

## FORM N: DETAILED SPECIFICATIONS 24033

### ARMORED VAN

#### 1. INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 1.1 All items in these specifications should be answered indicating compliance or non-compliance.
- 1.2 **Bidder/Proponents shall state “yes” for compliance or state “deviation”**, or give a reply where requested to do so. Deviations and/or equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specifications is used, the City will also consider deviations and/or equivalents.
- 1.3 Lengthy explanations of deviations may be included in a separate document and must reference the appropriate Detailed Specification.
- 1.4 Each Bidder/Proponent is required to fill in every blank. Failure to do so may be used as a basis for rejection of bid/proposal.
- 1.5 It will be the responsibility of the Bidder/Proponent to inform the City of any errors or omissions in these Detailed Specifications, for under this Contract, the Contractor shall be held responsible to ensure that the manufacturer will be responsible for the design, performance, reliability and satisfactory operational function of the unit.

#### 2. DESCRIPTION OF EQUIPMENT

- 2.1 These specifications describe an **Armored Van** and other equipment and features as specified herein.
- 2.2 The **ARMORED VAN** shall be a new 2024 model year or newer.
- 2.3 The **ARMORED VAN** and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 2.4 The **ARMORED VAN** shall be the manufacturer's latest model, as may be modified by these specifications. The **ARMORED VAN**, including all auxiliary equipment, shall be furnished complete and ready for use. All parts not specifically mentioned but which are required for the complete unit shall conform in strength, quality of material and workmanship, to the best standards and engineering practice in the industry.
- 2.5 The ratings specified herein merely state the minimum values acceptable to the City, not implying that those values are sufficient for the design of the particular equipment being bid/Proposed.

#### 3. OTHER SPECIFICATIONS AND STANDARDS

- 3.1 All applicable SAE Standards form an integral part of the vehicle specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 3.2 The Armored Van shall comply with the applicable regulations:

Transport Canada, National Safety Mark, NSM: <http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm>

Manitoba Safety and Health Regulation, Parts 12, 16, 22: <http://web2.gov.mb.ca/laws/reg/current/217.06.pdf>

Canadian Motor Vehicle Safety Standards C.M.V.S.S. [http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.\\_c.\\_1038/section-sched3.html](http://laws-lois.justice.gc.ca/eng/regulations/C.R.C._c._1038/section-sched3.html)

Manitoba Highway Traffic Act regulations and requirements including, but not limited to, a Manitoba Government Inspection with Safety Sticker. <http://web2.gov.mb.ca/laws/reg/index.php?act=h60>

Canadian Standards Association, CSA: <http://www.csagroup.org/>

Under Writers of Canada, U/L: <http://www.ulc.ca/>

Society of Automotive Engineers, SAE: <http://www.sae.org/>

Manitoba Building Code: <https://web2.gov.mb.ca/laws/reg/current/pdf-reg.php?reg=31/2011>

- 3.3 All welding and welding designs of the load supporting elements shall conform to the requirements of the Canadian Standards Association Standard (CSA) W47.1-03 and W59-03.
- 3.4 The completed unit shall include a Manitoba Government Inspection with Safety Sticker on the driver's side window.
- 3.5 The completed vehicle shall be complete with a National Safety Mark, NSM.
- 3.6 State NSM Number: \_\_\_\_\_

**4. REFERENCES**

- 4.1 Provide five (5) references where this equipment is used in a working environment where climatic conditions are similar to the City of Winnipeg.  
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\_\_\_\_\_  
\_\_\_\_\_  
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**5. PERFORMANCE RELIABILITY**

- 5.1 The responsibility for the design of the **Armored Van** its performance and reliability shall rest upon the Contractor.
- 5.2 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.
- 5.3 Where the **Armored Van** develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.
- 5.4 The equipment shall be capable of consistent top performance in City of Winnipeg Environment.  
**Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C).**

**6. SERVICE FACILITY**

- 6.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. 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.

**7. QUALIFICATIONS OF MANUFACTURER & CONTRACTOR**

- 7.1 The manufacturer of the High Roof Cargo Van shall have five (5) years continuous experience manufacturing Armored Vans.
- 7.2 The manufacturer shall have in effect a documented quality control program ensuring that the quality of materials and workmanship, including welding, conforms to the best standards and engineering practice of the industry.
- 7.3 The Contractor shall have five (5) years continuous experience servicing, repairing and maintaining Armored Vans of the type being offered.

**8. MAKE & MODEL**

- 8.1 **State** year, make and model being bid: \_\_\_\_\_
- 8.2 High Roof Van – required. \_\_\_\_\_
- 8.3 Exterior colour – grey. \_\_\_\_\_
- 8.4 GVWR – 11,000 lbs. approx. with dual rear wheels. \_\_\_\_\_
- 8.5 Roof height (exterior) – 110 in. approx., **state**. \_\_\_\_\_
- 8.6 Cargo height (interior) – 82 in. approx., **state**. \_\_\_\_\_
- 8.7 Vehicle length – 235 in. approx., **state**. \_\_\_\_\_
- 8.8 Cargo length at floor – 144 in. approx., **state**. \_\_\_\_\_
- 8.9 Wheelbase – 148 approx., **state**. \_\_\_\_\_
- 8.10 Engine – V6 Gasoline, 310 hp, 400 lb.-ft. torque approx. \_\_\_\_\_
- 8.11 Engine block heater – required, 120 Volt. \_\_\_\_\_
- 8.12 Transmission – 10-speed automatic with auxiliary transmission oil cooler. \_\_\_\_\_
- 8.13 Coolant – Extended life coolant, -37°C (-35°F). \_\_\_\_\_
- 8.14 All Wheel Drive – required. \_\_\_\_\_
- 8.15 Rear axle differential – 4.10 axle ratio, limited slip. \_\_\_\_\_
- 8.16 Bumper, front – aftermarket, heavy duty, black. \_\_\_\_\_
- 8.17 Door, side – sliding passenger. \_\_\_\_\_
- 8.18 Power cab door windows. \_\_\_\_\_
- 8.19 Doors, rear – 50/50 hinged rear doors. \_\_\_\_\_
- 8.20 Ignition keys/fobs – four (4) sets required. \_\_\_\_\_

**9. ARMORING SPECIFICATIONS**

9.1

VPAM	CEN	WEAPON	CALIBER	WEIGHT(g)	RANGE(m)	SPEED(m/s)
VR4	B4		.44 Magnum	15.6 ± 0.1	5.00 ± 0.5	440 ± 10
VR5	B5		5.56 x 45 mm SS109 & M193	4.0 ± 0.1	10.00 ± 0.5	950 ± 10
VR7	B6		7.62 x 51mm M80 Nato Ball	9.5 ± 0.1	10.00 ± 0.5	830 ± 10
VR9	B7		7.62 x 51MM AP (Armor Piercing)	9.8 ± 0.1	10.00 ± 0.5	820 ± 10

\*VPAM Certification includes ballistic and blast tests on a fully armored vehicle

9.2 Opaque Armor - Advanced Ballistic Steel and Composite Materials:

- All opaque armor to be acquired from certified, approved suppliers
  - Ballistic Safety Cell with vertical and horizontal body surfaces armored using a combination of Ballistic steel and lightweight composite materials to provide protection, to desired Ballistic protection Level NIJ III
  - Roof Armored with Light Weight Composite Material and ballistic steel framing
  - Ballistic Safety Cell provides 360-degree protection against multiple projectiles of a linear or angled trajectory, ensuring no bullet or fragmentation will enter the vehicle.
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9.3 Transparent Armor (Glass):

- All transparent armor provided by Tier 1 Certified and approved suppliers. The proper thickness will be sized based on the desired Ballistic and blast preference outlined in NIJ III Armor Level. Clad-Polycarbonate-Mylar, ceramic paint bands to assure adhesion with no de-lamination, anti-spall to protect against fragmentation, and no discoloration from UV rays. Generally 39/40mm thick
  - Ballistic steel windshield overlap design ensures all glass stress loads evenly distributed to prevent the ballistic windshield from falling inward
  - One-piece ballistic OEM In Appearance Curved windshield
  - Two (2) front door glass armored to NIJ III
  - Rear Door Glass Left OEM with B6 Rated Flat Glass modules installed behind
  - OEM Glass blacked out
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9.4 Floor – armored with a blast protection against 2 DM 51 grenades. Internal floor covered with grey DOT anti-slip flooring.

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9.5 Gun ports – three (3), **state** locations.

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9.6 Fuel tank – fuel tank armored, blast rated steel, fully fuelled upon delivery.

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9.7 Firewall – complete firewall protection against shots or blast fragmentation. Firewall armored to Level NIJ III/B6.

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9.8 Battery and PCU (computer) – battery and PCU fully armored and enclosed in armored compartment with NIJ III/B6 rated steel.

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9.9 Tailpipe – mesh tailpipe covering.

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9.10 Front doors – fully armored front doors with light weight composite material to NIJ III/B6 levels. Door straps on front doors to protect against extension. All door hinges heavy duty.

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9.11 Side sliding door – fully armored sliding door on passenger side with NIJ III/B6 ballistic light-weight material. Internal door handles to allow opening from inside.

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9.12 Rear deployment doors:

- Fully armored rear doors with mix of ballistic steel & light weight composite material to NIJ III/B6 Levels
  - Door straps on doors to protect against over extension
  - Rear Door Lock Outs at 90°
  - Door hinges are reinforced from the interior of the pillar and interior of doors to avoid sagging.
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9.13 Door overlaps – full ballistic overlaps on all doors.

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9.14 Privacy curtain – black privacy curtain between cab and rear officer's area.

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9.15 Grab handles – interior steel grab handles for stabilization inside rear officer's area.

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9.16 Suspension – front and rear suspension professionally upgraded to compensate for additional weight of armor.

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9.17 Tires, run flats & emergency equipment:

- Upgraded heavy duty tires
- Upgraded heavy duty rims
- Hutchinson Run Flat Inserts in all tires including full size spare
- Five Ton Jack
- Tire Iron
- Two (2) warning triangles
- 5 lb. fire extinguisher
- First aid kit

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9.18 Climate controls and insulation – separate air conditioning and heat for front and rear of unit, roof mounted air conditioner for rear compartment, separate controls.

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9.19 Internal lighting – three (3) red and white lights for both day and night deployment, two (2) installed in rear compartment, evenly spaced, one (1) mounted in cabin area. Dome Light master switch in cabin, switches by side jump sliding door and rear doors.

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9.20 Lighting system – LED Police lights (red/blue) in front grill and rear of vehicle, clear lensed lights.

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9.21 Siren and PA system – 200W siren and PA system.

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9.22 Seats:

- Front Seats OEM
- Driver's Side Rear bench seat with storage underneath
- Passenger's Side Rear bench seat flips up
- Five (5) Two Point Seat Belts

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9.23 Roof hatch – required with internal ladder and plate.

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9.24 Radio/laptop prep package – antennas to be supplied by the Winnipeg Police

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Service (WPS).

9.25 Miscellaneous Equipment:

- Two (2) Remote Control Go Lights
- Two (2) Additional Rear Cooling Fans
- One (1) Dry Erase Board
- 4-camera system with 1TB DVR system
- Roof Rack
- Roof Hatch with internal ladder to roof
- Radio Prep Package
- Heated Windshield
- Side Heavy Duty Running Boards with Exterior Grab Handles
- 3000W power inverter, AC plugs w/USB and battery backup
- Charging bank for radios supplied by WPS
- Kussmaul shore power with auto eject

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**10. WARRANTY**

10.1 Chassis warranty – the Contractor shall provide all detailed published Warranty information (including all exclusions) at the time of delivery of the equipment. State the following:

- 10.2 Basic vehicle State \_\_\_\_\_
- 10.3 Batteries State \_\_\_\_\_
- 10.4 Drivetrain State \_\_\_\_\_
- 10.5 Cab structure/corrosion State \_\_\_\_\_
- 10.6 Frame & crossmembers State \_\_\_\_\_
- 10.7 Cab paint State \_\_\_\_\_
- 10.8 Engine State \_\_\_\_\_
- 10.9 Towing coverage State \_\_\_\_\_
- 10.10 Transmission State \_\_\_\_\_
- 10.11 Axles, front & rear State \_\_\_\_\_
- 10.12 Exhaust system State \_\_\_\_\_
- 10.13 Provide details on any extended Warranty coverage available. \_\_\_\_\_

**11. DELIVERY**

- 11.1 Delivery Point – the complete unit shall be serviced, ready for operation and delivered FOB with the freight prepaid, including invoice and NVIS to the Winnipeg Fleet Management Agency (WFMA) 185 Tecumseh Street, Winnipeg MB. \_\_\_\_\_
- 11.2 Delivery Time – Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days. **State** earliest delivery time from date of award. \_\_\_\_\_
- 11.3 Delivery Contact – the Contractor shall contact the Contract Administrator prior to delivery of the equipment. \_\_\_\_\_
- 11.4 P.D.I. – a pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list. \_\_\_\_\_

**12. MANUALS**

- 12.1 The following manuals shall be supplied with the equipment when delivered:
  - 12.1.1 Operator two (2) copies required. \_\_\_\_\_
  - 12.1.2 Parts and Service – one (1) complete set including preventative maintenance schedules. \_\_\_\_\_

Note: CD or USB flash drive preferred where available.