# PART A BID SUBMISSION

# FORM A: BID (See B7)

1.	Project Title	SUPPLY & DELIVER' SERVICE BODY	Y OF A DECONTAMINAT	ION TRUCK AND
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 un	der the above name.	
3.	Contact Person	The Bidder hereby auth the Bidder for purposes	orizes the following contact of the Bid.	person to represent
		Contact Person	Title	<del> </del>
		Telephone Number	Facsimile Number	<del> </del>
4.	Definitions		sed in the Contract shall h General Conditions and D3	
5.	Offer		ers to perform the Work in a ), in Canadian funds, set out	
6.	Commencement of the Work		no Work shall commence un	

7.	Contract	deemed to be incorp	at the Bid Opportunity in porated in and to form a set all parts thereof are necestally provided in the company of the company	a part of this offer
8.	Addenda		t the following addenda have deemed to form a part of t	
		No	Dated	
9.	Time		for acceptance, binding and endar Days following the Sub	
10.	Signatures	In witness whereof th officials have signed thi	e Bidder or the Bidder's a	authorized official or
			_day of	, 20
		Signature of Bidder or Bidder's Authorized Off	icial or Officials	
		(Print here name and official	capacity of individual whose signatu	ure appears above)

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

# FORM B: PRICES

(See B8)

# SUPPLY & DELIVERY OF A DECONTAMINATION TRUCK AND SERVICE BODY

# **UNIT PRICES**

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
1	Aluminium Service Body	05005	Each	1	\$	\$
2	33,000# GVWR Cab & Chassis	05026	Each	1	\$	\$
	TOTAL BID PRICE (GST and PST extra) (in figures) \$  (in words)					

Name of Bidder

## **FORM N: DETAILED SPECIFICATIONS 05005**

#### SUPPLY & INSTALLATION OF AN ALUMINIUM SERVICE BODY

(Fire Paramedic Service)

## 1.0 SCOPE OF WORK

1.1 These specifications describe the supply and delivery of an aluminium decontamination service body installed on a cab & chassis vehicles supplied by the Contractor. The vehicle shall be suitable for use as a tow vehicle for a tandem axle decontamination trailer weighing 16,820 lbs. with a 3,580 lbs. tongue weight. (See Detailed Specifications 05026 for chassis description).

and model of service body being bid:
--------------------------------------

## 2.0 SPECIFICATIONS AND STANDARDS

- 2.1 The apparatus shall conform with National Standard of Canada No. CAN/ULC-S515-M88 and the National Fire Protection Association Standard NFPA 1901, with latest revisions. These Standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards. Any conflict with the specifications shall be brought to the attention of the Contract Administrator (see Section D4. of the Tender Documents) prior to Tender Submission.
- 2.2 All applicable SAE standards form and integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.3 The completed unit and all its components shall comply with all C.M.V.S.S. and Manitoba Highway Traffic Act regulations and requirements.
- 2.4 The delivered unit shall be complete with a current Manitoba Safety Sticker on the driver's side window.
- 2.5 All welding and welding designs of the entire body shall conform to the requirements of the Canadian Standards Association Standard W47.1-03 and W59-03. A certified letter confirming quality assurance shall be supplied by the Contractor at the time of delivery of the completed unit.

#### 3.0 QUALIFICATIONS OF MANUFACTURER

- 3.1 The manufacturer of the service body shall have a minimum of three (3) years continuous experience manufacturing bodies of the type being offered. The manufacturer shall have in effect a complete and documented quality control program ensuring compliance with all applicable Standards. Upon request of the Contract Administrator, the manufacturer shall provide (within seventy-two (72) hours) a detailed description of the manufacturer's experience and qualifications.
- 3.2 The manufacturer shall have in place, a documented and certified ISO 9001 Quality Program.
- 3.3 The manufacturer of the apparatus shall have successfully demonstrated the operation of the type of apparatus being offered in cold weather climatic conditions.

## 4.0 SERVICE FACILITY

4.1 For the purpose of warranty repairs, the Service Body supplier shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered.

7.3.2

Further to B9.1, 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.

4.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that warranty work be performed by the City of Winnipeg Mechanical Services Branch. Any Work performed by the City of Winnipeg shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed (for example, shop rate for 2005: \$65.00/hour).

## 5.0 <u>INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS</u>

Treadplate – 3003-H22 or 3002 Hi-Shine. State material.

- 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 described. Alternatives will be considered subject to evaluation.
- 5.2 Each bidder is required to fill in every blank. Failure to do so may be used as a basis for rejection of bid.

	••••	
6.0	PERFORMANCE	
6.1	The decontamination vehicle shall be designed and built to operate on a continuous duty basis in the climatic conditions common to the City of Winnipeg.	
	Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 95°F (35°C) to -40°F (-40°C), with an average annual snowfall of approximately 42 in. (1070 mm). The vehicle when not in use will be stored in a heated fire hall.	
7.0	ALUMINIUM SERVICE BODY	
7.1	The heavy duty body shall be constructed as follows. A layout drawing (including dimensions) of the truck and apparatus body shall be supplied with bid.	
7.2	Entire body, extruded superstructure and subframe shall be constructed entirely of heavy-duty tubular aluminium and channels to provide a full frame body design.	
	(Note: "fabricated sheet" type body construction is not acceptable. The use of rivets is not acceptable).	
7.3	Body materials – $\frac{1}{8}$ in. 3003-H14 alloy smooth plate or 5083-H321 saltwater marine grade aluminium. State material.	
7.3.1	All fasteners used in attaching or fastening of aluminium panels shall be installed with stainless steel hardware (rivets not be acceptable). All fasteners shall be drilled, tapped and applied using non-corrosive grease prior to stainless steel bolts are installed. Self-tapping screws or screws without threads shall not be accepted.	

7.3.3	Extrusions – $\frac{1}{4}$ in. 6061-T6, 6063-T5 or 6105-T5 alloys. State material.	
7.3.4	Welding – all welding shall be continuous welds, state method being used.	
7.4	Subframe – body framework shall be constructed of aluminium alloy extrusions. Framework extrusions shall be bevelled and electrically welded by digital welding method externally and internally at each joint.	
7.4.1	Upon request of the Contract Administrator, Bidder shall provide detailed drawings and a description of the subframe and body to chassis mount. Drawings shall be provided within three (3) working days upon request.	
7.5	Body layout – for the purpose of this specification:	
	W - Width along or parallel to chassis longitudinal axis	
	H - Height vertical	
	D - Depth on horizontal plane across vehicle	
7.6	General dimensions:	
	Note: Compartment dimensions stated in Sections 7.6.1 – 7.6.7 are approximate only. Bidders shall state dimensions in Sections 7.6.1 – 7.6.7 and shall provide a detailed service body layout drawing with their bid.	
7.6.1	Body height – 72 in. approx., state.	
7.6.2	Body length – 12 ft. approx., state.	
7.6.3	Compartment 1 (L1/R1) – transverse/through compartment, 28"W x 67"H approx Compartment shall be equipped with a heavy duty, full width bidirectional tray capable of storing and transporting a 45 gallon steel drum filled with liquid. Bottom section of compartment shall be equipped with a roll-out tray.	
7.6.3.1	45 gallon steel drum hoisting system – shall consist of a heavy duty main centre beam, I-beam or equivalent, mounted to the top of Compartment 1, full depth. The system shall include two (2) electric winches (one (1) for each side) c/w a latching system to hoist the drum into the compartment.	
7.6.4	Compartment 2 (L2/R2) – transverse/through, 28"W x 67"H approx. c/w a full width bi-directional tray. Bottom section of compartment shall be equipped with a roll-out tray. Compartment shall include a roll-out tool board, 3/16 in. aluminium with turned edges.	
7.6.5	Compartment 3 (L3/R3) – 50"W x 37"H x 26"D approx. c/w a full width roll-out tray mounted at bottom of each compartment	
7.6.6	Compartment 4 (L4/R4) – 34"W x 67"H x 26"D approx. c/w a full width roll-out tray mounted at bottom of each compartment	
7.6.7	Compartment 5 – rear compartment, 48"W x full height x 34/84"D approx	

7.7	All compartments shall be sweep-out style, i.e., no interior edges or lips.	
7.8	All compartments shall have reinforced floors to permit heavy articles to be stored without damaging the compartment.	
7.9	Interior of all compartments shall be sealed and caulked.	
7.10	Roll-out trays – heavy-duty ball bearing roll-out sliding tracks with 3/16 in. aluminium tray with up turned edges. Each tray shall include rubber tile floor matting, corner drain holes and a drop bar tray retainer.	
7.11	Bi-directional trays – heavy-duty ball bearing roll-out sliding/tilting tracks with a 3/16 in. aluminium tray with up turned edges. Each tray shall be supplied with rubber tile floor matting, corner drain holes and a drop bar tray retainer.	
7.12	Doors, compartments 1, 2, 4 and 5 – dual aluminium doors, side hinged, centre latched.	
7.12.1	Doors, compartment 3 – single aluminium door, bottom hinged.	
7.13	"Door ajar" warning circuit – to indicate an open storage compartment door, with a nominal 2 in. diameter, flashing red LED warning light located in the cab. The circuit shall utilize proximity switches located at each compartment door.	
7.14	Door latches – flush mounted with locks for all compartment doors.	
7.14.1	Hinge and latch material – all door hinges and latches shall be chromed or stainless steel.	
7.14.2	All locks shall be keyed alike.	
7.14.3	All compartment doors shall have paddle handles.	
7.14.4	Striker plates – adjustable.	
7.15	Door seals – all compartment door openings shall be sealed using automotive, bulb type, rubber gaskets.	
7.16	Vertical doors shall have removable check chains with compression springs.	
7.17	Rubber bumpers – installed on the body below the horizontal compartments to prevent contact between the compartment door and the body, two (2) bumpers per door.	
7.18	Wheelwells – 1/8 in. hi-shine aluminium with heavy-duty aluminium tube extrusion frame.	
7.18.1	Wheelwell liners – heavy-duty ABS or 5083 saltwater marine grade liners, removable.	
7.19	Drip moulding – required above each door opening including rear.	

7.20	All service body compartments shall have bottom roll-out trays lined with Interlocking matting, Dri-deck or equal.	
7.21	Rub rail – aluminium rail, bolted to the lower, outer edge of the body located below the compartments.	
7.21.1	Nylon spacers – required between rub rail and body, 18 in. spacing approx	
7.22	The rear lower section of the body sides behind the rear wheels shall be angled upwards to provide an unloaded angle of departure of approx. 10°. State rear departure angle.	
7.23	The rear section of the body shall be finished with $\frac{1}{8}$ in. hi-shine aluminium tread plate panels, fastened to the rear body framework.	
8.0	ELECTRICAL SYSTEMS, GENERAL	
8.1	All electrical and lighting equipment installed by the apparatus manufacturer shall conform to current and applicable NFPA and ULC Standards.	
8.2	Electrical wiring for all 12-Volt electrical circuits shall be in accordance with SAE Standard J1292.	
8.2.1	All wiring shall be in pre-engineered harnesses with weatherproof, guided pin snap-together connectors with no splices allowed. Each circuit shall be colour coded and marked the entire length of the wire with easily read numbers and/or letters for identification. Wires shall be minimum 14 ga., multi-strand copper with cross-linked polyethylene insulation.	
8.2.2	Where crimp-on type electrical connectors are necessary, the connectors shall be crimped to the wiring, pull tested then sealed using heat shrink tubing.	
8.2.3	All body electrical and lighting shall be wired from a power distribution box, i.e., connecting to the chassis fuse panel is not acceptable.	
8.2.4	All wiring shall be properly secured and routed. All holes required for routing shall have rubber grommets installed and sealed as required.	
8.3	Reset type circuit breakers shall be used in lieu of fuses for all circuits requiring overload protection.	
8.4	Distribution panel – labelled with a permanent type label, required for electrical relays and wire connection bar, located to be readily accessible for servicing. The panel shall be located so as not to reduce useable compartment space. An electric harness quick-disconnect shall be provided to facilitate removal of body in the future.	
8.5	Switch panel – all electrical equipment switches shall be mounted on a switch panel mounted in the cab convenient to the operator. Light switches shall be rocker type with integral indicator lights to show when the circuit is energized. All switches shall be appropriately identified with a permanent type label.	
8.6	Master light switch – shall consist of one (1) illuminated rocker switch wired	

	through a constant duty solenoid to accessory switches to allow pre-selected switches to be turned on or off at one time.	
8.7	Battery master disconnect – one (1) illuminated rocker switch wired through a constant duty solenoid within easy reach of the driver.	
8.8	Engine run light – located in the cab and wired into the oil pressure switch.	
8.9	Battery charger/conditioner – LaMarche Type J model A-18 or equal, fully automatic charger c/w a weatherproof 120 Volt AC receptacle, located in an easily accessible location. State make and model being bid.	
9.0	VEHICLE LIGHTING AND WARNING EQUIPMENT	
9.1	The apparatus shall be equipped with all vehicle lighting equipment required under the Canada Motor Vehicle Safety Act and the Manitoba Highway Traffic Act.	
9.2	The apparatus shall have a certified system of optical warning devices that meets or exceeds the requirements of NFPA 1901 (latest edition), LED preferred where applicable.	
9.3	Stop, turn, taillight and clearance lights – Truck-Lite Super 44 series and LED 10 Series c/w amber LED turn signals or equivalent LED system. State details of system being bid.	
9.3.1	The wiring connections shall be made with weather resistant, plug-in style connectors.	
9.4	License plate light – LED required.	
9.5	Back-up alarm – required, 97 dB(A) min	
9.6	Compartment lights – nominal 4" x 2" light(s) in each compartment. Compartments with shelves and/or partitions shall be equipped with a separate light in each storage area such that the entire compartment interior is illuminated. The light(s) in each compartment shall be activated by a proximity switch upon the opening of the compartment door. A master switch for the compartment light circuit shall be located in the cab for operation by the driver.	
9.7	Step lights – LED indirect lights with clear lens shall be provided to illuminate step areas. Step lights shall be actuated with work lights switch in cab when park brake is set.	
9.7.1	Work lights – apparatus shall have sufficient LED work lighting to properly illuminate the work areas, steps and ground areas around the body. Areas under the driver and passenger area exits shall be activated automatically when the exit doors are opened.	
9.7.2	Scene lights – two (2) clear, halogen scene lights, one (1) per side of body. State make and model being bid.	

9.8		dome lights – a clear dome light with 3-position switch shall be installed e cab ceiling, one (1) per door. LED lighting preferred.	
9.9		manager – one touch device, protected against reverse voltage and rostatic damage, capable of managing up to seven (7) items.	
9.10	The l	oad manager system shall include the following features:	
	i)	Main battery monitoring.	
	ii)	Electrical load sequencing in priority from 1-7. Sequencer shall sequence loads on $\frac{1}{2}$ second intervals.	
	iii)	Electrical load shedding tied through the parking brake and only shed items during stationary vehicle operations. Load shedding shall be reverse order of load sequencing. If a load has been shed, it shall be reactivated upon parking brake release.	
	iv)	Visual and audible low voltage alarm control.	
	v)	Override switch required (with permanent type label) to override operation of the management system as per NFPA requirements.	
9.11		vehicle low voltage electrical system shall be tested in compliance with ont N.F.P.A. and ULC requirements and a certificate shall be supplied.	
9.12		ning lights – lights shall be mounted in accordance with current NFPA 1901 dards.	
9.13		the make and model of lights being bid for the following areas: (Note: LED ng required).	
	i)	Zone A – one (1) nominal 52 in. light bar on upper zone, two (2) red LED lights mounted on front bumper.	
	ii)	Zone B – state.	
	iii)	Zone C – state.	
	iv)	Zone D – state.	
9.14	Siren	– complete with microphone. State make and model being bid.	
9.14.1		speaker – one (1) 100 Watt siren speaker mounted on front bumper. make and model being bid.	

9.15	Trailer wiring – 7-pin connector mounted to back of body near trailer hitch, see chassis spec. for connector, wiring and brake controller.	
10.0	WELDING	
10.1	The Contractor shall be CWB Certified, and/or ASME qualified or have Journeyman qualifications. All welding shall be of excellent workmanship and appearance, and shall conform to CSA Standard W47.1-03 and W59-03.	
10.2	All welds shall be continuous welds where applicable.	
10.3	The body manufacturer shall have a documented quality control program in effect including inspection of welds by a qualified inspector.	
11.0	INSTALLATION	
11.1	Exhaust modification – shall be modified and routed to the passenger side ahead of the rear wheels.	
11.2	Fluid capacity and type label – a permanent label shall be provided stating the type and quantity of the following fluids used in the vehicle:	
	<ul> <li>Engine oil</li> <li>Engine coolant</li> <li>Chassis transmission fluid</li> <li>Drive axle fluid</li> </ul>	
11.3	Welding to truck chassis frame is not permitted. Drilling on chassis frame flanges is not permitted.	
11.4	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.	
11.5	U-bolt mounting brackets required for body installation, bolted to chassis frame using Grade-8 fasteners.	
11.6	Isolators – all contact between steel or aluminium shall be separated by 1/16 in. rubber or neoprene isolator to prevent galvanic corrosion.	
11.6.1	All fasteners connecting dissimilar metals shall be stainless steel or cadmium plated bolts.	
11.7	Any holes required in chassis frame web must be drilled and reamed to fit bolts.	<del></del>
12.0	MISCELLANEOUS	
12.1	First aid kit – one (1) required.	
12.2	Mud flaps – heavy-duty, rubber, no insignia, installed behind rear wheels c/w anti-sail brackets.	
12.3	Rear bumper – heavy-duty step type, tapered at outer ends, bolted to chassis frame with Grade-8 bolts and designed to protect the full width of	

	the body. State dimensions.	
12.3.1	Dock bumpers – two (2) bolt-on, hollow core, rubber dock type, bolted to bumper.	
12.3.2	Rear tow eyes – heavy-duty tow eyes, rated for vehicle weight, firmly attached to truck frame.	
12.4	Trailer hitch – receiver style hitch, "A" frame design, bolted to chassis frame web, capable of towing a decontamination trailer weighing 16,820 lbs. with a 3,580 lbs. tongue weight. Hitch shall be c/w equalizer bars and heavy duty tow hooks for safety chains.	
12.4.1	Trailer hitch insert – 2-5/16 in ball.	
12.5	Exhaust extension – chassis exhaust pipe shall be modified to the right rear wheel area c/w necessary heat shielding.	
13.0	COLOUR AND FINISH	
13.1	The exterior of the body shall be properly cleaned, primed and painted red to match cab colour using a polyurethane enamel paint, Dupont Imron or Sikkens painting process.	
13.2	All painting shall be performed in an atmosphere controlled spray booth.	
13.3	Any caulking of body seams shall be performed prior to painting. Caulking material shall be high performance elastomeric sealant.	
13.4	Reflective striping – minimum 4 in. red reflective stripping, applied to the front sides, and rear of the apparatus in accordance with NFPA requirements for reflective striping.	
13.5	The reflective striping on the cab front entrance doors shall incorporate the Fire Department's stylised "WFPS" logo. (A diagram of the logo shall be provided to the Contractor by the City).	
14.0	TESTING AND CERTIFICATION	
14.1	The Contractor shall be responsible for obtaining testing and certification of the vehicle in compliance with the requirements of CAN/ULC-S515-M88 Standard for Automobile Fire Fighting Apparatus, by Underwriters' Laboratories of Canada (ULC). The Contractor shall provide proof of certification to the City prior to delivery of the vehicle.	
14.2	A Manitoba Vehicle Safety Inspection shall be performed on the vehicle prior to delivery. A valid decal shall be displayed and a safety certificate shall be provided.	
14.3	Weight – a certified weigh scale ticket including front and rear axle weights shall be provided of the completed unit at the time of delivery.	
14.3.1	State estimated front and rear axle weights.	

# 15.0 MANUALS

15.1	Manuals supplied under this contract shall be in English and shall be specifically for the vehicle supplied. General purpose manuals are not acceptable. The manuals shall cover the complete equipment including all components thereof.  Compact Disk format is preferred.			
15.2	The f			
	<u>Cab</u>	Cab & Chassis		
	a)	Operator's manuals – two (2) sets in total.		
	b)	Parts, repair and service manuals, including preventative maintenance schedules – two (2) sets in total.		
	Serv	ice Body		
	c)	Parts, repair and service manuals, including detailed wiring schematics and preventative maintenance schedules – two (2) sets in total.		
	Note	: The wiring schematics shall identify the location of all relays, switches, etc.		
16.0	PER	FORMANCE RELIABILITY		
16.1	The responsibility for the design of the complete unit, its performance and reliability shall rest upon the Contractor.			
16.2	The term "repeated failures" as used herein is defined to mean that the same component, subassembly, or assemble 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, 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 operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.			
16.2.1	make	re the unit develops "repeated failures" in service, the Contractor shall e any necessary engineering changes, repairs, alterations or modifications der to guarantee reliability of performance.		
17.0	WAF	<u>RRANTY</u>		
17.1	agair agree has t on th	Contractor shall warrant <b>all body equipment</b> , and all parts thereof, nest any defects of workmanship, construction and materials, and es to repair or replace, without cost to the City, any article that become defective and not proven to have been caused by negligence e part of the user within <b>three (3) years</b> from the date the equipment t into service by the City of Winnipeg.		
17.2	The	Contractor shall warrant <b>all body paint</b> , primer and finish against any		

defects of workmanship, and agrees to repair or repaint, without cost to

The City of	Winn	ipeg			
Addendum	1 for	Bid O	pportuni	ty No.	308-2005

Bid Submission Page 14 of 20

	the City, any area that has become defective and not proven to have been caused by negligence or accident on the part of the user within <b>five (5) years</b> from the date the equipment is put into service by the City of Winnipeg.	
17.3	A new one (1) year warranty period shall be provided for any article that is repaired or replaced under the terms of the "repeated failures" clause (Section 16.0 Performance Reliability). The new warranty period shall be effective from the date of acceptance of the repaired or replaced article.	
17.4	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, the Bidder shall include a written detailed estimate with the bid. Any work performed by the Fire Paramedic Service Mechanical Services Branch shall be charged to the Contractor at the Branch's shop rate in effect at the time the work is performed. The City reserves the right to reject any bid where the proposal for warranty work is deemed unacceptable by the Supervisor of the Emergency Mechanical Services Branch.	

#### **DETAILED SPECIFICATIONS 05026**

## 33,000 LBS. GVWR CAB & CHASSIS

(Fire/Paramedic)

## 1.0 <u>TYPE</u>

- 1.1 Shall be a minimum 33,000 lbs. GVWR Conventional Cab & Chassis suitable for use as a decontamination truck with an aluminium service body. The vehicle shall be furnished complete and ready for use with all features and equipment as described herein.
- 1.2 STATE MAKE AND MODEL BEING BID: 2005/2006\_\_\_\_

#### 2.0 OTHER SPECIFICATIONS AND 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.
- The completed unit and all its components shall comply with all C.M.V.S.S. and Manitoba Highway Traffic Act regulations and requirements including, but not limited to, a Manitoba Government Inspection with Safety Sticker on the driver's side window.

## 3.0 SERVICE FACILITY

3.1 For the purpose of warranty repairs, the chassis supplier shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to B9.1, 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.

# 4.0 <u>INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS</u>

- 4.1 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.

ITEM	SPECIFICATION	BIDDER TO STATE "YES" OR STATE DEVIATION
GVWR		
- Total	33,000 lbs.	
- Front	12,000 lbs. minimum	
- Rear	21,000 lbs. minimum	
GCWR	40,000 lbs. minimum	

Cab-to-axle	102 in. approx., suitable for 12 ft. aluminium body, state	
- Wheelbase	170 in. approx., state	
Engine	Diesel, inline 6-cylinder, Cat C7	
- Horsepower	300 HP gross minimum	
- Torque	800 lb-ft minimum	
- Engine shut down	Low oil pressure / high water temperature	
- Air intake warmer	Required	
- Fuel shut-off	Electric solenoid type	
- Air cleaner	Dry type	
- Air intake restriction indicator	Dash or underhood mounted	
- Oil drain plug	Magnetic type	
- Oil filter	Full flow, spin-on type	
- Fuel filter	Spin-on type	
- Fuel/water separator	Heated, drainable, located to be protected from road spray	·
- Fuel line primer pump	Required	
- Block heater	Immersion type, 1000 Watt minimum with covered recessed male plug, located under driver's side door	·
- Coolant	CAT Extended Life coolant, antifreeze to -35° F (-37°C)	
- Coolant filter	Required	
- Coolant hoses	Silicone type or Gates Blue Stripe	
- Fan Drive	Horton, on/off type	
- Air compressor	Water cooled, pressure lubricated, minimum 15 cfm	
Electrical system		
- Alternator	Leece Neville, 250 Amp minimum	
- Circuit breakers	Auto-reset, readily accessible	
- Batteries	Three (3), 12-volt, group 31F, 1950 CCA comb. capacity minimum	
- Battery storage	Under cab mounted, readily accessible. Battery box/storage shall not be completely sealed, state location	
- Battery disconnect	In-cab mounted outboard of driver's seat	
- Remote battery boost terminal	Required, state location	
- Trailer plug wiring	Routed to end of frame c/w plastic 7-way connector, Pollak 12-707 or equal. Wiring shall be circuit breaker protected, wired separately from main truck lighting	
- Electric brake controller	Required, suitable for use with electric over hydraulic trailer brake system	

- Back-up alarm	97dBA, factory installed	
- 2-way radio circuit	Independent 20 Amp circuit, ignition powered, wired under dash loose, labelled	
Exhaust system	Horizontal muffler, horizontal discharge on passenger side, modified as per Detailed Spec. 05005	
Transmission		
- Model	Allison 3500 EVS Series	
- Shift selector	Dash mounted, digital push button	
- PTO provision	Required with maximum clearance from exhaust	
- Oil level dipstick	Bayonet type with high and low level markings	
- Trans. drain plug	Magnetic type	
Front axle	Meritor, 12,000 lbs. capacity minimum	
Rear axle	Meritor, 21,000 lbs. capacity minimum	
- Ratio	For 110 km/hr top speed, state ratio	
- Differential lock	Required for rear drive axle w/dash mtd. switch	
Hub seals	Oil lubricated front and rear	
Front suspension	Multi-leaf or taper leaf spring suspension, 12,000 lbs. capacity minimum	
Rear suspension	Air ride suspension, 21,000 lbs. capacity minimum, state make and model	
Rims, wheels		
- Front	22.5 x 8.25 steel disk, 10-bolt	
- Rear	22.5 x 8.25 steel disk, 10-bolt	
Tires, front	Michelin XZY or Goodyear equivalent, state	
- Size	11R 22.5G	
Tires, rear	Michelin XDE M/S or Goodyear 164 RTD, state	
- Size	44D 00 50	
	11R 22.5G	
Frame	To match GVWR, 1,000,000 inlbs. RBM minimum	
Frame	To match GVWR, 1,000,000 inlbs. RBM minimum	
Frame - Afterframe	To match GVWR, 1,000,000 inlbs. RBM minimum As required for service body, state	
Frame - Afterframe Steering	To match GVWR, 1,000,000 inlbs. RBM minimum As required for service body, state Power	
Frame - Afterframe Steering Brakes	To match GVWR, 1,000,000 inlbs. RBM minimum As required for service body, state Power Air, ABS, S-cam drum brakes front & rear	
Frame - Afterframe Steering Brakes - Slack adjusters	To match GVWR, 1,000,000 inlbs. RBM minimum As required for service body, state Power Air, ABS, S-cam drum brakes front & rear Meritor (clearance sensing), automatic type	

- Drain valves	air tank except wet tank	
- Air drier	Wabco System Saver 1200, heated	
Fuel tank	170 L minimum capacity, fully fuelled upon delivery	
- Fuel separator	Heated, drainable	
Cab		
- Type	Conventional w/corrosion inhibitor	
- Construction	Riveted aluminium or galvanized steel, state	
- Hood	Fibreglass tilt	
- Cab mounts	Air suspension	
- Driver's seat	High back, air suspension w/armrests, cloth upholstery	
- Passenger seat	High back, air suspension w/armrests, cloth upholstery	
- Interior trim	Cloth or vinyl headliner on roof, door panels and rear interior of cab	
- Floor covering	Rubber mat with under-padding	
- Floor mats	Two (2), rubber	
- Engine cover / Firewall	Insulated	
- Sun visors	Dual flip-up type	
- Steering wheel	Tilt type	
- 12-Volt power outlet	Required	
- Radio	Factory installed AM/FM	
- Starter switch	Key operated c/w three (3) sets of keys	
- Interior light	Dome light with driver and passenger door switches	
- Heater / Defroster	High output, capable of keeping all windows clear at an outside temperature of -35°F (-37°C)	
- Air conditioning	Required	
- Brake and accelerator pedals	Hanging type	
- Horn	Dual electric	
- Exterior mirrors	Dual West Coast, heated, lighted, stainless steel, 7" x 16", suitable for 102 in. equipment width	
- Convex mirrors	6 in. aux., stainless steel, mtd. below West Coast mirrors, one (1) per side	
- Windows & windshield	Tinted	
- Windshield wipers	Electric, intermittent	
- Windshield washers	Electric	
- Grab handles	Dual exterior	

- Entrance steps	Dual each side, open grate / grip type	
- Winter front	Heavy-duty vinyl w/twist lock or snap type fasteners	
Instrumentation		
- Oil pressure	Gauge	
- Coolant temperature	Gauge	
- Transmission oil temperature	Gauge	
- LOP/HWT	Warning light and buzzer	
- Voltmeter	Gauge	
- Air reservoir pressure	Gauge with LAP warning light and buzzer	
- Engine hourmeter	Required, non-resettable type	
Tow hooks	Front mounted	
Front bumper	Steel, full width	
Colour		
- Exterior	Red, Imron N2225HN or equal	
- Interior	Blue or grey	
- Frame & suspension	Primed and finished with black Imron 5000 paint	
- Front bumper	Argent	
- Wheels	Red, Imron N2225HN or equal	
Flare kit	Three (3) triangular reflectors, CVSA approved	
Fire extinguisher	Permanently fastened , readily accessible	
Warranty		
- Basic Vehicle	Two (2) years, unlimited km	
- Batteries	One (1) year or 100 000 km	
- Drivetrain	Two (2) years, unlimited km	
- Cab structure and corrosion	Five (5) years, unlimited km	
- Frame rails and crossmembers	sFive (5) years, unlimited km	
- Cab paint	One (1) year of 100 000 km	
- Engine	Three (3) years or 240 000 km	
- Transmission	Five (5) years, unlimited km	
- Axles, front & rear	Three (3) years or 240 000 km	

# **FORM O: QUESTIONNAIRE**

0	STATE the delivery time of the complete order from the date of official notification of award: (See D5.1)
0	<b>LIST</b> any significant features that will be supplied standard on the unit being offered, but were not specifically mentioned in the Detailed Specifications:
0	LIST three current users of the offered model:
0	STATE the location of the service facility:
)	Does the equipment being offered meet or exceed the minimum requirements of the Detailed Specifications?
)	LIST any deviations that might be considered less than equal to the Detailed Specifications: