

FORM A: BID
(See B8)

1. Contract Title SUPPLY & DELIVERY OF RAPID DEPLOYMENT WATER RESCUE VEHICLES

2. Bidder

Name of Bidder

Usual Business Name of Bidder as it appears on Invoice (if different from above)

Street

City

Province

Postal Code

(Mailing address if different)

Email Address of Bidder

Facsimile Number

Street or P.O. Box

City

Province

Postal Code

(Choose one)

GST Registration Number (if applicable)

The Bidder is:

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

Email Address

4. Definitions

All capitalized terms used in the Contract shall have the meanings ascribed to them in the General Conditions and D3.

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/she is in receipt of a notice of award from the Award Authority authorizing the commencement of the Work.

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.

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.

10. Signatures 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 B9)

SUPPLY & DELIVERY OF RAPID DEPLOYMENT WATER RESCUE VEHICLES

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Rapid Deployment Water Rescue Vehicle	15008	2	Each	

Name of Bidder

FORM N: DETAILED SPECIFICATIONS 15008

1.0 **DESCRIPTION-**

- 1.1 Shall be a nominal approximately 20' to 22' aluminium van bodies or extruded bodies installed on 2015 or newer conventional low profile conventional chassis supplied by the Successful Bidder. The completed vehicles shall be furnished complete and ready for use with all features and auxiliary equipment as described herein.
- 1.2 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the vehicles.

2.0 **SAFETY STANDARDS**

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 The complete **Rapid Deployment Water Rescue Vehicles and all of its components and attachments** shall comply with the applicable regulations.
- 2.3 The **Rapid Deployment Water Rescue Vehicles** must comply with current (NFPA) National Fire Protection Association Standard 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 Clause D4 of the Supplemental Conditions.
- 2.4 All applicable SAE standards form an integral part of the **Rapid Deployment Water Rescue Vehicles** specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.5 The **Rapid Deployment Water Rescue Vehicles and all associated equipment** as stated in the Contract shall comply with the applicable standards:
- (NFPA) National Fire Protection Association Standard latest revisions
 - Highway Traffic Act
 - Canadian Motor Vehicle Safety Standards
 - Transport Canada
 - National Safety Mark, NSM
 - Manitoba/Winnipeg Safety and Health Act, Parts 12, 22
 - Canadian Standards Association
 - Society of Automotive Engineers
 - City of Winnipeg Lighting Visibility Standard = <http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf>
 - Under Writers of Canada -ULC
- 2.6 In Canada, Modification to new vehicles can only be done at facilities that are recognized by Transport Canada. All of these facilities must have a National Safety Mark from Transport Canada. Transport Canada National Safety Mark is a label that indicates that the modifications are compliant with all current Canadian Motor Vehicle Safety Standards (CMVSS).
- STATE (NSM) #- _____**
- 2.7 The vehicle shall be complete with a current Manitoba Safety Sticker affixed to the driver's side window.

3.0 SERVICE FACILITY & QUALIFICATIONS OF MANUFACTURER

3.1 For the purpose of warranty repairs and service support, the Contractor shall have an authorized service facility located within 25 kilometres of the City of Winnipeg Fire Department Emergency Mechanical Services Branch located at 2546 McPhillips Street, Winnipeg Manitoba (**no exceptions**). The facility or a portion thereof, shall be dedicated to the service and maintenance of Rapid Deployment Water Rescue Vehicles being offered. Further to B11, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator. _____

3.2 All components of the Rapid Deployment Water Rescue Vehicles requiring regular scheduled servicing or lubrication shall be easily accessible. The design and construction of the Rapid Deployment Water Rescue Vehicles 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 Rapid Deployment Water Rescue Vehicle body. _____

3.3 The manufacturer of the Rapid Deployment Water Rescue Vehicles shall have five (5) years continuous experience manufacturing Emergency Response Vehicles. The manufacturer shall have in effect a complete and documented quality control program ensuring compliance with all applicable standards. _____

3.4 A list of at least five (5) references for Emergency Response Vehicles shall be included. The list shall include the fire department's name, location, contact person, telephone number and the length of time the Rapid Deployment Water Rescue Unit has been in service. The manufacturer of the Emergency Response Vehicles shall have successfully demonstrated the operation of the type of Emergency Response Vehicles being offered in cold weather (-40°C) conditions. _____

1. _____
2. _____
3. _____
4. _____
5. _____

3.5 The Contract Administrator shall determine if the service facility meets the required qualifications. _____

4.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

4.1 Where requested to do so, all items in these specifications must be answered indicating compliance or non-compliance. **Bidders shall state "yes" for compliance or state deviation**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

4.2 Each bidder is required to fill in every blank. **Failure to do so may be used as a basis for rejection of bid.**

5.0 INTENDED USE AND APPLICATION-

5.1 The intended use of these vehicles is a 24 hour, 7 days a week Water Rescue Vehicles operated by the City of Winnipeg Fire Paramedic Services. These units must be able to rapidly deploy a Zodiac style boat to affect a water rescue. The intention of these vehicles is to turn off the chassis engine, and have an Auxiliary Power Unit (APU) power the following:

- LED Exterior Lights including LED Command Light tower as specified in this tender
- LED Interior Lights as specified in this tender
- All LED compartment lighting as specified in this tender
- Heating as specified in this tender
- Air Conditioning as specified in this tender
- Exterior and Interior Electric Receptacles as specified in this tender
- WFPS Tool List as specified in this tender

5.2 The purpose is to continue to provide the essential services without the chassis engine running, which causes unnecessary idling, fuel consumptions, environmental impacts, and decreased truck life cycle of the chassis engine. Given the above, it is the responsibility of the bidder to notify the Contract Administrator of any design or performance constraints including complete weight distribution of all equipment within.

6.0 MAKE/MODEL-

6.1 **State** make and model of Vehicle and Body being bid-

6.2 Chassis- _____

6.3 Body- _____

7.0 SUB-CONTRACTORS-

7.1 The bidder shall list all of their subcontractors (Sub-Contractor name, contact, address, phone #, fax, e-mail address)

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

7.2 When required, the Contractor shall assign the warranty to the City of Winnipeg to improve logistics, unnecessary down time, regarding warrantable failures.

8.0 SPECIFICATIONS-

GVWR /WEIGHT DISTRIBUTION-

8.1 The **Complete Rapid Deployment Water Rescue Unit** shall not exceed the City of Winnipeg's limit for gross vehicle weight, axle and tire loads.

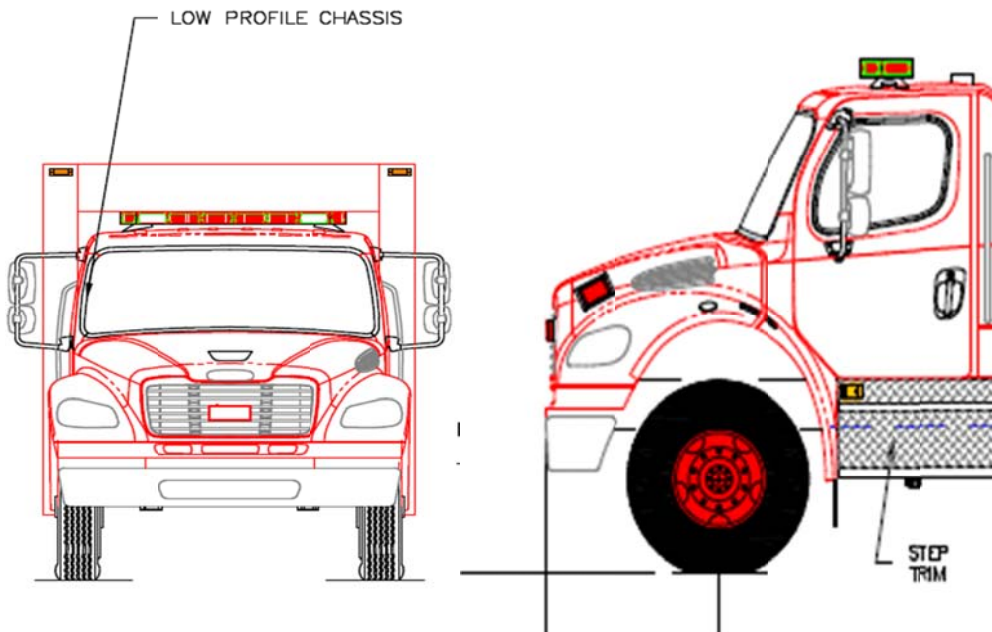
Note: The City of Winnipeg and the Province of Manitoba limits the gross vehicle weight and axle and tire loads to:

- Front axle (steering axle) – 7300 kg (16,094 lbs.). _____
- Rear axle (single axle) – 9100 kg (20,062 lbs.). _____
- Tire load – 9 kilograms for each millimetre width of tire (approx. 500 lbs. per inch of tire width). _____
- Bidder to provide Weight distribution documentation _____

8.2 **Weigh scale ticket** – The Contractor shall provide a certified weigh scale ticket upon delivery of the completed unit. The scale ticket shall include front and rear axle weights including five (5) operators, full of liquid, and all equipment and any attachments. _____

8.3 **Payload- State** available payload including all components, tools, to accommodate a Zodiac Classic Mark 1 (11'6") aluminum boat, (2) Yamaha 25F out board engines, and five (5) 300 lbs. operators- _____

9.0 CHASSIS SPECIFICATIONS- (LOW PROFILE DESIGN TO ACCOMEDATE ENTRY AND EXIT HEIGHTS. BIDDER SHALL PROVIDE THE CONTRACT ADMINISTRATOR PROOF AND DOCUMENTATION THAT THE CHASSIS IS INDEED A LOW PROFILE CHASSIS)



9.1 Chassis must be provided from **a local Winnipeg major truck manufacturer.** No "home-made" proprietary truck chassis will be accepted.

9.2 **State make & model-**

10.0 WEIGHTS-

10.1	GVWR	Approx. 24,000 lbs.	_____
10.2	FRONT GVWR	Approx. 9,000 lbs.	_____
10.3	REAR GVWR	Approx. 15,000 lbs.	_____
10.4	GCWR	Gross Combined Weight Rating, state-	_____
10.5	GAWR	Gross Actual Weight Rating, state-	_____

11.0 DIMENSIONS-

11.1	WHEELBASE -	As required for an approx. 22 ft. body measurement. State WB-	_____
11.2	CAB TO AXLE -	As required for an approx. 22 ft. body measurement. State CA-	_____
11.2	AFTER FRAME -	As required for an approx. 22 ft. body measurement. State AF-	_____

12.0 ENGINE-

12.1	Type	Cummins Diesel Tier IV Final -Engines shall be warranted to use biodiesel at a B10 blend level (10% biodiesel to 90% ultra low sulphur diesel), where the biodiesel will meet product specification ASTM D 6751 to ensure fuel quality.(Emergency Service Vehicle) rated, state model-	_____
12.2	Horsepower	330 hp gross (Emergency rated high output horsepower)	_____
12.3	Torque	800 lb-ft (Emergency rated high output torque)	_____
12.4	Engine shut down	Low oil pressure / high water temperature	_____
12.5	Anti-idling	Programmable anti-idling shut down	_____
12.6	Air intake warmer	required	_____
12.7	Fuel Shut-off	Electric solenoid type	_____
12.8	Air cleaner	Dry type standard filter element, with ember screen	_____
12.9	Air intake restriction	Dash mounted restriction indicator	_____
12.10	Oil drain plug	Magnetic type	_____
12.11	Oil filter	Full flow, spin-on type	_____

12.12	Fuel filter	Spin-on type	_____
12.13	Fuel/water separator	Heated Drainable, mounted under hood, located to be protected from road spray and not to impede with body installation. State location-	_____
12.14	Fuel line primer pump	required	_____
12.15	Block heater	Immersion type, 1000 Watt w/ covered recessed male plug, located under driver's side door	_____
12.16	Coolant	Extended Life coolant, antifreeze to -34°F	_____
12.17	Coolant filter	required	_____
12.18	Coolant hoses	Premium type or Gates Blue Stripe	_____
12.19	Fan Drive	thermostatically controlled, automatic type	_____
12.20	Air compressor	Air compressor required with 13 cfm	_____
12.21	Air compressor option	State if air compressor with higher cfm is available and price-	\$ _____
13.0	<u>ELECTRICAL SYSTEM-</u>		
13.1	Electrical system	Multiplexed only acceptable-	_____
13.2	Alternator	Delco Remy 240 Amp, or equivalent state-	_____
13.3	Starter	Delco Remy 29 MT or equivalent , state-	_____
13.4	Circuit breakers	Auto-reset, readily accessible	_____
13.5	Batteries	Three batteries (3), 12-volt, group 31, 2850 CCA combined capacity, must be maintenance free batteries.	_____
13.5	Battery Option	State optional price of (4 th) battery if available-	_____
13.6	Battery Box	Under cab or frame mounted c/w enclosure. Not to impede with body installation, state location-	_____
13.7	Remote boost terminal	Remote battery boost terminal, protected from road spray, covered, state location-	_____
13.8	Marker lights	LED Cab marker lights	_____
13.9	Accessory switches	Twelve (12) multiplex programmable dash mounted rocker switches required, all switches complete and wired for body installation, labelled and backlit.	_____

14.0 EXHAUST SYSTEM-

14.1 Exhaust System The tailpipe configuration must be compatible for use with a "Plymovent" automatic exhaust disconnection system and shall include the installation of the appropriate adapter. Must be on passenger side. Preferably underneath of R3 _____

15.0 TRANSMISSION-

15.1 Model Emergency Rated EVS 3000 Allison transmission with PTO provision suitable for requested horsepower, torque, GVWR, and application. _____

15.2 Shift selector Dash mounted shift selector _____

15.3 Cooling capacity As per manufacturer's recommendation for Severe duty cycle. _____

15.4 Oil level dipstick Bayonet type with high and low level markings _____

15.5 Trans. drain plug Magnetic type _____

16.0 FRONT AXLE-

16.1 Front axle type 7000-9000 lbs. capacity., **state make and model-**_____

17.0 REAR AXLE-

17.1 Rear axle type 12,500-15,000 lbs. capacity., **state make and model-**_____

17.2 Ratio Rated 120 km/hr maximum top speed, **state ratio-**_____

17.3 Differential Rear limited slip differential of differential lock up _____

18.0 HUB SEALS-

18.1 Type Oil lubricated front and rear _____

19.0 FRONT SUSPENSION-

19.1 Front Suspension Type Taper leaf front suspension, 7,000 lbs. capacity _____

20.0 REAR SUSPENSION-

20.1 Rear Suspension Type Programmable air ride suspension to dump With park brake, 12,000 lbs. capacity, **state make and model-**_____

20.2	Suspension Control	Manual and programmable dump valve for air suspension c/w dash mounted switch, indicator light, gauge & buzzer.	_____
21.0	<u>WHEELS-</u>		
21.1	Front	19.5 x 6.75 polished aluminium disk, hub piloted Must meet requested GVWR	_____
21.2	Rear	19.5 x 6.75 polished aluminium disk, hub piloted Must meet requested GVWR	_____
22.0	<u>TIRES FRONT-</u>		
22.1	Front Tires	Must be low profile steer tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) Preferred Michelin	_____
22.2	Size	245/70R/19.5 Low Profile, must meet requested GVWR	_____
23.0	<u>TIRES REAR-</u>		
23.1	Rear Tires	Must be low profile drive tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) Preferred Michelin XDS2	_____
23.2	Size	245/70R/19.5 Low Profile, must meet requested GVWR	_____
23.3	Spare Tire and Rim-	Required	_____
24.0	<u>FRAME-</u>		
24.1	Type	Single rail, suitable for requested GVWR and height requirements, outside frame clear of components for body installation.	_____
24.2	Frame height	Frame height from ground level to top of frame Rail shall not exceed approx. 29-32" unladen State-	_____
24.3	Application	Suitable for cutaway van body application	_____
24.4	Chassis fasteners	Grade-8 threaded hex headed frame fasteners	_____
24.5	After frame	As required for van body application	_____
25.0	<u>STEERING-</u>		
25.1	Steering Type	Power steering required	_____
26.0	<u>BRAKES-</u>		
26.1	Type	Air Brakes, ABS, front & rear brakes	_____
26.2	Parking brake	State type and location park brake valve-	_____

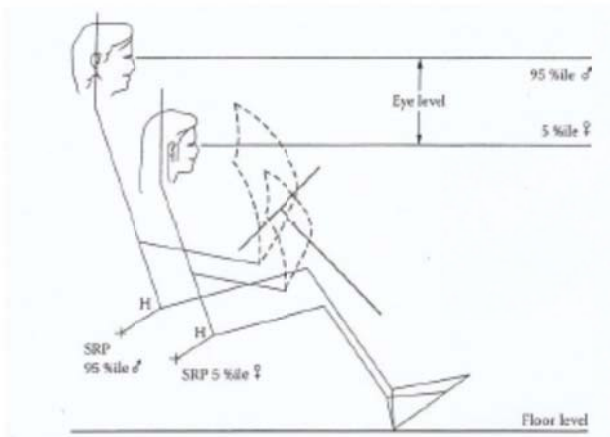
26.3	Moisture ejector	Heated	_____
26.4	Drain valves	Cable operated, required on each air tank	_____
26.5	Air dryer	Spin on Heated Air Dryer required	_____
27.0	<u>FUEL TANKS-</u>		
27.1	Type	40 Gallon (151 L) aluminium fuel tank.	_____
27.3	Option- Larger Tank	State if an additional tank can be installed, But not impede in with the body installation-	_____
27.2	Tank straps	Steel straps with minimum 1/16 in. rubber or neoprene isolators to prevent galvanic corrosion.	_____
27.3	Fuel separator	Heated, drainable type	_____
28.0	<u>CAB-</u>		
28.1	Type	Conventional style cab only, to accommodate body application. Cab must have corrosion inhibitor.	_____
28.2	Construction	Aluminium or galvanized steel construction	_____
28.3	Front axle to (BBC)	106-108 "front axle to back of cab measurement-	_____
28.4	Front grille	OEM Standard	_____
28.5	Cab interior / trim	Premium Insulation including cloth or vinyl headliner on roof, door panels and rear interior of cab.	_____
28.6	Cab silencer package	Required for minimal decibel level	_____
28.7	Hood/Firewall/Engine	Insulated hood liner, engine cover and firewall	_____
28.8	Floor covering	Moulded vinyl floor covering with under-padding	_____
28.9	Floor mats	Two (2), rubber floor mats	_____
28.10	Driver's seat	One (1) Bostrom Air ride seat w/foldable armrests, vehicle seat sensors, heavy-duty cloth upholstery, lumbar support. Cordura Fabric	_____
28.11	Passenger seat	One (1) Bostrom Air ride seat w/foldable armrests, vehicle seat sensors, heavy-duty cloth upholstery, lumbar support. Cordura Fabric	_____
28.12	Sun visors	Dual flip-up type	_____
28.13	Steering wheel	Telescopic and Tilt steering	_____
28.14	12-Volt power outlet	Two (2) Required on dash	_____

28.15	Radio	Factory installed AM/FM/CD/with blue tooth	_____
28.16	Starter switch	Key operated c/w three (3) sets of keys	_____
28.17	Anti-theft Device	Vehicle Anti-theft switch to cut power to the Transmission.	_____
28.18	Interior light	Dome light with driver and passenger door switches	_____
28.19	Heater / Defroster	High output, capable of keeping all windows clear at an outside temperature of -35°F (-37°C)	_____
28.20	Air conditioning	High output air conditioning required	_____
28.21	Foot Pedals	Floor or hanging type brake and accelerator pedal, State-	_____
28.22	Horn	Dual electric, and (2) air horns	_____
28.23	Exterior mirrors	Westcoast style, heated, lighted, 2-way motorized adjustment, exterior mirrors to include convex mirrors, suitable for 102 in. equipment width.	_____
28.24	Down view mirror	Required over passenger door, 5" x 4" approx.	_____
28.25	Windows & windshield	Factory tinted	_____
28.26	Windows and Locks	Power windows and locks	_____
28.27	Windshield wipers	Electric, intermittent	_____
28.28	Wiper blades	OEM Winter Wiper Blades	_____
28.29	Windshield washer	Electric, required with spray nozzles on wiper blades.	_____
28.30	Grab handles	Dual exterior grab handles	_____
28.31	Entrance steps	One each side, open grate / grip type with boot brush mounted on driver and passenger sides	_____
28.32	Winter-front	Heavy-duty vinyl w/twist lock or snap type fasteners	_____
28.33	Safety equipment-	5 lbs First Fire Extinguisher and First Aid Kit, State recommended locations-	_____
29.0	<u>INSTRUMENTATION-</u>		
29.1	Oil pressure	Gauge	_____
29.2	Coolant temperature	Gauge	_____
29.3	Transmission oil temp.	Gauge	_____
29.4	LOP/HWT	Warning light and buzzer	_____

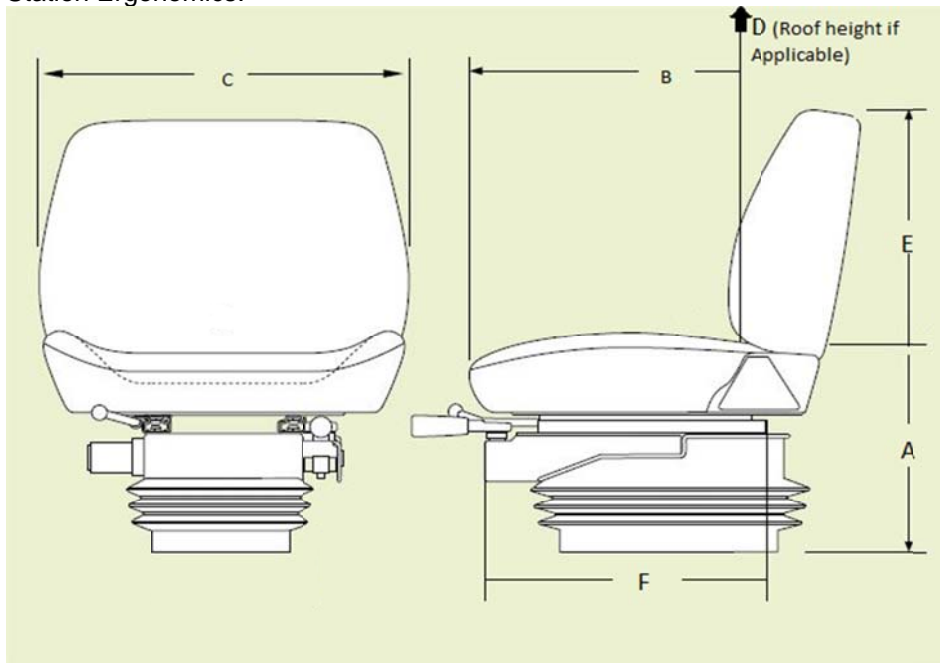
29.5	Voltmeter	Gauge	_____
29.6	Air reservoir pressure	Gauge with LAP warning light and buzzer	_____
29.7	Engine hour meter	Required, non-reset able type	_____
30.0	<u>TOW HOOKS-</u>		
30.1	Location	Readily accessible, front frame mounted, Closed eye hook type.	_____
31.0	<u>FRONT BUMPER-</u>		
31.1	Type	Front bumper full width chrome	_____
31.2	Bumper horns-	Front facing forward bumper mounted air horns, Approx.. 18".	_____
32.0	<u>COLOUR-</u>		
32.1	Paint –	Painted two tone, with bottom half Red (SIKKENS Brand Code 911662 and top half Black (SIKKENS Brand Code 910788) using a polyurethane enamel paint.	_____
32.2	Interior	Blue or grey	_____
32.3	Frame & suspension	Primed and finished with black Imron 5000 paint	_____
33.0	<u>KUSHMAL AUTO EJECT-</u>		
33.1	Auto Eject System	Model: Kussmaul Auto Charge 1200 Pump Plus, Part #091-193-12 required	_____

**OPERATOR STATION
 ERGONOMICS**

34.0 Cab or station layout should provide a comfortable seating position for the 5th to the 95th percentile of personnel. Figure 1 below illustrates the variance between a 5th to a 95th percentile of North American males and females when seated.



34.1 Figure 2: Use the below diagram to answer the specifications for Operator Station Ergonomics.



- | | | | |
|------|---|--|-------|
| 34.2 | Sitting height range from floor (where feet rest) (A) | State , seat height range in inches | _____ |
| 34.3 | Seat length/depth (B) | State , seat length/depth in inches | _____ |
| 34.4 | Seat width (C) | State , seat width in inches | _____ |
| 34.5 | Cab height from seat to roof (if applicable) (D) | State , cab height range in inches | _____ |
| 34.6 | Back rest height (E) | State , back rest height in inches | _____ |

34.7	Seat travel range (F)	State , seat travel in inches	_____
34.8	Include any other relevant ergonomic specifications and applicable range of adjustment		_____ _____

WARRANTY-

35.0	All warranty information shall be detailed and include all exclusions. The successful bidder shall provide all published warranty information upon delivery of the equipment. Bidder shall state all warranty information.		_____
35.1	Basic Vehicle	One (1) year, unlimited km, state-	_____
35.2	Batteries	One (1) year, unlimited km state-	_____
35.3	Drivetrain	Two (2) years, unlimited km state-	_____
35.6	Cab structure/ corrosion	Five (5) years, unlimited km state-	_____
35.7	Frame & Cross-members	Five (5) years, unlimited km state-	_____
35.8	Cab paint	One (1) year or 100 000 km state-	_____
35.9	Engine	Three (3) years or 240 000 km state-	_____
35.10	Transmission	Two (2) years, unlimited km state-	_____
35.11	Emissions (DPF)	Five (5) years, unlimited km state-	_____
35.12	Axles, front & rear	Two (2) years or 161 000 km state-	_____

WATER RESCUE BODY

36.0 GENERAL DIMENSIONS
CONSTRUCTION TYPE-

Shall be van type or extruded aluminium,
State construction method-

36.1 Interior Cargo Length-

Front of body to rear back roll up door approx.
20-22', finished interior, **state** exact
measurement-

36.2 Overall Length-

State overall length including chassis
"front bumper to rear bumper"-

36.3 Overall Height-

Approx., 126-130", state exact height-

36.4 Overall Width-

96-99" not including mirrors

36.5 Interior Height-

Approx., 78", finished height, **state** exact height-

36.6 Floor Height-

Approx., 36" from ground level, **state** floor height-

36.7 Unit Weight-

Total finished weight. **State** front & rear axle
total finished weight. Bidder shall provide
weight scale ticket upon delivery to ensure
the submitted weights are accurate.

Total Weight-
Front Axle-
Rear Axle-

37.0 INTERFACES/INSTALLATION-

37.1 Interfaces-

All interfaces between aluminium and steel are to
be separated by 1/16 in"3M tape and are to be
bolted through with stainless steel bolts and
nonconductive bushings.

37.2 Mounting-

Mounting brackets shall be bolted to chassis frame
using Grade-8 fasteners. Mounting of the body
shall be in accordance with the chassis
manufacturer's guidelines for body mounting,
including, but not limited to, guidelines for tire
and suspension clearance and fuel_filler
installation.

37.3 Tire Clearance-

Bumper pad clearance plus 3"

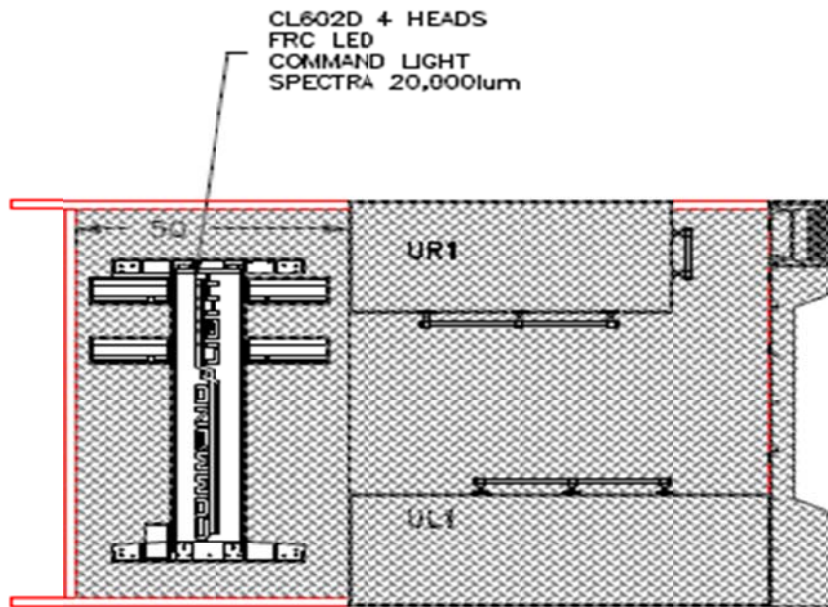
37.4 Operator Entry-

The van body/extruded body shall be mounted
as low as practicable and shall incorporate wheel
wells.

37.5 Quality-

All holes for latches, outlets, etc. shall be neatly cut
and de-burred. Any holes required in the chassis
frame web must be drilled and reamed to fit bolts, no
exceptions.

37.6	Edges-	All edges and corners shall be rounded to prevent accidental injury	_____
37.8	Drilling-	Drilling on chassis frame flanges is not permitted.	_____
37.9	Welding-	Welding on the chassis frame is not permitted.	_____
38.0	<u>WALL CONSTRUCTION-</u>		
38.1	<u>Walls</u> -	Smooth aluminium, construction method to be either snap-lock panels - 0.125 in. thick on 12 in. centres; or frame and skin construction - 1½ in. "Z" type extrusions on 12 in. centres with 0.125 in. panels fastened with aluminium rivets. State construction method and thicknesses-	_____
39.0	<u>FLOOR-</u>		
39.1	<u>Cross sills-</u>	Full width 2 in. X 2 in. X 0.125 in. hollow Structural Galvanized or Stainless steel tubing or equivalent on 16 in. centres. State construction method and thicknesses-	_____
39.2	<u>Long sills-</u>	If applicable to van body type, Galvanized or Stainless steel structural C channels. State construction method and thicknesses-	_____
39.3	<u>Interior Floor material-</u>	Line X products ,Full Metal Jacket, Rhino Spray on Materials, state-	_____
40.0	<u>ROOF-</u>		
40.1	<u>Construction</u> -	Smooth aluminium stressed-skin, <u>walk-on style</u> roof 10 gauge aluminium. State construction method and thicknesses-	_____
40.2	<u>Roof bows</u> -	12 in. centres. State construction method and thicknesses-	_____
40.3	<u>Roof lining</u> -	Insulated, ¼ in. plywood or equivalent covered with glass board (Kemlite) panel.	_____
40.4	<u>Roof vent-</u>	(2) Fan-Tastic, model 4000 power vents or equivalent with 3 speeds and reversible fan, installed in roof of cargo area, switch panel actuated.	_____
40.5	<u>Escape Hatch-</u>	Roof Hatch required, state dimensions and exact location-	_____
40.6	<u>Command Light-</u>	Command Light CL602D (4) Heads FRC LED Command Light Spectra 20,000 lum.	_____



41.0 INSULATION-

41.1 **Insulation-** 3-4" in. of spray foam urethane insulation on underside of Exterior floor. 2-3" in. spray foam walls and ceiling
State R7 rating-

42.0 UNDERCOATING-

42.1 **Under-coating-** Complete sub-frame including cross-members to be sealed with **Line X products ,Full Metal Jacket, Rhino Spray on** Materials or equivalent spray on protective materials with a life time warranty protective coating. Coating shall be sprayed over the to protect the material from water, rust, rocks, corrosion, and falling insulation and provide a higher R-rating.

43.0 DRIVER SIDE EXTERIOR-

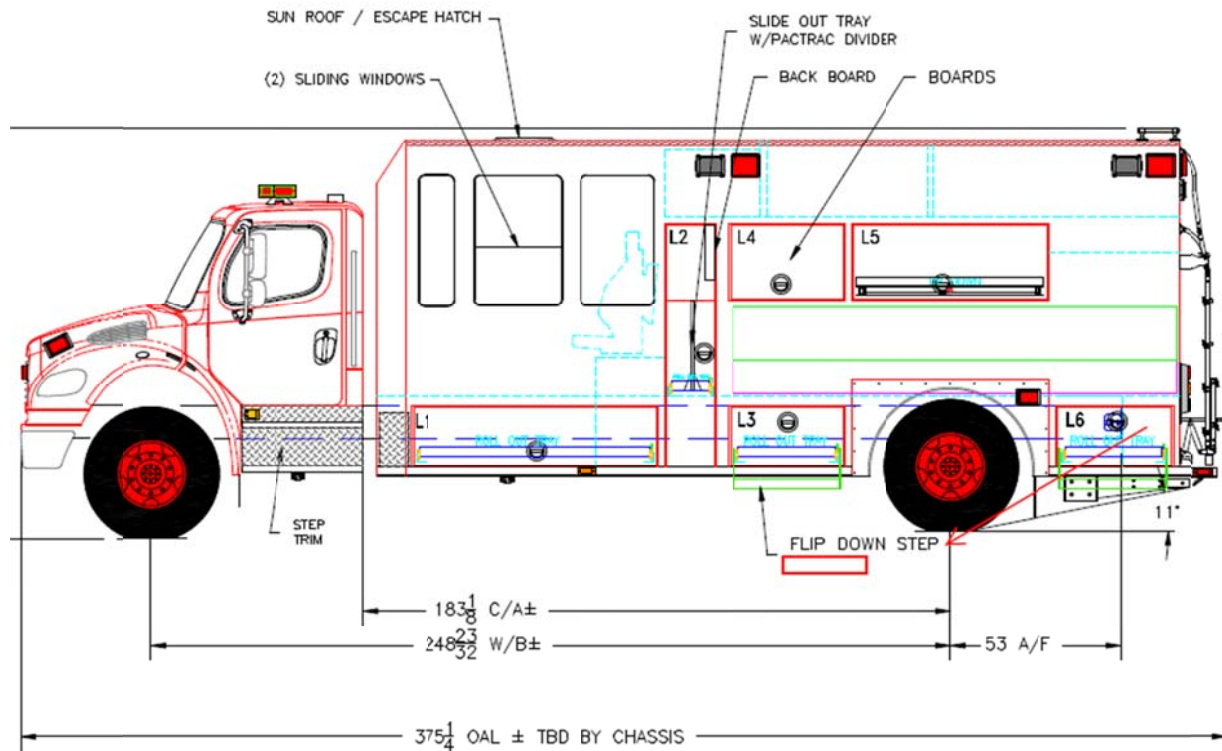
43.1 **Compartments-** All compartments shall be sealed plumbed for heat, with removable matting with LED Lighting on all 4 sides.

43.2 **Handles-** All compartment handles shall be heavy duty type

43.3 **Windows-** Two sliding type windows driver and passenger side.

43.4 **Approx. Dimensions-** As follows:

Compartment	L1	Roll-Out Tray	77W X 19H X 27D	_____
Compartment	L2	Roll-Out Tray	16W X 76H X 27/71/98D	_____
Compartment	L3	Roll-Out Tray, flip step down	36W X 19H X 27D	_____
Compartment	L4	Standard (not step down)	36W X 24H X 88/82D	_____
Compartment	L5	Tip Down	62.25W X 24H X 88/82D	_____
Compartment	L6	Roll-Out Tray, flip step down	36W X 19H X 27D	_____



44.0 PASSENGER SIDE EXTERIOR-

44.1 **Compartments-** All compartments shall be sealed plumbed for heat, with removable matting with LED Lighting on all 4 sides. _____

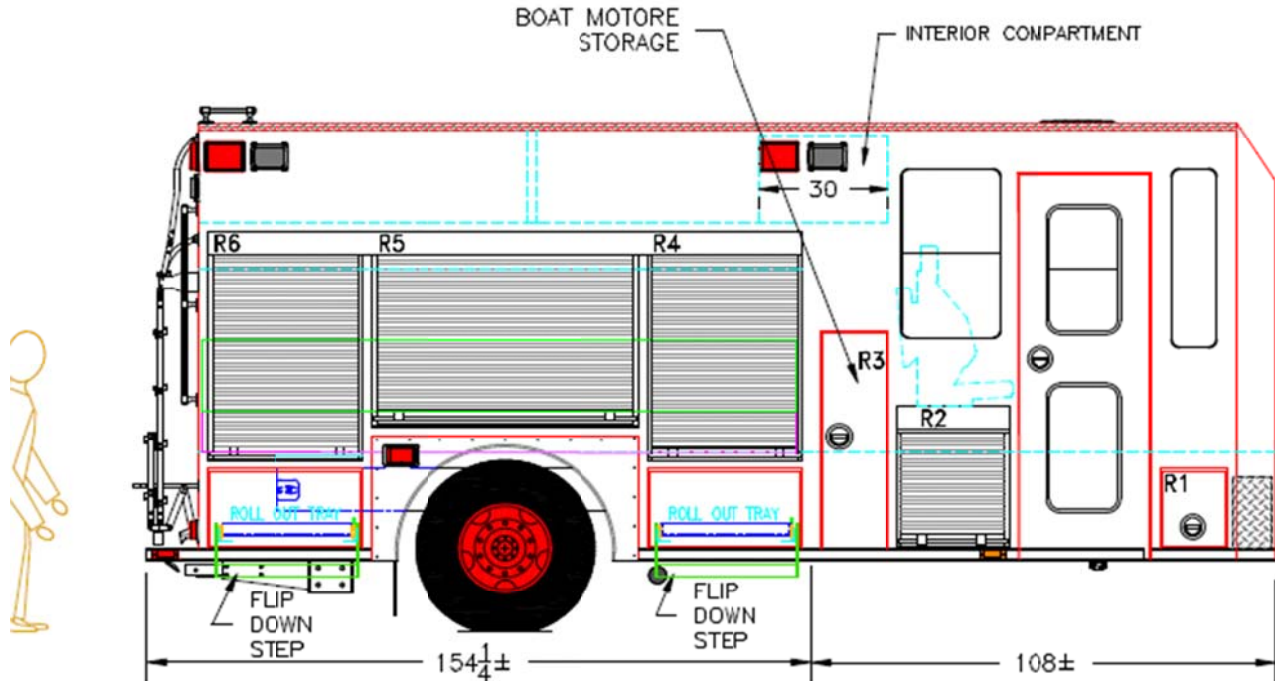
44.2 **Handles-** All compartment handles shall be heavy duty type _____

44.3 **Windows-** One sliding type window _____

44.4 **Approx. Dimensions-** As follows:

Compartment	R1	Standard	16W X 19H X 27D	_____
Compartment	R2	Roll-Up	26W X 34H X 27D	_____
Compartment	R3	Standard	16W X 52H X 27D	_____
Compartment	R4	Roll-Up, Roll-Out Tray, flip step down	36W X 24H X 88/82D	_____
Compartment	R5	Roll-Up	62.25W X 47H X 10/16/27D	_____
Compartment	R6	Roll-Up Roll-Out Tray, flip step down	36W X 76H X 10/16/27D	_____

44.5 **Entry Door Handle-** Exterior door handle to be single lever time in order for Operator to use with large winter gloves. Exact type To be determined upon pre-production meeting and Approval of the Contract Administrator. _____



45.0 REAR EXTERIOR-

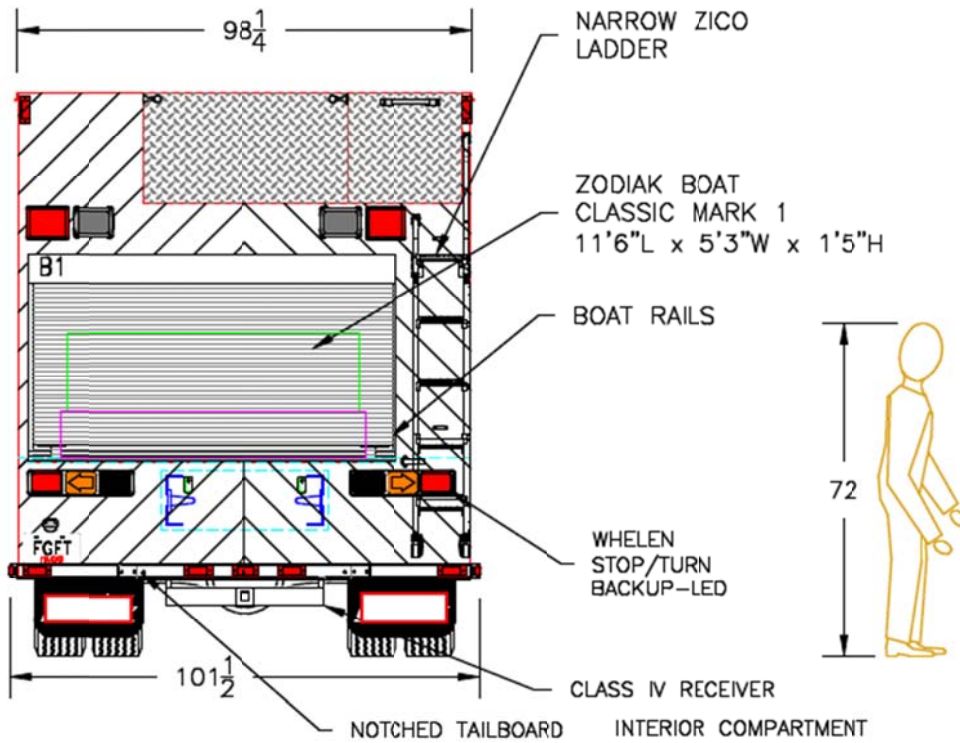
- 45.1 **Slide door-** Roll-up door type- B1 Roll-Up 80W X 45H _____
- 45.2 **Back-up camera-** Required, located approx. mid body above rear roll-up door. _____
- 45.3 **Ladder-** Narrow Zico ladder located approx. passenger side rear Body. **State** exact height from ground- _____
- 45.4 **Boat Rails-** Boat rail system must be able to deploy a Zodiac Classic Mark 1 Aluminum (3.5M or 11'6"). System shall be Manual hydraulically assisted for one operator to lower the boat. Boat deployed and lowered to ground level. Exact height to be verified upon pre-production meeting. **State** Method, type, materials used- _____
- 45.5 **Rear bumper -** Full width, heavy-duty step bumper, c/w a grip strut step surface. **State** depth- _____
- 45.6 **Bumper-** Bumper shall be bolted to chassis frame and to van body, structurally reinforced and fastened with Grade 8 bolts. Mounting height shall designed for easy entry and exit. _____
- 45.7 **Hitch Receiver-** The bidder shall provide an incorporated Class IV rear hitch trailer receiver into the bumper design. _____
- 45.8 **Trailer connector -** 6-pole and 7 pole , Dominion Auto 76-4009, wired , installed in hitch plate. _____
- 45.9 **Continuous duty solenoid-** Cole Hersee part # 24059 or 24016, controlled by "ACC" & "RUN" on ignition switch. _____

45.10 **Upper Body**
Compartments-

Required, **state** location and dimensions including the depth.-

45.11 **Rear Tow Hooks-**

Required, **state** location-



46.0 CREW AREA SEATING

46.1 Seating Configuration-

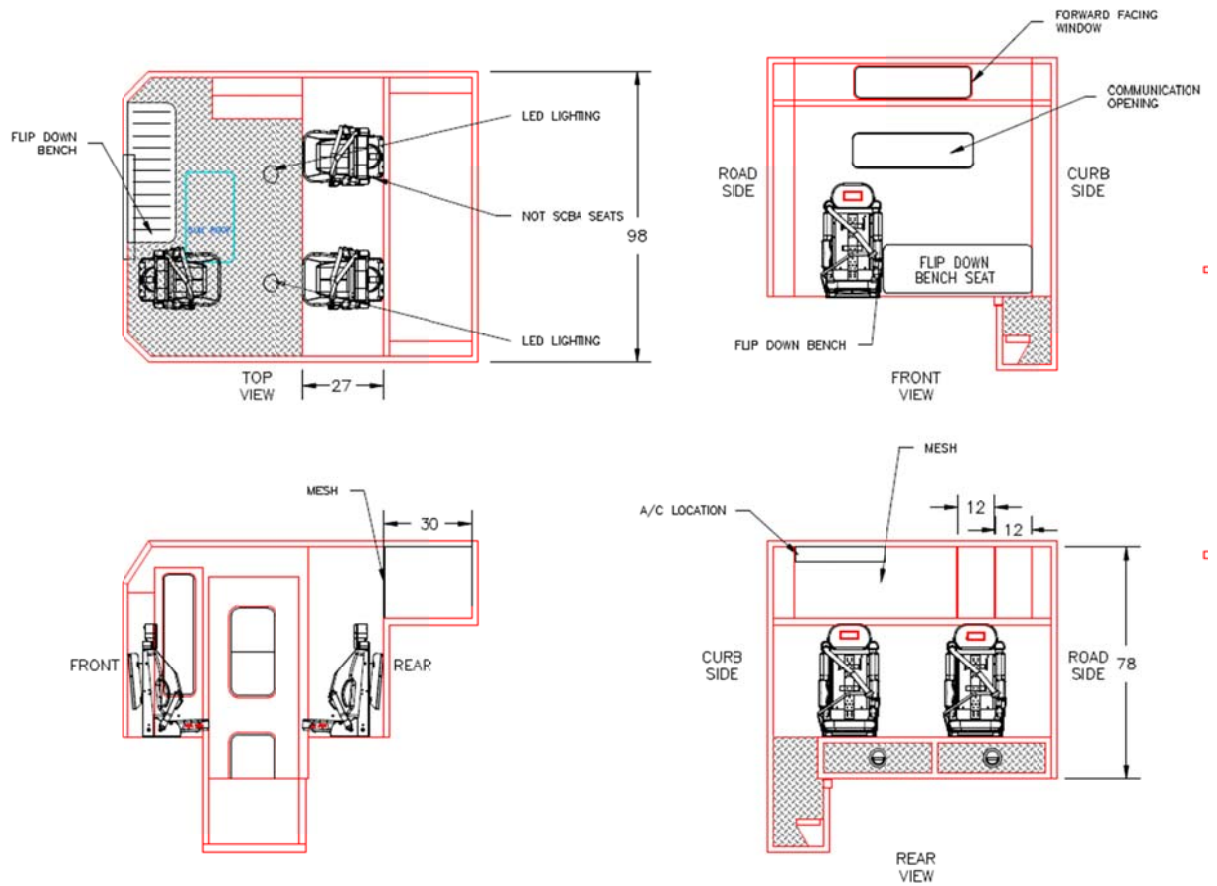
Seating shall have (2) front facing Bostrom High back Dura wear bucket seats (non SCBA), (1) rear facing Bostrom High back Dura wear bucket seat (non SCBA) with flip up seat, and one Flip down Storage bench seat

46.2 Seating Under storage-

Seats shall have under storage with flip up doors.

46.3 Overhead Storage-

Seating area shall have storage above seating overhead contained by mesh. **State** exact dimensions-



47.0 INTERIOR-

47.1 Complete interior lining -

Interior walls and ceiling must be lined with 3/8" plywood and lined over with white glass board Kemplite products or equivalent, **state-**

47.2 Light Mounting Locations-

Five (5) Bright High Intensity LED mounted above centre isle, evenly spaced. Three (3) Bright High Intensity LED mounted in crew Seating area. Dome lights shall be combination type with clear and red lenses. All lights shall be operated by door switches. Each light shall be equipped with an individual switch at the light.

Photos are for visual reference only

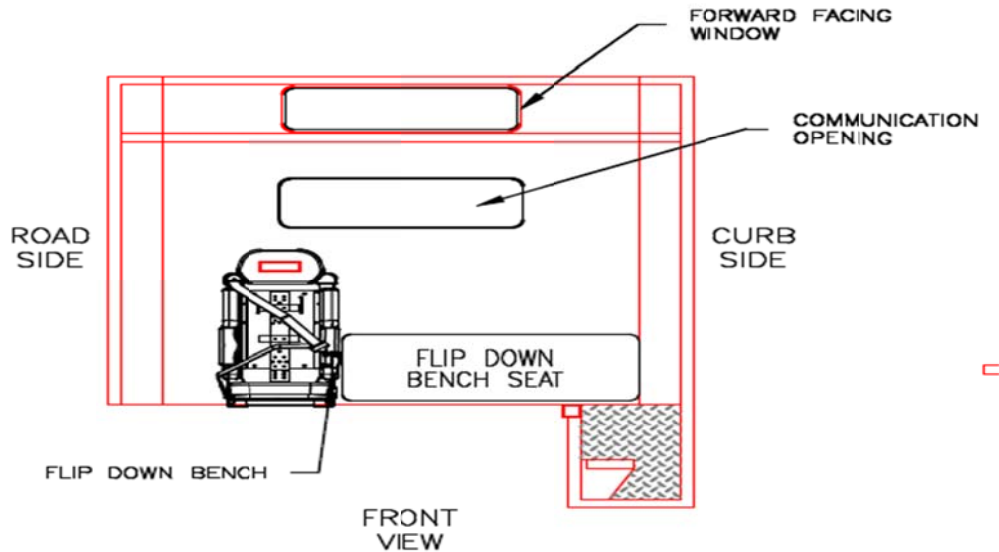


47.5 Map Light-

High Intensity LED, exact location to be determined upon pre-production meeting.

47.6 Communications-

The vehicles shall have a window from the cab Parallel to the body to communicate. It should be noted that the vehicles shall have a rubber boot connected from cab to body.



48.0 APU-

48.1 Intent/Requirements-

The intent of the APU is to provide van body heat, air conditioning and 12V and 110 V electrical power with reducing chassis idling by turning the chassis engine off). The APU shall be located at exterior incorporated into the body design. **State** location and required dimensions for the APU- _____

48.2 Make & Model-

State APU make and model. APU 12KW or state equivalent. _____

48.3 Performance-

It will be the responsibility of the Bidder to inform the City of any errors or omissions in these APU specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the APU. _____

48.4 Heater ducting-

Heater duct(s) shall be c/w round, swivel type air deflector(s) that can be also closed manually if needed. Air intake to be constructed for sufficient airflow as recommended by manufacturer. Intake air shall be drawn from the inside of the van body. Intake air shall be located near upper outside wall in order to keep contaminants and dirt out of the air intake. It is crucial that sufficient heating ducts are located also at the operator body entry/exit step area. **State-** quantity of heating duct outlets and location of condenser for air conditioning- _____

48.5 Temperature Control -

shall be ergonomically located within driver's reach and easily serviceable. **State** exact mounting locations- _____

49.0 ACCESSORIES-

49.1 Mud flaps -

No-name black rubber type with steel bar anti-sail brackets, installed in front and rear tires _____

49.2 **Radio-** **2-way radio circuit**-Independent 20 Amp circuit, ignition powered, wired under dash loose, labelled. _____

50.0 **ELECTRICAL-**

50.1 Requirements- All trucks shall be capable to power the following components:
 1. Lap Top
 2. Phone Chargers
 3. Thermal Imaging Camera Charger
 4. Possible future 8 cameras- _____

50.2 **Emergency Lighting/ Miscellaneous-** All exterior lighting must conform to NFPA current Lighting standards.

- | | | |
|---|-----------------------------|-------|
| - Light Bar 60" LED FN60VLED | Make Whelen Model Freedom | _____ |
| - Federal Siren Smart with | Make Whelen Controllor | _____ |
| - 100W Speaker | Make Whelen | _____ |
| - 1 X Hand Held Spot Light in Cab | Make Collins | _____ |
| - 2 X Grille Lights Red | Make Whelen Model 600 LED | _____ |
| - 4 X Side Intersection Lights Red | Make Whelen Model 600 LED | _____ |
| - 2 X Rear Lower Warning Lights Red | Make Whelen Model 600 LED | _____ |
| - 4 X Side Upper Warning Lights Red 9X7 | Make Whelen Model 600 LED | _____ |
| - 2 X Rear Upper Warning Lights Red 9X7 | Make Whelen Model 600 LED | _____ |
| - 6 X Scene Lights | Make FRC LED Model 900-Q65 | _____ |
| - 6X Ground Lights | Make Luma Model Bar H20-12" | _____ |
| - Air Inlet | Make Kussmaul Pump | _____ |
| - Battery Charging Provision | Make Plus 1000 | _____ |
| - (3) Antenna Mounts | Fleet net, GPS, Radio | _____ |

50.3 **Conform-** All vehicle lighting shall conform to C.M.V.S.S. and Manitoba Highway Traffic Act requirements and NFPA Standards _____

50.4 **Body supplier installed wiring-** shall be numbered, colour coded, loomed, properly secured and protected from damage. Successful bidde shall provide electrical diagram schematics upon delivery of the vehicles. _____

50.5 **All electrical connectors-** shall be crimped and soldered, then sealed using heat shrink tubing. _____

50.6 **All joining of wires-** shall be soldered and sealed using heat shrink tubing (crimp on electrical connectors for joining wires are not acceptable). _____

50.7 **All holes-** required for routing wiring shall be drilled (not punched), grommetted and sealed as required. _____

- 50.8 **Wiring access panel-** Wiring for interior lights, switch panel wiring, outlets, etc., shall be accessible from an access, **state** location- _____
- 50.9 **LED Requirements-** Supplier installed lighting shall be LED _____
- 50.10 **Lighting harnesses –** Properly routed and secured, **state make & model-** _____
- 50.11 **Junction box –** Complete with necessary compression fittings, required for all vehicle lighting harness connections located inside rear of truck frame. **State** make & model- _____
- 50.12 **All plug-in connectors-** shall be coated with Truck-Lite NYK or equivalent compound prior to assembly. _____
- 50.13 **Electrical Outlets-** Seven (7) 120 Volt duplex outlets required, GFI, CSA approved. Two exterior and five interior, exact location to be determined at pre-production meeting . (One) interior outlet shall have universal provisions for USB ports plug in accessories. _____
- 50.14 **Complete lighting part # list-** Upon delivery of the vehicles, the successful bidder shall provide a complete lighting part # list of all lights and electrical components used to build the complete unit and also applicable warranties for each item. _____
- 50.15 **Supply wiring schematics-** Bidder shall supply wiring schematics for all body wiring and routing _____
- 50.16 **Battery charging system –** On-board system with a 0-20 Amp rated automatic charger for charging of the batteries from an external 120-Volt power supply _____
- 50.17 **Charging system plug-in –** Located between driver's door and the rear Passenger door. Automatic ejector type with a 20 Amp receptacle. Located approx. 60 to 80 in. above ground level. _____
- 50.18 **Power disconnect –** 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. 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. _____
- 50.19 **Camera System-** Wiring Provisions for a future 8 cameras. Exact locations to be determined upon a pre-production meeting. _____
- 51.0 **COLOUR-**
- 51.1 **Paint –** Painted two tone, with bottom half Red (SIKENS Brand Code 911662 and top half Black (SIKENS Brand Code 910788) using _____

52.0 **SAFETY** a polyurethane enamel paint. _____

52.1 **Flare kit** - Three (3) triangular reflectors, CVSA approved. _____

52.2 **Fire Extinguisher-** Two (2) Five (5) lbs. pound Fire Extinguisher mounted
In cab and body. _____

53.0 **FINAL DRAWINGS**

53.1 Upon bid submission bidders shall supply a final diagram and description showing the body manufacturers recommended body to chassis mount. The drawing shall be as follows:

1. Driver side _____
2. Passenger side _____
3. Frond side _____
4. Rear side _____
5. Down view _____

54.0 **WARRANTY-** Body and all Component warranties-

54.1 All warranty information shall be detailed and include all exclusions. The successful bidder shall provide all published warranty information upon delivery of the equipment. Bidder shall state all warranty information. _____

54.2 Basic Body **State-** _____

54.3 Batteries **State-** _____

54.4 APU **State-** _____

54.5 Body Paint- **State-** _____

54.6 Body Electrical including Lighting- **State-** _____

55.0 **TOOLS-**

55.1 The following tools shall be including in each vehicle. It is the responsibility of the bidder to strategically place and secure the tools as well as ensuring the tools to not impede in the weight distribution safety standards. _____

55.2 Two (2) - 600' Sterling 3/8 (9.5mm) Ultraline Water Line c/w mesh bag, Two (2) X Rescue Pulleys (CMC) Model # 300301 or ProSeries Model # 300461, One (1) X 6" XL Auto-Lock (Red) ProSeries Aluminum Carabiner (CMC)- Model # 300253, Six (6) X CMC ProSeries aluminum Key-Lock Carabiners – Model # 300233, Three (3) X (CMI) Ascenders Aluminum Rescue rope Walkers (Self clearing) 333Kn (7500lb) , and One (1) - 8' x 1 1/2" rescue webbing _____

55.3 Two (2) - 600' Sterling 3/8 (9.5mm) Ultraline Water Line c/w mesh bag and Two (2) CMC ProSeries (Red) Aluminum Key-Lock Carabiners Model # 300233 _____

55.4 Two (2) - 2 US gallons Roto Pax Gasoline Cans c/w mounting brackets _____

55.5 Two (2) - Fire Axes 6 lb. (2.7 kg) pick head fire axes with fibreglass handles _____

- 55.6 One (1) – Oceanid RDC (Rapid Deployment Craft) Banana Boat c/w paddles and air filling tube and caring bag _____
- 55.7 One (1) - Binocular (10x42mm) Weaver Model 849676 Classic _____
- 55.8 Two (2) - 12” Knipex Pliers _____
- 55.9 One (1) - 30 inch RIDGID S30 Bolt Cutters Model # 14228 _____
- 55.10 One (1) - 20 lb. (9.1 kg) BC Rated Pressurized Dry Chemical Extinguisher _____
- 55.11 Three (3) - Fitzwright Immersion Suits – Model # 9700 _____
- 55.12 Three (3) - Mustang Ice Commander Rescue Suit Pro, c/w integrated harness, yellow, and universal sizing Model IC9002 02 _____
- 55.13 Three (3) - US Divers Shredder SAR Fin, yellow, pair _____
- 55.14 One (1) - Honda Generator Model # EU2000i c/w light _____
- 55.15 Two (2) - Portable LED Lights c/w cord reels _____
- 55.16 Four (4) – Streamlight pistol grip with tether, Model Waypoint (LED) c/w batteries _____
- 55.17 Six (6) – Make: NRS Model: Havoc Size: Universal-Helmets, (Red) _____
- 55.18 Six (6) – Black Diamond Storm headlamp 160 Lumens Helmet Lights _____
- 55.19 Two (2) – CMC Rescue LSP Cinch Rescue Collars _____
- 55.20 Four (4) – Pick-of-Life Ice picks/Awls _____
- 55.21 Two (2) Horse Collar Hit Inflatable Life Jackets –Mustang Model # MD315302 _____
- 55.22 Four (4) Mustang Zipper Life Jackets (Thermosystem Plus Coat)– Extra Large Model # MC 1535 (Red) _____
- 55.23 Two (2) Mustang PFD Survival SRT Vests (Universal Swift Water Rescue Vest) Size Large- Model # MRV150 or MRV200 _____
- 55.24 Two (2) Mustang PFD Survival SRT Vests (Universal Swift Water Rescue Vest) Size Extra Large- Model # MRV150 or MRV200 _____
- 55.25 One (1) Set of 3-4 Marker Buoys _____
- 55.26 Two (2) 10 foot Fibreglass Pike Poles with non-slip “D” handle _____
- 55.27 One (1) Reeves Sleeve c/w back board _____
- 55.28 Four (4) (Unidive) Blue Tang Hydralloy Dive Knives – yellow Blunt Tip _____
- 55.29 One (1) 10 foot X 10 foot Salvage Tarp _____
- 55.30 One (1) 8 foot X 8 foot Salvage Tarp _____
- 55.31 Two (2) Throw Balls c/w rope and mesh bag– Make 360 Model XPG85 or similar _____
- 55.32 Two (2) Torpedoes Buoy (Red) c/w tether and shoulder strap (1)-28” & (1)-33” _____

- 55.34 One (1) Water Cooler – 5 QT flip lid Coleman Model 5205A758G _____
- 55.35 Six (6) NRS Paddlers Glove – Three (3) X – Extra Large & Three (3) X Large _____
- 55.36 Four (4) Fox 40 Whistles _____
- 55.37 Two (2) 25 HP Yamaha F25 4 Stroke Outboard Motors – Short Shaft.
Complete with fuel container and fuel hose. _____
- 55.38 One (1) Zodiac Classic Mark 1 Aluminum (3.5M or 11'6") c/w Bench seat,
Paddles, pressure gauge with matching foot pump, bench storage bag,
Navigation light kit and transom travel wheels. _____
- 55.39 Two (2) Marsars Model IRSS (Ice Rescue Safety Shuttle) Paddle Boards _____
- 55.40 One (1) Aluminum telescoping pike pole (Blunt tip). Collapsed 4'-5' and
extendable to 8'-10' _____
- 55.41 Two (2) Thermal Imaging Cameras Make- Bullard Model- Eclipse LDX complete
With spare batteries, chest tether and Apparatus charging station. _____
- 55.42 Two (2) 75' Water Rescue Professional Throw bags. Make- Mustang
Model- MRD175 _____
- 55.43 Twelve (12)- Mustang Two Pocket Flotation Vest PFD. Standard PFD's to be
handed to external agencies crews (Police, Ambulance and pertinent bystanders).
Six (6) XXL Model # MV3119 RP & Six (6) XL Model # MV 3119 RP _____
- 55.54 One (1) Megaphone Portable Loud speaker- Pylepro-PMP50 Bullhorn 50 Watt
Megaphone W/Siren & Volume control _____
- 55.55 One (1) Set of Electric Lithium Ion Battery Operated Automobile Extrication Tools
to include: -One (1) Hydraulic Cutter – c/w 2 batteries and one charger (Hurst
Model S700E2 or equivalent) -One (1) Hydraulic Spreader – c/w 2 batteries and
one charger (Hurst Model SP310E2 or equivalent) -One (1) Hydraulic Ram with
12" (300mm) extension–c/w 2 batteries and one charger (Hurst Model R411E or
equivalent) -One (1) Ram Support (to be used on door sills) -One (1) 115v power
adapter cord (to be plugged into an electrical source: generator, etc.) _____

Provided by WFPS and not required in the bid submission. This information is provided for tool location requirements and weight distribution.

- 55.56 Two (2) Extendable Hydro Poles _____
- 55.57 One (1) Cascade System c/w retractable 30' fill hose _____
- 55.58 One (1) Personnel Accountability System P.A.S. Board _____
- 55.59 One (1) EPCR _____
- 55.60 Two (2) Sherlock Map Books _____
- 55.61 One (1) Set of Culvert Covers _____
- 55.62 One (1) Snow Fence _____
- 55.63 One (1) Fuel Card _____

- 55.64 Two (2) Bottles of Deodorizer Spray _____
- 55.65 One (1) Contamination Bag _____
- 55.66 One (1) Backboard c/w head blocks _____
- 55.67 Two (2) Insect Repellent _____
- 55.68 Four (4) Waterproof Portable Radios _____
- 55.69 Four (4) Blankets _____
- 55.70 Eight (8) Hospital Towels _____
- 55.71 One (1) Set of Mooring Ropes _____
- 55.72 One (1) Oxygen Kit c/w various masks and tubing _____
- 55.73 One (1) Trauma Bag _____
- 55.74 One (1) Zoll Cardiac Monitor _____
- 55.75 Two (2) - Animal Pole Catcher _____

56.0 PERFORMANCE RELIABILITY-

- 56.1 The responsibility for the design of the **Rapid Deployment Water Rescue Vehicles**, its performance and reliability shall rest upon the Contractor.
- 56.2 The term “repeated failures” as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the vehicle inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, of 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 operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer’s preventative maintenance schedule.
- 56.3 Where the **Rapid Deployment Water Rescue Vehicles** develops “repeated failures” in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.