatus, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards an engineering practice of the industry.
- 1.3 The ratings specified herein state the minimum values acceptable to the City, not implying that those values are sufficient for the design of the particular apparatus being Bid.

#### **2.0 STANDARDS**

##### **2.1 Listing of Standards:**

The following standards with latest revisions form an integral part of these specifications and any conflict with the specifications shall be brought to the attention of the Contract Administrator in accordance with B3. Enquiries.

- 2.1.1 National Standards of Canada No. CAN/ULC-SS15-M88.
- 2.1.2 United Nations Agreement, Standard for Protection of cab Occupants, regulation # 29 (also known as European Crash Test Standards)
- 2.1.3 National Fire Protection Association Standard NFPA 1901 (current edition)
- 2.2 All applicable SAE standards form an integral part of the chassis specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.3 The apparatus shall comply with the Canada Motor Vehicle Safety Act and the Manitoba Highway Traffic Act and all regulations thereunder.

#### **3.0 QUALIFICATIONS OF MANUFACTURER**

- 3.1 The manufacturer of the apparatus shall have a minimum of three (3) years continuous experience manufacturing apparatus of the type being offered.
- 3.2 The manufacturer shall have in effect a complete and documented quality control program ensuring compliance with all applicable standards.
- 3.3 The chassis shall be manufactured in an ISO 9002 certified facility.
- 3.4 The manufacturer of the apparatus shall have successfully demonstrated the operation of the type of apparatus being offered in cold weather climatic conditions.
- 3.5 Bidders shall provide, within three (3) Business Days of a request by the Contract Administrator:
- 3.5.1 a detailed description of the manufacturer's qualifications and experience;

- 7.2 State the **tare weight** of the apparatus being Bid:

7.2.1 Front

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7.2.2 Rear

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7.2.3 Total

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7.3 State the **weight distribution** ( in percentage) of the apparatus with the compartments filled:

7.3.1 Front (in percent)

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7.3.2 Rear (in percent)

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7.4 State the following dimensions:

7.4.1 Overall width – 102 inches (2,591 mm) maximum. State width.

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7.4.2 No part of the vehicle, including lights, shall exceed the maximum overall height specified.

Overall height – 122 inches (3,099 mm) maximum. State height.

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7.4.3 Overall length – 390 inches maximum. State length.

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7.4.4 Wheel base- preferred 187 inches, axle to axle. State wheelbase.

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7.4.5 Ground clearance – 8 inches (203 mm) minimum. State clearance.

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7.4.6 Approach and departure angle – nominal 10°.

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7.5 State the vehicle turning radius, to-wall, measured as per SAE J695-35 ft. (10.7 m) maximum. Tighter turning radius is preferred. State turning radius.

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**8.0 ENGINE AND ENGINE EQUIPMENT**

8.1 Engine – 6 cylinder, 4 cycle in-line diesel engine, Cummins or equal. Must be able to meet 2004 EPA Emission Standards.

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8.1.1 Engine horsepower – The engine shall provide sufficient horsepower and RPM to enable the unit to meet and exceed its rated performance.

All applicable power deductions and parasitic losses associated with the specified equipment shall be considered as required.

Certification must be provided to demonstrate acceptable ratings and performance.

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8.1.2 Engine location – over the front axle.

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8.1.3 Engine governor – electronic, compatible with fire apparatus operation.

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8.2 Oil drain plug – magnetic type.

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8.3 Oil filter:-

8.3.1 As recommended by the engine manufacturer, full flow, spin-on filter complete with an electrical bypass indicator and dash mounted indicator lights.

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8.3.2 The filter shall be remote mounted such that it is easily accessible for servicing from underneath the vehicle.

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**8.4 Fuel filter:**

8.4.1 Primary – As recommended by the engine manufacturer, spin-on filter, remote mounted on the chassis frame such that it is easily accessible for servicing.

8.4.2 Secondary (if recommended) – spin-on filter complete with an electrical bypass indicator and dash mounted indicator lights. The filter shall be remote mounted on the chassis frame such that it is easily accessible for servicing.

8.5 Starter – 12 volt electric. The starter shall be shielded from exhaust heat where required.

8.6 Air cleaner – heavy duty replaceable element, dry type, as recommended by the engine manufacturer.

**9.0 ENGINE COOLING SYSTEM**

9.1 The engine cooling system shall be in accordance with the engine manufacturer's recommendations for front-engine fire apparatus application and an ambient temperature range of 95°F (35°C) to -45°F (-43°C).

9.1.1 The cooling system must be a type which is used with 2004 EPA compliant engines. The cooling system shall be of adequate capacity to maintain the coolant temperature within the recommended range during operation of the fire pump and under high ambient temperature conditions without the use of an auxiliary cooler.

9.1.2 The coolant temperature shall not exceed 200°F (93°C) with the engine operating at maximum capacity for extended periods of time. The normal operating temperature of the coolant system shall be approximately 180°F (92°C).

9.2 Radiator – pressurized type with non-corrosive high temperature composite top and bottom tanks with surge tank or coolant recovery system.

9.3 Fan drive – thermostatically controlled fan clutch, viscous type or air clutch preferred.

9.4 Coolant – ethylene glycol based extend life coolant protected to -35°F (-37°C) compatible with the engine.

9.4.1 Coolant filter – spin-on type, as recommended by the manufacturer.

9.5 Hoses – as recommended by manufacturer.

9.5.1 Hose clamps – spring loaded, constant torque type.

**10.0 ELECTRICAL SUPPLY SYSTEM**

10.1 12 volt automotive style electrical supply system.

10.2 Batteries – as recommended by the manufacturer considering load requirements and severe use c/w top mounted steel stud terminals and with removable vent caps.

10.2.1 Battery location:



- a) Batteries shall be located in an enclosed battery tray within close proximity to the engine. \_\_\_\_\_
- b) The battery box shall be fully enclosed, vented and corrosion resistant. \_\_\_\_\_
- c) The bottom of the battery box shall be dry deck lined. \_\_\_\_\_
- d) The batteries shall be protected from road spray.  
Preferable location – back end of cab, battery box mounted on top and across the frame. State location. \_\_\_\_\_
- e) Within cab battery access required. \_\_\_\_\_

10.2.2 Battery cables – 3/0 gauge, color coded welding type cable, with connector ends soldered and sealed with heat shrink tubing at all terminal connectors. \_\_\_\_\_

10.3 Battery charging system – on-board system with a 0 – 20 amp rated (preferred) automatic charger for charging of the batteries from an external 120 volt power supply. \_\_\_\_\_

10.3.1 Charging system plug-in – automatic ejector type with a 20 amp receptacle mounted on the rear of the apparatus body on the left side, 60 to 80 inches (1,524 – 2,032 mm) above ground level. \_\_\_\_\_

10.4 Ground wire:

10.4.1 The electrical wiring harness shall have a dedicated ground wire running the full length of the truck is preferred. This ground wire shall be connected directly to the battery negative post. \_\_\_\_\_

10.4.2 All electrical systems shall be grounded to this ground wire. \_\_\_\_\_

10.4.3 The total resistance of this ground wire shall not exceed 0.2 volts drop at any point with all circuits turned on. The conventional grounding system using the frame shall be maintained. Weather tight junction boxes shall be provided at the dash, pump panel and the rear of the truck. \_\_\_\_\_

10.5 Alternator:

10.5.1 Leece Neville 270 or equal alternator minimum with compatible drive system for full load capacity. State make and model. \_\_\_\_\_

10.5.2 The alternator shall be shielded from exhaust and engine heat where required. \_\_\_\_\_

10.5.3 The alternator shall be sufficient to exceed the electrical demands of the vehicle under full load. \_\_\_\_\_

10.6 Power disconnect:

10.6.1 Power to all electrical systems shall be wired through a power disconnect system with the master switch or switches located in the cab for operation by the driver. \_\_\_\_\_

10.6.2 The system shall be designed to prevent alternator damage in the event that the master switch is placed in the off position while the engine is running. \_\_\_\_\_

10.6.3 State details of the power disconnect system.

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**11.0 FUEL SYSTEM**

11.1 Fuel tank – minimum 40 imp. gallons (182 L) capacity.

11.2 Fuel transfer pump is required.

11.2.1 Engine manufacturer shall confirm compliance and need for a fuel transfer pump system.

11.2.2 The fuel system circuit should be a fuel tank, fuel transfer pump, primary filter, secondary filter to engine.

11.2.3 The fuel line shall be check valved to prevent fuel leak back to tank.

**12.0 EXHAUST SYSTEM**

12.1 Horizontal muffler and exhaust, aluminized or stainless steel.

12.2 Tailpipe:

12.2.1 Located on the right side of the apparatus suitable for use with an exhaust extraction system.

12.2.2 The tailpipe shall be 90° to the rubrail, shall extend a minimum of 1/2 inch (13 mm) beyond the rubrail and shall be 3 inches (76 mm) below the rubrail.

12.2.3 Hanger brackets shall be a minimum of 18 inches (457 mm) from the rubrail.

12.2.4 The tailpipe configuration is intended for use with a “Plymovent” automatic exhaust disconnection system and shall include the installation of the appropriate adapter.

**13.0 TRANSMISSION**

13.1 Allison World transmission model EVS3000P (minimum), 5 speed.

13.1.1 Torque converter –as recommended by the manufacturer

13.2 Shifter – As recommended by the manufacturer

13.3 Transmission oil filter – as recommended by the manufacturer, full flow filter complete with dash mounted bypass indicator lights preferred.

13.4 Drain plug – magnetic type.

13.5 Oil level dipstick – easy access steel ribbon bayonet type with high and low level markings.

13.6 PTO opening – required.

13.7 Jacobs Engine Brake.

**14.0 DRIVE SHAFTS**

14.1 Preferred Spicer 1810 Series drive shafts with Glidecoat splines. \_\_\_\_\_

14.2 Adequate clearance shall be provided to allow greasing of the drive shaft U-joints from underneath the vehicle. \_\_\_\_\_

## 15.0 **AXLES AND SUSPENSIONS**

### 15.1 Front axle:

15.1.1 Rockwell/ Meritor with 45 degree cramp angle and capacity of axle to exceed actual load carried by a minimum 10%.

15.1.2 Minimum axle capacity 18,000 lbs (8,182 kg), c/w oil lubricated wheel bearings. State front axle capacity. \_\_\_\_\_

### 15.2 Front suspension –to match the front GAWR.

15.2.1 State make and model of front suspension being Bid  
\_\_\_\_\_

15.3 Shock absorbers, front – heavy duty, double acting. \_\_\_\_\_

### 15.4 Rear axle:

15.4.1 Rockwell/Meritor single speed axle. Axle to exceed actual load carried by 10%.

15.4.2 Minimum capacity of axle 23 000 lbs (10 433 kg).  
State rear axle capacity. \_\_\_\_\_

15.4.3 Drive ratio – for approximately 62 MPH (100 km/h). \_\_\_\_\_

15.4.4 Differential drain plugs – magnetic type. \_\_\_\_\_

### 15.5 Rear suspension –with capacity to match the rear GAWR.

15.5.1 State make and model of rear suspension being Bid  
\_\_\_\_\_

## 16.0 **WHEELS AND TIRES**

### 16.1 Front:

16.1.1 Front wheels - Aluminium. \_\_\_\_\_

16.1.2 Front tires – as recommended by OEM. State. \_\_\_\_\_

### 16.2 Rear:

16.2.1 Rear wheels - Aluminium. \_\_\_\_\_

16.2.2 Rear tires Mud and Snow – as recommended by OEM. State. \_\_\_\_\_

## 17.0 **BRAKE SYSTEM**

17.1 Full air service brake system with spring loaded parking brakes and an anti-lock system.

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17.2 Antilock braking system:

17.2.1 Meritor Wabco four (4) channel system with diagnostic memory, providing antilock brake control and traction control on both axles.

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17.3 Brakes, front and drum rear – Rockwell preferred.

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17.4 Slack adjusters –automatic type as recommended by the manufacturer.

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17.5 Parking brake – spring set parking brakes on rear service brake system.

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17.6 Air lines – color-coded, reinforced nylon tubing.

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17.7 Air compressor:

17.7.1 Water cooled, pressure lubricated compressor, minimum 16 cfm capacity.

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17.7.2 The compressor air intake shall be plumbed into the engine air intake after the air cleaner.

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17.8 Air dryer – heated, spin-on desiccant type, Meritor Wabco System Saver 1200 E.

17.9 Moisture ejector – Bendix or equal, heated, automatic, in wet tank only. State model of ejector.

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17.10 Drain valves:

17.11 Cable operated, in each air tank except the wet tank.

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17.12 The cables shall be vinyl coated and shall terminate at the bottom edge of the cab or at the rub rail on the body.

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17.13 Auxiliary air reservoir:

17.13.1 To operate the vehicle air horns and to function as an emergency parking brake release.

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17.13.2 Nominal 1200 in<sup>3</sup> (20 L) air reservoir.

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17.13.3 The reservoir shall be isolated from the brake system reservoir and shall be plumbed such that it is charged with air along with the brake system reservoir.

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17.13.4 A pressure protection valve, set at approximately 90 psi (6.2 Bar), shall maintain air pressure in the auxiliary reservoir.

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17.13.5 A dash mounted control, located directly below the main parking brake release, shall allow the air in the reservoir to be used to release the parking brakes.

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a) The control shall be non-detented, spring return type such that it cannot be left engaged in the brake release position.

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17.14 External air inlet:

17.14.1 Plumbed to the inlet side of the air dryer such that the air brake system can be charged from an outside source without starting the engine.

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17.14.2 A check valve shall be located in the inlet line.

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17.14.3 The air inlet shall be a 3/8 inch (9.5 mm) NPT male fitting, capped, and shall be located on the left side of the chassis cab.

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17.15 Air line sources – all air lines shall be sourced after the air dryer.

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17.16 110 volt air compressor:

17.16.1 On-board air compressor for maintaining pressure in the air reservoirs when the vehicle is parked in a fire hall.

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17.16.2 Electrical power for the compressor shall be provided through the charging system plug-in ( see 10.3.1 ).

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## 18.0 **STEERING**

18.1 Hydraulic power steering.

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18.2 Steering column – tilt/telescopic preferred.

18.3 Steering wheel – padded type.

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## 19.0 **FRAME**

19.1 Steel channel rail frame designed and constructed to match the GVWR and the application of the vehicle as a triple combination pumper fire apparatus.

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19.1.1 Resisting bending moment – 1,700,000 inch-lbs per rail minimum. State bending moment.

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19.2 Front frame extension

19.2.1 Bolt on as required for 19.1.1

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19.2.2 Trash hose storage compartment

a) located in front bumper extension.

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b) Approximately 21 inches x 12 inches x 12 inches deep, to accommodate 50 feet of 1 3/4 inches hose with nozzle.

c) C/W aluminum cover

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19.3 Front bumper – polished stainless steel bumper bolted to the chassis frame.

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19.3.1 Corner indicators – blaze orange, flexible sight rods, approx. 24 inches (610 mm) high.

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19.4 Front tow hooks:

19.4.1 Two (2) hooks or eyes, bolted to the chassis frame.

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- 19.4.2 A crossmember shall be located in the chassis frame at the tow hook location (use of the front bumper as a crossmember is not acceptable).

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19.5 Rear tow hooks:

- 19.5.1 Two (2) hooks or eyes, bolted to the chassis frame.

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- 19.5.2 A crossmember shall be located in the chassis frame at the tow hook location. The tow hooks shall be easily accessible.

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**20.0 CAB AND CAB EQUIPMENT**

20.1 Cab – Overall Design and Construction:

- 20.1.1 Cab over design four-door, fully enclosed.

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- 20.1.2 Low entry, standard configuration for six (6) seating capacity.

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- 20.1.3 Bidders shall provide drawing(s) showing the cab interior layout and relevant dimensions, within three (3) Business Days from request of the Contract Administrator

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- 20.1.4 Construction – corrosion resistant aluminum.

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- 20.1.5 Insulating material:

- a) To prevent galvanic corrosion shall be provided at all possible areas of contact between aluminum and steel.
- b) The insulation material used shall be nonporous.

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20.2 Cab Interior:

- 20.2.1 Raised rear roof style cab.

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- 20.2.2 The cab interior height shall be sufficient for an average firefighter to stand erect in the rear portion, and a cab width of 87 inches

- 20.2.3 Minimum cab interior length – 134 inches.

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- 20.2.4 Fixed, tinted glass windows should be located in the front and sides of the cab as permitted by the highway traffic act.

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20.3 Entrance doors:

- 20.3.1 Two (2) per side.

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- 20.3.2 Door opening height:

- a) Front door –  
Maximum height of cab (determined by structural requirements of manufacturer). State maximum height of front door.
- b) Rear door –  
Maximum height of cab (determined by structural requirements of manufacturer). State maximum height of rear door.

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- 20.3.3 Door handles / latches, exterior – as recommended by manufacturer.

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20.3.4 Door handles / latches, interior – flush-mounted, paddle handle type, located such as to prevent accidental actuation.

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20.3.5 Door latch striker pins – recessed such as not to protrude into the door opening area.

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20.3.6 Door hinges – as recommended by manufacturer.

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20.3.7 Weather stripping – automotive style.

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20.3.8 Entry assist handles – grab handles as per NFPA standard.

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20.4 Entrance steps

20.4.1 All front and rear entrance steps designed for ease of entry and exit.

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20.4.2 The entrance steps shall provide a low entry step height with the bottom steps no more than 20 inches (559 mm) above ground level.

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20.4.3 Step width - should be a minimum 22 inches (559 mm) wide.

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20.4.4 Step Depth - The step surfaces shall be nominally 10 inches (254 mm) deep to ensure a safe stepping area for firefighter in turnout boots.

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a) The step surfaces shall be non slip material.

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20.5 Rear entrance steps:

20.5.1 Designed to allow personnel to step out of the cab in a forward position.

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20.5.2 The location of the rear entrance steps should be such as to provide adequate floor space between the step wells and the outboard rear seats to allow seated personnel to rest their feet at floor level.

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20.5.3 Step width, rear doors – 20 inches (508 mm) minimum.

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20.5.4 Step Depth - Step surfaces should be nominally 10 inches (254 mm) deep to ensure a safe stepping area for firefighter in turnout boots.

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a) Rear step surfaces shall be non slip material.

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20.6 Step area lights:

20.6.1 Recessed, side mounted light in each entrance step area.

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20.6.2 The lights should be activated by door switches.

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20.7 Seats:

20.7.1 Five (5) seats as follows.

a) All seats shall be Seats Inc. Model 911 with grey, heavy duty vinyl (preferred) upholstery.

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b) Modura cloth inserts must be approved by the Contract Administrator to be acceptable.

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20.7.2 Drivers seat – conventional high-back, fully adjustable air suspension seat upholstered in grey Mordura.

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20.7.3 Officer's seat – fully adjustable air suspension seat preferred with a Zico walkaway SCBA bracket.

\_\_\_\_\_

20.7.4 Air supply for the seats should be taken from the auxiliary air reservoir.

\_\_\_\_\_

20.8 Rear seats:

20.8.1 Three (3) forward facing seats are preferred located along the back of the cab.

\_\_\_\_\_

20.8.2 The rear seats shall be equipped with Zico walkaway brackets complete, 3-point mount, collision restraint straps, c/w removable backrest centre piece.

\_\_\_\_\_

20.9 Zico walkaway brackets for the officer's and rear seats shall be compatible with 45 minute high pressure air bottles and S.C.B.A. harness.

\_\_\_\_\_

20.10 Seat belts – three-point, retractable type for all seats, with the exception of the rear middle seat which may be equipped with a two-point retractable type seat belt.

\_\_\_\_\_

20.11 Floor covering – heavy duty rubber, or approved equivalent.

\_\_\_\_\_

20.12 Insulation:

20.12.1 Full insulation and vinyl padding package for walls and ceiling.

\_\_\_\_\_

20.12.2 Insulation shall be non-hygroscopic, mildew proof and fire retardant.

\_\_\_\_\_

20.12.3 Vinyl should be grey, heavy duty automotive type.

\_\_\_\_\_

a) Floor insulation – Option price for spray foam applied to entire under side of floor.

\_\_\_\_\_

20.13 Headliner – grey, heavy duty vinyl with padding.

\_\_\_\_\_

20.14 Windows:

20.14.1 Tinted safety sunglass for all windows including windshield.

\_\_\_\_\_

20.14.2 Door windows, rear doors – fully opening roll-up windows. or sliding type windows

\_\_\_\_\_

20.15 Window fans: – If recommended by the manufacturer to assist in defrosting the windows: State if recommended.

\_\_\_\_\_

**If required** .....fill in .....20.15.1 , 20.15.2 , 20.15.3 .....with appropriate response.

**If not required** .....fill in .....20.15.1 , 20.15.2 , 20.15.3 .....with **N/R**

20.15.1 Four (4) auxiliary defroster fans with metal blade guards and individual switches.

\_\_\_\_\_

20.15.2 Two (2) located at the front windshield and two (2) in the rear section.

\_\_\_\_\_

20.15.3 A master power switch for all fans shall be provided on the driver's switch panel. ( Note 20.18.1 ).

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20.16 Sunvisors:

20.16.1 Full windshield interior sun visors.

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20.16.2 Two (2) swivel visors. One positioned in the front of the driver and officer.

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20.16.3 The two (2) swivel visors swivel to provide coverage of the front door windows. A centre visor fills in the gap that is found between the two outer visors.

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20.17 Mirrors, exterior:

20.17.1 West coast style chrome finish mirrors c/w convex mirror built into the mirror head, electric defroster.

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20.17.2 Driver operable remote controls are preferred. State if offered.

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20.18 Heating/Ventilating/Air Conditioning System

20.18.1 Front heater and air conditioner

- a) High output, fresh air type with multi-speed fan, controlled by the driver.
- b) Outlets shall be provided at dashboard level and in the drivers and officers foot area to ensure occupant comfort when heat is required.
- c) Defroster outlets shall be provided to defrost entire windshield and the drivers and officers side windows.
- d) Coolant flow (preferred) in the heater circuit shall be passively controlled by a dash mounted heat control device.
- e) The system/s shall meet or exceed the BTU(s) required to heat/cool the cab for the temperatures common to the City of Winnipeg, -40°F (-40°C) to 95°F (35°C). State if meets or exceeds.

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20.18.2 Rear heater and air conditioner:

- a) Shall meet or exceed the BTU requirements necessary to ensure floor area heating and cooling the rear of the cab to ensure occupant comfort and shall be separately controlled from the front of the cab.

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20.18.3 The Heating/Ventilation/Air Conditioning systems (front and rear) shall dehumidify the air in the defrost mode to assist in preventing the fogging or frosting of the windows due to excess humidity from wet firefighter clothing.

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20.19 Dome lights

20.19.1 Minimum four (4) lights, two (2) in the front and two (2) in the rear portion of the cab to fully illuminate the cab interior.

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20.19.2 All lights should be operated by door switches.

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20.19.3 Each light should be equipped with an individual switch at the light.

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21.0 INSTRUMENTATION,

21.1 Full instrumentation on a removable or flip down panel, or pull-out gauges.  
State if removable , flip down or pull out.

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21.2 Instrumentation should include, but not be limited to:

a) Speedometer / odometer – metric.

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b) Tachometer.

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c) Oil pressure gauge.

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d) Coolant temperature gauge.

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e) Transmission oil temperature gauge or warning light.

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f) Low oil pressure / high water temperature warning light(s).

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g) Voltmeter.

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h) Fuel level gauge.

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i) Air reservoir pressure gauge(s).

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j) Engine hourmeter.

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k) Air cleaner restriction indicator gauge.

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l) Engine oil filter bypass indicator lights.

---

m) Fuel filter bypass indicator lights.

---

n) Transmission filter bypass indicator lights if recommended.

---

21.3 Ignition switch – keyless type.

---

21.4 Doors- should be keyed alike.

---

21.5 OEM Engine shut down system operational with

21.5.1 Coolant, oil pressure, transmission oil temperature.

---

21.5.2 Should be audible with warning light.

---

21.6 Radio- should include a Weatherband AM/FM/CD stereo, mounted inside  
of dash, controlled by the driver.

---

## **22.0 RESCUE BODY**

22.1 Rescue body module:

22.1.1 Shall be stainless steel and designed specifically for emergency  
vehicle use.

---

22.1.2 No stock or catalogue type extrusions are permitted and  
documentation must be provided to verify this requirement.

---

22.1.3 The module's structure must be a roll cage design to enhance safety  
and resist crushing.

---

22.1.4 The body module shall be of sufficient strength to support the fully  
loaded vehicle if overturned.

---

- a) Overturn strength shall be demonstrated by third party certification prior to delivery if requested by the Contract Administrator.

22.1.5 All parts of the body shall be of welded construction where applicable.

22.1.6 The body shall be mounted to the frame by Grade 8, hardened steel U-bolts.

22.1.7 Lower body rubrails shall be spaced off the body and constructed to permit ease of repair.

22.1.8 Rear Bumper and step assembly shall protect the body from damage in the event of a low speed collision.

22.1.9 Wheel housings shall be lined and provide extensions to protect the body from wheel wash. This liner and extension must be removable.

22.1.10 The roof shall be designed to permit fire fighters to walk on safely.

22.1.11 Two(2) - Exterior floodlights, tripod mounted and wired to be plugged into the exterior 120 volt system.

- a) The floodlights shall come complete with circuit breakers at the electrical panel.

22.1.12 Exterior flood and loading lights shall be provided to adequately light the scene on both sides and the rear of the unit

- a) Describe lighting.

22.2 The approximate body module dimensions should be:

22.2.1 Exterior Height - 113 inches maximum. State height.

22.2.2 Exterior Width – 100 inches maximum. State width.

22.2.3 Exterior Length- 220 inches maximum. State length.

22.3 Ladder – Roof accessibility, mounted on the right rear of body.

### 23.0 **COMPARTMENT DOORS**

23.1 Shall be R-O-M or equal as approved by the Contract Administrator.

23.2 All compartment doors shall be keyed alike.

### 24.0 **STORAGE COMPARTMENTS -**

**Note:** The following description is intended only as a guide and **should not** preclude manufacturers from recommending alternatives.

24.1 Compartment L1 - Located on the driver's side behind the cab.

24.1.1 Shall transverse the body to compartment R2.  
Approximate measurements of 66 inches height x 48 inches width x Full width above frame.

24.1.2 Containing: 1 Stokes basket and 2 backboard storage.

24.2 Compartment L2 – located forward of the rear wheels on the driver's side.

24.2.1 Shall transverse to compartment R2 with approximate measurements of 66 inches height x 48 inches width x Full width above frame.

---

24.2.2 Containing: 2 Pull Out Trays.

---

24.3 Compartment L3 – located over the rear wheels on the driver's side.

24.3.1 Measuring approximately 35 inches height x 60 inches width x 27 inches depth.

---

24.3.2 Containing: 1 Pull Out Tray.

---

24.4 Compartment L4 – located on the driver's side behind the rear wheels

24.4.1 Approximate measurements of 68 inches height x 60 inches width x 27 inches depth.

---

24.4.2 Containing: 2 Pull Out Trays.

---

24.4.3 1 shelf.

---

24.5 Compartment B1 – Located at the rear

24.5.1 Approximate measurements of 47 inches height x 42 inches width x 60 inches depth.

---

24.5.2 Containing 1 Roll out, full extension tray.

---

24.6 Compartment R4 - Located passenger side, behind the rear wheels

24.6.1 Approximate measurements of 68 inches height x 60 inches width x 27 inches depth.

---

24.6.2 Containing: 2 Pull Out Tool Boards.

---

24.6.3 1 shelf.

---

24.7 Compartment R3 - Located passenger side, over the rear wheels

24.7.1 Approximate measurements of 35 inches height x 60 inches width x 27 inches depth.

---

24.7.2 Containing: 1 Pull Out Tray.

---

24.8 Compartment R2 – Located passenger side forward of the rear wheels.

24.8.1 Shall transverse to compartment L2 with approximate measurements of 66 inches height x 48 inches width x Full width above frame.

---

24.8.2 Containing: 2 Pull Out Trays.

---

24.9 Compartment R1 - Located on the passenger side behind the cab.

24.9.1 Shall transverse the body to compartment L1. Approximate measurements of 66 inches height x 48 inches width x Full width above frame.

---

- 24.9.2     Containing: 1- Pull Tray  
            1 Stokes stretcher and 2 back Board Storage.

---

- 24.10     Lighting – adequate protected strip lighting to light the interior of the compartments and each shelf included within.

---

- 24.10.1    Shall be designed so that only the compartment with the door open shall light.

---

- 24.11     Compartment floor and shelf decking – black Turtle Tile

- 24.12     Shelf lining – black ribbed rubber.

---

- 24.13     Pull and Drop Trays – unless otherwise specified trays shall be approximately 3 inches height, smooth aluminium plate and be engineered to support a minimum of 500 lbs.

---

- 24.13.1    Certification must be provided to verify load capacity of the Pull and Drop trays.

---

- 24.14     Roll Out Trays - unless otherwise specified trays shall be approximately 3 inches height, smooth aluminium plate and be engineered to support a minimum of 500 lbs.

---

- 24.14.1    Certification must be provided to verify load capacity of the Roll Out Trays.

---

- 24.15     Shelf – unless otherwise specified should be approximately 1 1/2 inches in height, mounted on adjustable track and be capable of supporting 250 Lbs. Minimum.

---

- 24.16     Wheel wells

- 24.16.1    Equipped with full liners.

---

- 24.16.2    Each wheel well shall have two (2) SCBA storage compartments capable of each holding one 45 minute high pressure SCBA cylinder.

---

- 24.16.3    The compartments shall have a slam lock weather tight door.

---

- 24.16.4    Shielding shall be provided on the in-board side to prevent road spray from entering enclosed wheel well or apparatus body.

---

## 25.0     **ELECTRICAL GENERATING SYSTEM**

- 25.1     Generator

- 25.1.1    A 35 kw direct drive PTO generator.

---

- 25.1.2    Onan preferred. State type.

---

- 25.1.3    NFPA 1901 compliant.

---

- 25.1.4    Generator to be mounted on a steel frame in a manner as to provide adequate ground clearance and protected from road spray.

---

- 25.2     A generator instrument panel shall provide the following:

- a)   Hour meter.

---

- b) Ammeters. \_\_\_\_\_
- c) Voltmeter. \_\_\_\_\_
- d) Frequency meter. \_\_\_\_\_
- e) Transmission temperature warning light. \_\_\_\_\_
- f) Instruction plaque (essential operating instructions). \_\_\_\_\_

**25.3 PTO indicator lights in the cab**

- 25.3.1 Flush mounted weatherproof duplex receptacles with integral power indicator lights (minimum 4 receptacles). \_\_\_\_\_

- 25.3.2 Marked receptacles shall be provided.

- a) Two on driver's side. \_\_\_\_\_
- b) Two on passenger side. \_\_\_\_\_

- 25.4 A 12 volt powered electrical cable reel shall be installed c/w 200 feet of electrical cabling (10/3) with a twist lock plug on the end. \_\_\_\_\_

- 25.5 There shall be a 36-inch grounding stake with adequate system wiring and a slide hammer feature. \_\_\_\_\_

**26.0 SHORELINE UTILITY POWER**

- 26.1 An appropriate two-wire c/w ground, 115 ac wiring system that is separate from the 12 volt system, incorporating ground fault interrupter systems and a 20 amp circuit breaker shall be installed as per Manitoba Code.

**27.0 LIGHT TOWER**

- 27.1 A Wilburt NS15-9000 or equal light tower shall be installed.

State make and model. \_\_\_\_\_

**28.0 RESCUE EQUIPMENT**

The following equipment shall be supplied as part of the apparatus and shall be mounted where applicable.

**28.1 Smoke ventilator**

One (1) RamFan GF-165 positive pressure ventilator with 5.5 H.P. (4.1 kW) Honda engine (no substitutes).

*(RamFan Corporation, 2746 Via Orange Way, Spring Valley, California, 91978, Tel: (619) 670-9590).* \_\_\_\_\_

- 28.1.1 The smoke ventilator shall be mounted in compartment L1. \_\_\_\_\_

**28.2 Pike Poles:**

- 28.2.1 One (1) – 6 foot (1.8 m) pike pole with fibreglass handle. \_\_\_\_\_

- 28.2.2 One (1) – 8 foot (2.4 m) pike pole with fibreglass handle. \_\_\_\_\_

- 28.2.3 One (1) – 10 foot (3.0 m) pike pole with fibreglass handle. \_\_\_\_\_

28.3 Axes and Brackets

28.3.1 Two (2) 6 lb. (2.7 kg) pickhead fire axes with fibreglass handles.

\_\_\_\_\_

28.3.2 Axe mounting brackets – Zico or equal, required for each axe.  
Bracket locations to be determined. State type.

\_\_\_\_\_

28.4 Sledgehammer and Brackets

28.4.1 One (1) 6 lb. (2.7 kg) sledgehammer with fibreglass handle.

\_\_\_\_\_

28.4.2 Sledgehammer mounting bracket – Zico or equal.  
Bracket location to be determined. State type.

\_\_\_\_\_

28.5 Prybars and Brackets

28.5.1 One (1) – 50 inch (1,270 mm) crow bar.

\_\_\_\_\_

28.5.2 Two (2) Kelly tools.

\_\_\_\_\_

28.5.3 Prybar mounting brackets – Zico or equal.  
Bracket locations to be determined. State type.

\_\_\_\_\_

28.6 Shovels and Brackets

28.6.1 One (1) square mouth shovel.

\_\_\_\_\_

28.6.2 Two (2) No. 10 scoop shovels.

\_\_\_\_\_

28.6.3 Shovel mounting brackets – Zico or equal. Brackets to be mounted  
in the compartment L3 on the upper shelf. State type.

\_\_\_\_\_

28.7 Salvage Covers

28.7.1 Six (6) in total – approx . size 14 feet x 16 feet (4.3 m x 4.9 m)

\_\_\_\_\_

28.7.2 Made from no. 6 yellow Herculite fabric.

\_\_\_\_\_

28.8 Extinguishers and Brackets

28.8.1 One (1) 2 ½ gal. (11 L) hand pump water extinguisher.

\_\_\_\_\_

28.8.2 One (1) 15 lb. (6.8 kg) BC rated CO2 extinguisher.

\_\_\_\_\_

28.8.3 One (1) 20 lb. (9.1 kg) BC rated pressurized dry chemical  
extinguisher.

\_\_\_\_\_

28.8.4 Extinguisher mounting brackets – Zico or equal. Bracket locations to  
be determined. State type.

\_\_\_\_\_

28.9 Door opener – one (1) hydraulic powered door opener with hand pump,  
prybar, hammer and carry bag

*Rabbit Tool by Hurst Jaws of Life (no substitutes).*

\_\_\_\_\_

28.10 Hurst Jaws of Life

28.10.1 Hurst Jaws of Life power unit (or equivalent). State make.

\_\_\_\_\_

a) Manifold spreader.

\_\_\_\_\_

b) 60 inch ram.

c) 24 inch ram.

28.10.2 50 feet of hose

28.10.3 Honda engine.

28.11 Winch – Ramsey 12K, centre mounted on Front Bumper.

28.12 Two-way radio: Note: Mobile radio and accessories to be shipped loose.

28.12.1 One (1) Motorola MCS2000 (UHG conventional trunkable and DVP capable) mobile radio.

28.12.2 Complete with a 5 year warranty (Part #ACW975 AB).

28.12.3 17 foot remote mount cable (Part #W496)

28.12.4 Keylock mount (Part #HLN 6205 A).

## 29.0 ELECTRICAL SYSTEMS, GENERAL

29.1 Electrical wiring for all 12 volt electrical circuits shall be in accordance with SAE standard J1292.

29.1.1 Wires shall be minimum 16 ga., multi-strand copper with cross-linked polyethylene insulation.

29.1.2 All wiring shall be in pre-engineered harnesses with weatherproof, guided pinsnap-together connectors.

29.1.3 All wiring shall be properly secured and routed.

a) All holes required for routing shall be grommetted and sealed as required.

29.1.4 Each circuit shall be colour -coded and marked the entire length of the wire with easily read numbers and/or letters for identification.

29.2 Where crimp-on type electrical connectors are necessary, the connectors shall be crimped and soldered to the wiring, then sealed using heat shrink tubing.

29.3 All soldered connections shall be performed using flux core solder. *(Acid and / or acid core solder shall not be used.)*

29.4 Circuit breakers shall be used in lieu of fuses for all circuits requiring overload protection *(Reset type circuit breakers preferred).*

29.5 All circuit breakers and relays shall be located behind quick removable panels, located to be readily accessible for servicing.

29.5.1 All circuit breakers and relays shall be labelled to indicate their function.

29.6 The electrical distribution panels for the apparatus body

29.6.1 The panels shall be located in an easily accessible location for the maintenance people to access.



29.6.2 The panels shall have a removable weather tight front cover. \_\_\_\_\_

29.6.3 The dedicated ground cable shall have a ground terminal in these panels with sufficient connection point available for all circuits. \_\_\_\_\_

### **30.0 VEHICLE LIGHTING AND WARNING EQUIPMENT**

#### **30.1 Vehicle Lighting - General**

30.1.1 The apparatus shall be equipped with all vehicle lighting equipment required under the Canada Motor Vehicle Safety Act and the Manitoba Highway Traffic Act. \_\_\_\_\_

30.1.2 The apparatus shall have a certified system of optical warning devices that meets or exceeds the requirements of N.F.P.A. 1901 (Current Edition). \_\_\_\_\_

- a) Bidders shall provide a list of all optical warning devices, and their respective mounting locations, being supplied on the apparatus, within three (3) Business Days from request of the Contract Administrator \_\_\_\_\_

30.1.3 All lighting shall be LED unless otherwise specified. \_\_\_\_\_

#### **30.2 Light bar –rotator,**

30.2.1 Clear lens and red filters, located on the front of the cab roof. \_\_\_\_\_

30.2.2 Individual switches shall be provided for the alley lights if included in the light bar. \_\_\_\_\_

#### **30.3 Lights**

30.3.1 Rear warning lights- as per NFPA 1901 Standards (current edition). \_\_\_\_\_

30.3.2 Red flashing lights front two (2). \_\_\_\_\_

30.3.3 Red flashing lights rear two (2). \_\_\_\_\_

##### **30.3.4 Intersection lights**

- a) Two (2) in the side at the front bumper area. \_\_\_\_\_

- b) Two (2) in the rear wheel well area. \_\_\_\_\_

- c) Two (2) in the rear tail board area. \_\_\_\_\_

30.3.5 Arrow stick – c/w controller. The arrow stick shall be mounted in the rear of the body below the hose bed. \_\_\_\_\_

30.3.6 Scene lights – located to provide adequate side and rear scene lighting. \_\_\_\_\_

30.4 Load management system – an automatic electrical load management system shall be required. \_\_\_\_\_

30.5 Taillights – minimum 6 inch (152 mm) diameter lights. \_\_\_\_\_

30.6 Turn signals – as per C.M.V.S.S. and as per N.F.P.A. 1901 (current edition). – ( Ten(10) in total )

30.6.1 Front of Vehicle - mounted left and right.

---

30.6.2 Rear of Vehicle - mounted left and right.

---

30.6.3 Side of Vehicle

a) Front – left and right side of on corner of vehicle.

---

b) Rear – left and right side of on corner of vehicle.

---

c) Side – turn signals located approximately midway of vehicle.  
One (1) on each side of vehicle.

---

30.7 Wig wags – alternately flashing headlights operating on high beam only.

---

30.8 Siren– siren system with one (1) speaker with mounted in the front bumper, spaced as wide apart as possible.

---

30.9 Warning lights and siren controller.

30.9.1 The siren controller shall be mounted with the arrow stick controller mounted to the right of the driver for primary operation by the driver from the normal seated position.

---

30.9.2 The officer's position shall be equipped with a siren tone control switch. This switch when activated shall only be able to change siren tones of siren wail, yelp and electronic air horn.  
*(It will not select stand by or on/off selection).*

---

a) The switch position shall be to the left of the officer.

---

30.10 Air horns – two (2) air horns mounted in the front bumper.

---

30.10.1 The air horns shall be operable from the driver's position via the steering wheel horn activator and from the officer's position via a tow switch.

---

30.11 Back-up alarm – electronic, self-adjusting (87-112 dB) type.

---

30.12 Spotlight

30.12.1 12 volt, heavy-duty hand held spotlight with momentary switch.

---

30.12.2 Dash mounted in the officer area.

---

### 31.0 SERVICEABILITY

31.1 All components of the apparatus requiring regular scheduled servicing or lubrication shall be easily accessible.

---

31.2 The design and construction of the apparatus shall be such that the removal of drive train components including, but not limited to, the engine, transmission and transfer case, can be accomplished without dismantling the apparatus body.

---

### 32.0 COLOR

32.1 The apparatus shall be painted as follows:

32.1.1 Cab – painted two tone

a) Bottom half red to match Dupont C8053U (Candy Apple Red), using a polyurethane enamel paint, Dupont Imron or equal.  
State paint type.

b) Top half white to match Dupont DU 1300 (Super White), using a polyurethane enamel paint, Dupont Imron or equal.  
State paint type.

32.1.2 Apparatus body – painted red to match the bottom half of the cab.

32.1.3 Chassis frame, axles, etc. – painted using Hammerite smooth black corrosion resistant paint.

**32.2 Surface Preparation and Paint Application:**

32.2.1 All surfaces shall be properly cleaned, prepared and primed with a suitable primer prior to painting.

32.2.2 Any caulking of body seams shall be performed prior to painting.  
Caulking material shall be of the highest industry standards.

32.2.3 All mounting holes shall be drilled and deburred and nutserts shall be installed in blind holes prior to painting.

32.2.4 All paint shall be applied in accordance with the paint manufacturer's recommendations.

32.2.5 Painting shall be performed in an atmosphere controlled spray booth.

32.2.6 The cab and apparatus body shall be painted with all trim and hardware removed.

32.3 The apparatus body roll-up doors shall be anodized.

**32.4 Reflective striping:**

32.4.1 Minimum 4 inch (102 mm), white reflective striping, applied to the front, sides and rear of the apparatus in accordance with NFPA requirements for reflective striping.

32.4.2 The reflective striping on the cab rear entrance doors shall incorporate the Fire Department's stylized "**FPS**" logo.  
*(A diagram of the logo shall be provided to the Contractor by the City).*

32.5 The cab interior shall be charcoal grey.

**33.0 NOISE LEVELS**

33.1 The sound level in the cab at all seated positions shall not exceed 80 dB(A), measured in accordance with SAE J336, with the apparatus travelling at any speed up to governed speed with the sirens off and doors and windows closed.

33.1.1 State the sound level in the cab.

**34.0 TESTING AND CERTIFICATION**

34.1 The Contractor shall be responsible for obtaining testing and certification of the apparatus in compliance with the requirements of CAN/ULC-S515-M88

Standard for Automobile Fire Fighting Apparatus, by Underwriters' Laboratories of Canada (ULC).

- 34.2 The Contractor shall provide proof of certification to the City prior to delivery of the apparatus.

### **35.0 DELIVERY**

- 35.1 A Manitoba Vehicle Safety Inspection shall be performed on the apparatus prior to delivery.

- 35.1.1 A valid decal shall be displayed and a safety certificate shall be provided.

### **36.0 MANUALS**

- 36.1 Manuals supplied under this Contract shall be in English and shall be specifically for the apparatus supplied. General purpose manuals are not acceptable.

- 36.2 The manuals shall cover the complete equipment including all components thereof.

- 36.3 The following manuals shall be supplied under this Contract::

- 36.3.1 Operator's manuals – two (2) sets in total.

- 36.3.2 Parts and service manuals, including detailed wiring schematics and preventative maintenance schedules – two (2) sets in total.

- a) The wiring schematics shall identify the location of all relays, switches, etc.

- 36.4 The manuals shall be supplied at the time of delivery of the apparatus.

- 36.5 Diagnostic tool – Prolink diagnostic tool

Complete with software to diagnose the supplied engine, Allison transmission and Rockwell Wabco ABS braking system – one (1) tool in total.

### **37.0 TRAINING**

- 37.1 The Contractor shall provide at their expense, operational and maintenance training by qualified staff for Fire Department Mechanical Services Branch and Training Branch personnel.

- 37.2 The training shall be conducted in separate sessions for each group of personnel. Each session shall be sufficient in duration and shall provide adequate familiarization and orientation on the apparatus, to the satisfaction of the Contract Administrator.

- 37.3 For the purpose of bidding, Bidders should plan on 2 days of training.

- 37.4 The training shall be conducted in Winnipeg at a location to be designated by the Contract Administrator.

- 37.5 State if VHS video tape or CD Rom training aides on the type of apparatus being offered are available.

### **38.0 PERFORMANCE RELIABILITY**

38.1 The responsibility for the design of the complete apparatus, its performance and reliability shall rest upon the Contractor.

---

38.2 The term "repeated failures" (3 times) as determined by the Contract Administrator, as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the apparatus inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, or assembly.

Minor items or ordinary service adjustments are not included, or considered under the scope of "repeated failures", as well as other factors, such as

- a) operational damage due to accidents,
- b) misuse
- c) lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.

38.3 Where the apparatus develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance, at no cost to the City with a reapplied, full warranty.

---

### **39.0 WARRANTY**

39.1 Further to GC.10.01, the warranty on the apparatus shall include:

39.1.1 100% replacement parts and labour at no cost to the City.

---

39.1.2 Shall cover the complete equipment and all parts thereof against any defects of workmanship, construction and materials for three (3) years from the effective date of the Certificate of Total Performance.

---

39.1.3 A new three (3) year warranty period shall be provided for any article that is repaired or replaced under the terms of the "repeated failures" clause (Section 38.0 PERFORMANCE RELIABILITY)

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- a) The new warranty period shall be effective from the date of acceptance of the repaired or replaced article.
- 

39.2 The apparatus is of vital importance to the City in providing essential services and, accordingly, all warranty items brought to the attention of the Contractor by the City shall be rectified expediently.

---

39.2.1 The City reserves the right to effect warranty repairs to the apparatus, at full cost to the Contractor, should the Contractor fail to perform in a timely manner.

---

39.3 In the case where the Bidder proposes that warranty work be performed by a third party **or** by the City of Winnipeg Fire Paramedic Service,

39.3.1 Any work performed by the Fire Paramedic Service's Mechanical Services Branch shall be charged to the Contractor at the Branch's shop rate in effect at the time the work is performed.

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- 39.3.2 The City reserves the right to reject any bid where the proposal for warranty work is deemed unacceptable by the Contract Administrator.

- 39.4 In the case where the Contract Administrator and the Contractor have determined that the repair time will be in excess of five (5) Calendar Days

- 39.4.1 The Contractor shall supply a unit for use, equivalent to the one being offered during the downtime period.
- If the Contractor is unable to provide a unit then the cost of a spare unit from the Winnipeg Emergency Response Service will be billed to the Contractor.

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#### **40.0 PARTS AVAILABILITY**

- 40.1 The Contractor shall have an established dealer/representative located within 10 kilometers of the City of Winnipeg limits.

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#### **40.2 Regular Servicing Parts**

The Contractor's Winnipeg dealer/representative shall stock parts required for regular servicing, as outlined in the manufacturers service and maintenance manual.

---

#### **40.3 Replacement Parts**

Replacement parts shall be made available to the City of Winnipeg within twenty-four(24) hours, consistent with the essential service requirements of the apparatus.

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#### **41.0 LITERATURE**

- 41.1 Bidders shall submit current descriptive, detailed literature within three (3) Business Days of a request by the Contract Administrator.

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**FORM O: QUESTIONNAIRE**

**1.0** STATE – the delivery time of the complete order from the date of official notification of award: (See D5.5)

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**2.0** LIST – any significant features that will be supplied standard on the unit being offered, but were not specifically mentioned in the Detailed Specifications:

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**3.0** LIST – three current users of the offered model:

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**4.0** STATE – the name and location of the established dealer/representative that is within 10 kilometers of the City of Winnipeg:

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**5.0** Does the equipment being offered meet or exceed the minimum requirements of the Detailed Specifications?

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**6.0** LIST – any deviations that might be considered less than equal to the Detailed Specifications:

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