

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des
soumissions - TPSGC**

**11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776**

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet TYPES 1 AND 3 AMBULANCES FOR DLR	
Solicitation No. - N° de l'invitation W8476-144753/A	Date 2014-01-20
Client Reference No. - N° de référence du client W8476-144753	
GETS Reference No. - N° de référence de SEAG PW-\$\$HP-912-64449	
File No. - N° de dossier hp912.W8476-144753	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-03-03	Time Zone Fuseau horaire Eastern Standard Time EST
F.O.B. - F.A.B. Plant-Usine: <input checked="" type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Pearson, Neil	Buyer Id - Id de l'acheteur hp912
Telephone No. - N° de téléphone (819) 956-3976 ()	FAX No. - N° de FAX (819) 953-2953
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

**Vehicles & Industrial Products Division
11 Laurier St./11, rue Laurier
7A2, Place du Portage, Phase III
Gatineau, Québec K1A 0S5**

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with this bid solicitation.

2. Requirement

Canada is seeking proposals to procure:

2.1 Quantity five (5) Type I and Type III Ambulances and related items as described in Annex “A” - Pricing and in accordance with Annex “B” - Purchase Description Type I and Type III Ambulances.

2.2 Irrevocable options identified in Annex “A” - Pricing.

2.2.1 The options may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

2.2.2 The options may be exercised in whole or in part and on more than one occasion at the sole discretion of Canada, up to the maximum quantity identified in Annex “A” - Pricing.

2.2.3 The options may be exercised within twelve (12) months after contract award.

3. Debriefings

Bidders may request a debriefing on the results of the bid solicitation. Bidders should make the request to the Contracting Authority within 15 working days of receipt of notification that their bid was unsuccessful. The debriefing may be provided in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions (<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2013-06-01) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.remove bold

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days

Insert: ninety (90) days

2. Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

3. Enquiries - Bid Solicitation

All enquiries must be submitted to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a "proprietary " nature must be clearly marked "proprietary" at each relevant item. Items identified as proprietary will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in *Ontario*.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

5. Environmental Considerations

Canada is committed to greening its supply chain. In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to acquire products and services that have a lower impact on the environment than those traditionally acquired. Environmental performance considerations include, among other things: the reduction of greenhouse gas emissions and air contaminants; improved energy and water efficiency; reduced waste and support reuse and recycling; the use of renewable resources; reduced hazardous waste; and reduced toxic and hazardous substances. In accordance with the Policy on Green Procurement, for this solicitation:

- Offerors / suppliers are requested to provide all correspondence including (but not limited to) documents, reports and invoices in electronic format unless otherwise specified by the Contracting Authority or Project Authority, thereby reducing printed material.
- Offerors / suppliers should recycle (shred) unneeded copies of non-classified/secure documents (taking into consideration the Security Requirements).
- Product components used in performing the services should be recyclable and/or reusable, whenever possible.

6. Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications, Statement of Work or Purchase Description contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least seven (7) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (2 hard copies);

Section II: Financial Bid (1 hard copy);

Section III: Certifications (2 hard copies)

Section IV Additional Information (2 hard copies).

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation;

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement

(<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

2. Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Bidders should complete and submit with their bid the following;

- Appendix "1" - Technical Information Questionnaire -Type I and Type III Ambulances.

2.1 Substitutes and Alternatives

Bidders may propose substitutes and alternatives where "**shall^(E)**" is indicated in the technical requirement description (Purchase Description/Statement of Requirement/Statement of Work). Offerors / suppliers are encouraged to offer or suggest green solutions whenever possible.

2.1.1 Substitutes and alternatives that are equivalent in form, fit, function and performance will be considered for acceptance by the Technical Authority where the Bidder:

- (a) Clearly identifies a substitute and/or an alternative;
- (b) Designates the brand name, model and/or part number of the substitute and/or of the product, where applicable;
- (c) States that the substitute product is fully interchangeable with the item specified in the technical requirement description;
- (d) Provides complete specifications and brochures, where applicable;
- (e) Provides compliance statements that include technical details showing the substitute and/or the alternative meet all technical requirements specified in the technical requirement description; and
- (f) Clearly identifies those areas in the technical requirement description and in the brochures that support the substitute and/or the alternative compliance with the technical requirements.

2.1.2 Substitutes and alternatives offered as equivalent in form, fit, function and performance will not be considered for acceptance by the Technical Authority if:

- (a) The bid fails to provide all of the information requested to allow the Technical Authority to fully evaluate the evaluate the equivalency; or
- (b) The substitute and/or the alternative fail to meet or fail to exceed the technical requirements specified in the technical requirement description.

3. Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment.

3.1 Exchange Rate Fluctuation Risk Mitigation

- 3.1.1 The Bidder may request Canada to assume the risks and benefits of exchange rate fluctuations. If the Bidder claims for an exchange rate adjustment, this request must be clearly indicated in the bid at time of bidding. The Bidder must submit form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments with its bid, indicating the Foreign Currency Component (FCC) in Canadian dollars for each line item for which an exchange rate adjustment is required.
- 3.1.2 The FCC is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuations. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.
- 3.1.3 The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provision in the contract. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease).
- 3.1.4 At time of bidding, the Bidder must complete columns (1) to (4) on form PWGSC-TPSGC 450, for each line item where they want to invoke the exchange rate fluctuation provision. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.
- 3.1.5 Alternate rates or calculations proposed by the Bidder will not be accepted for the purposes of this exchange rate fluctuation provision.

4. Section III: Certifications

Bidders must submit the certifications required under Part 5 - Certifications.

5. Section IV Additional Information

Canada requests that bidders submit the following information:

5.1 Delivery

5.1.1 Firm Quantity

While delivery of the vehicle(s) is requested by 30 September 2014, the best delivery that can be offered is as follows:

Item 001 – quantity one (1), Type I, 4x4 Ambulances and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 002 – quantity one (1), Type I, 4x4 Ambulances and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 003 – quantity one (1), Type III, 4x2 Ambulances and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 004 – quantity one (1), Type I, 4x4 Ambulances and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 005 – quantity one (1), Type III, 4x2 Ambulances and related items will be delivered within _____ calendar days from the effective date of the contract.

5.1.2 Optional Quantity

If an option is exercised, the best delivery that can be offered is as follows:

Item 006 – quantity up to three (3), Type I 4x4 Ambulances and related items will be delivered within _____ calendar days after an option is exercised.

Item 007 – quantity up to two (2), Type III 4x2 Ambulances and related items will be delivered within _____ calendar days after an option is exercised.

5.2 Manufacturer's Standard Warranty Period

Canada requests that the Bidder provide details of the manufacturer's standard warranty period for the vehicle/equipment and its component that exceeds the minimum warranty period of twelve (12) months.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

1.1 Mandatory Technical Evaluation Criteria

1.1.1 Mandatory Proof of Compliance

Bidders must submit, with their bid, all proof of compliance required in the Annex B - Purchase Description and the Appendix 1 - Technical Information Questionnaire.

1.1.2 Substitutes and/or Alternatives

Bidders proposing substitutes and/or alternatives must provide all the information as detailed in Part 3, Section 1, - Substitutes and Alternatives to be considered for evaluation.

1.2 Mandatory Financial Evaluation Criteria

1.2.1 Bidders must provide with their bid the financial information requested in the bid solicitation and at Annex A - Pricing for items 001 to 007, 009 and 010.

1.2.2 The prices of the bid Bids must be in Canadian dollars, DDP Delivered Duty Paid at destination, Incoterms 2000, for the firm quantity for items 001 to 005 and FCA Free Carrier at Contractor's Canadian facility, Incoterms 2000 for optional quantities items 006, 007, 009 and 010. Canadian Custom Duties and Excise Taxes included where applicable, and Applicable Taxes are extra.

1.2.3 Aggregate Evaluated Price

Bids will be evaluated on an aggregate price basis for the firm quantity, optional quantity and familiarization instruction/training (option) as follows:

- a) the firm unit price for the firm quantity, the optional quantity and familiarization instruction/training (option) will be multiplied by their identified estimated quantities; and
- B) the sum of all results will determine the aggregate evaluated price.

Solicitation No. - N° de l'invitation

W8476-144753/A

Amd. No. - N° de la modif.

File No. - N° du dossier

hp912W8476-144753

Buyer ID - Id de l'acheteur

hp912

CCC No./N° CCC - FMS No/ N° VME

W8476-144753

2. Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical and financial evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated aggregate price will be recommended for award of a contract.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and documentation to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default, if any certification made by the Bidder is found to be untrue whether during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with this request will also render the bid non-responsive or will constitute a default under the Contract.

1. Mandatory Certifications Required Precedent to Contract Award

1.1 Code of Conduct and Certifications - Related documentation

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003.. The related documentation therein required will assist Canada in confirming that the certifications are true.

1.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Human Resources and Skills Development Canada (HRSDC) - Labour's website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the FCP Limited Eligibility to Bid " list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed Annex (C) Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the

Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

2. Additional Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

2.1 Product Conformance

The Bidder certifies that all vehicles/equipment proposed conform, and will continue to conform throughout the duration of the contract, to all technical specifications of the purchase description(s).

This certification does not relieve the bid from meeting all mandatory technical evaluation criteria detailed in Part 4.

Bidder's authorized representative signature

Date

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement applicable to this contract.

2. Requirement

- 2.1 The Contractor must deliver quantity five (5), Type I and Type III Ambulances and related items as described in Annex "A" - Pricing and in accordance with Annex "B" - Purchase Description Type I and Type III Ambulances.
- 2.2 The Contractor grants to Canada irrevocable options identified in Annex "A" - Pricing.
 - 2.2.1 The options may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.
 - 2.2.2 The options may be exercised in whole or in part and on more than one occasion at the sole discretion of Canada, up to the maximum quantity identified in Annex "A" - Pricing.
 - 2.2.3 The options may be exercised within Twelve (12) months after contract award.
- 2.3 Optional Extended Warranty Period (**if applicable**)

The Contractor grants to Canada the irrevocable option to extend the warranty period for an additional (to be inserted by PWGSC at time of contract award) months, under the same terms and conditions and at the price stated in the Contract at Annex "A" - pricing. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option within ninety (90) calendar days after contract award and/or the exercising of an option by sending a written notice to the Contractor.

3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<http://sacc.pwgsc.gc.ca/sacc/index-e.jsp>) issued by Public Works and Government Services Canada.

3.1 General Conditions

2010A (2013-04-25) General Conditions - Goods (Medium Complexity), apply to and form part of the contract.

Section 09 entitled Warranty of general conditions 2010A is amended by deleting subsection 2 in its entirety and replacing it with the following:

The Contractor must pay the transportation cost associated with returning the Work or any part of the Work to the Contractor's plant for replacement, repair or making good. The Contractor must also pay the transportation cost associated with forwarding the replacement or returning the Work or part of the Work when rectified to the delivery point specified in the Contract or to another location as directed by Canada. If, in the opinion of Canada, it is not expedient to remove the Work from its location, the Contractor must carry out any necessary repair or making good of the Work at that location. In such cases, the Contractor will be responsible for all Costs (including travel and living expenses) incurred in so doing, Canada will not reimburse these Costs.

If action to effect repairs under warranty cannot be initiated within **two (2)** working days and completed within a reasonable length of time or if the Contractor has no repair facilities in the immediate vicinity (**within 100 kilometres**) of the specified delivery destinations (consignees), the Department of National Defence reserves the right to make such repairs and be reimbursed by the Contractor at the rate of **\$103.91** per hour for labour and the cost for replaced parts."

All other provisions of the warranty section remain in effect.

4. Term of Contract

4.1 Delivery of Vehicle

4.1.1 Firm Quantity

Delivery date of the vehicle must be made as follows:

Item 001 - quantity one (1) Type I 4x4 Ambulance and related items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 002 - quantity one (1) Type I 4x4 Ambulance and related items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 003 - quantity one (1) Type III 4x2 Ambulance and related items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 004 - quantity one (1) Type I 4x4 Ambulance and related items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 005 - quantity one (1) Type III 4x2 Ambulance and related items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

4.1.2 Option Quantity

Item 006 - quantity up to three (3) Type I 4x4 Ambulances and related items to be delivered within _____ calendar days after an option is exercised. (Days to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 007 - quantity up to two (2) Type III 4x2 Ambulances and related items to be delivered within _____ calendar days after an option is exercised. (Days to be inserted by PWGSC the Contracting Authority at time of contract award.)

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Neil Pearson
Title: Supply Specialist
Organization: Public Works and Government Services Canada - Acquisitions Branch
LEFT Directorate, HP Division,
7A2, Place du Portage, Phase 3, 11 Laurier Street, Gatineau Quebec,
K1A 0S5
Telephone: 819 956-3976
Facsimile: 819 953-2953
E-mail: neil.pearson@pwgsc-tpsgc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

5.2 Procurement Authority

The Procurement Authority for the Contract is:

Name: _____ (To be inserted by PWGSC at time of contract award.)

Title: _____

Organization: _____

Telephone: ____ - ____ - ____

Facsimile: ____ - ____ - ____

E-mail: _____

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

5.3 Technical Authority:

The Technical Authority for the Contract is:

Name: _____ (To be inserted by PWGSC at time of contract award.)

Title: _____

Organization: _____

Telephone: ____ - ____ - ____

Facsimile: ____ - ____ - ____

E-mail: _____

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.4 Contractor's Representative

Name and telephone number of the person responsible for :

General enquiries

Name: _____ (To be completed by the bidder.)

Title: _____

Telephone: ____-____-____

Facsimile: ____-____-____

E-mail: _____

Delivery follow-up

Name: _____ (To be completed by the bidder.)

Title: _____

Telephone: ____-____-____

Facsimile: ____-____-____

E-mail: _____

5.5 After Sales Service

5.5.1 The following dealer and/or agent is authorized to provide after sales service, maintenance and warranty repairs and a full range of repair parts for the vehicle/equipment offered:

Item 001

Name: _____

Address: _____

Telephone Number: _____

Distance between the delivery location and the dealer and/or agent: _____ km

Item 002

Name: _____

Address: _____

Telephone Number: _____

Distance between the delivery location and the dealer and/or agent: _____km

Item 003

Name: _____

Address: _____

Telephone Number: _____

Distance between the delivery location and the dealer and/or agent: _____km

Item 004

Name: _____

Address: _____

Telephone Number: _____

Distance between the delivery location and the dealer and/or agent: _____km

Item 005

Name: _____

Address: _____

Telephone Number: _____

Distance between the delivery location and the dealer and/or agent: _____km

6. Payment**6.1 Basis of Payment - Firm Unit Price(s)**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm unit price(s) specified in Annex "A" - Pricing, and as follows:

Basis of Payment (BOP) Type 1: Firm unit prices in Canadian dollars, Delivered Duty Paid at destination, Incoterms 2000, including Canadian Custom Duties and Excise Taxes included where applicable, and applicable Taxes are extra.

Basis of Payment (BOP) Type 2: Firm unit prices in Canadian dollars, FCA Free Carrier, Incoterms 2000 at Contractor's Canadian facility or Contractor's Canadian distribution point, including Canadian Custom Duties and Excise Taxes included where applicable, and applicable Taxes are extra.

Basis of Payment (BOP) Type 3: Price to be negotiated in Canadian dollars, Delivered Duty Paid at destination, Incoterms 2000, including Canadian Custom Duties and Excise Taxes included where applicable, and applicable Taxes are extra.

The transportation cost and/or Travel and living expense will be "negotiated" when Canada intends to exercise an option and has identified the applicable quantities and destinations. When requested by Canada, as a basis for negotiation, the Contractor must provide the transportation price(s) and/or Travel and living expense and relevant information.

Basis of Payment (BOP) Type 4: If exercised, the Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the National Joint Council Travel Directive

(<http://www.njc-cnm.gc.ca/directive/index.php?sid=90&hl=1&lang=eng>), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 SACC Manual Clauses

H1001C Multiple Payments

2008-05-12

6.3 Exchange Rate Fluctuation Adjustment

6.3.1 The foreign currency component (FCC) is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuation. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.

6.3.2 For each line item where a FCC is identified, Canada assumes the risks and benefits for exchange rate fluctuation, as shown in the Basis of Payment. For such items, the exchange rate fluctuation amount is determined in accordance with the provision of this clause.

6.3.3 The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provisions in the contract. The exchange rate adjustment amount will be calculated in accordance with the following formula:

$$\text{Adjustment} = \text{FCC} \times \text{Qty} \times (i_1 - i_0) / i_0$$

where formula variables correspond to:

FCC Foreign Currency Component (per unit)

i_0

Initial exchange rate (CAN\$ per unit of foreign currency [e.g. US\$1])

i_1

exchange rate for adjustments (CAN\$ per unit of foreign currency [e.g. US\$1])

Qty quantity of units

- 6.3.4 The initial exchange rate is typically set as the noon rate as published by the Bank of Canada on the solicitation closing date.
- 6.3.5 For goods, the exchange rate for adjustment will be the noon rate as published by the Bank of Canada on the date the goods were delivered. For services, the exchange rate for adjustment will be the noon rate on the last business day of the month for which the services were performed. For advance payments, the exchange rate for adjustment will be the noon rate on the date the payment was due. The most recent noon rate will be used for non-business days.
- 6.3.6 The Contractor must indicate the total exchange rate adjustment amount (either upward, downward or no change) as a separate item on each invoice or claim for payment submitted under the Contract. Where an adjustment applies, the Contractor must submit with their invoice form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments.
- 6.3.7 The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease), calculated in accordance with column 8 of form PWGSC-TPSGC 450 (i.e $[i_1 - i_0] / i_0$).
- 6.3.8 Canada reserves the right to audit any revision to costs and prices under this clause.

7. Invoicing Instructions

- 7.1 The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions including the Client Ref # BT426 . Invoices cannot be submitted until all work identified in the invoice is completed. Suppliers are requested to provide invoices in electronic format unless otherwise specified by the Contracting Authority or Project Authority, thereby reducing printed material.

Each invoice must be supported by:

- (a) a copy of the release document and any other documents as specified in the Contract;

- 7.2 Invoices must be distributed as follows:

- (a) The original and one (1) copy must be forwarded to the following address for certification and payment:

National Defence Headquarters
Mgen George R. Pearkes Bldg
101 Colonel By Drive
Ottawa, Canada
K1A 0K2

Attention: DLP _____

- (b) One (1) copy must be forwarded to the PWGSC Contracting Authority identified under the section entitled "Authorities" of the Contract.

7.3 Holdback

A ten percent (10%) holdback will apply on the total price of each vehicle Items 001 to 007. on any due payment of the said vehicle/equipment. Release of the holdback (10%) is conditional upon receipt and certified acceptance by inspection authority of the said vehicle and all related items as identified in Annex "A" - Pricing.

Applicable Taxes must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no Taxes payable as it was claimed and payable under the previous invoice.

- (a) The original and one (1) copy of the invoice for the holdback must be forwarded to the Procurement Authority identified under the section entitled "Authorities" of the Contract.
- (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

8. Certifications

8.1 Compliance

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and HRSDC-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by HRSDC will constitute the Contractor in default as per the terms of the Contract.

9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

10. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) 2010A (2013-04-25) General Conditions - Goods (Medium Complexity);
- (c) Annex "A" - Pricing;
- (d) Annex "B" - Purchase Description - Type I and Type III Ambulances
- (e) Appendix 1 - Technical Information Questionnaire - Type I and Type III Ambulances
- (f) Annex "C", Federal Contractors Program for Employment Equity - Certification
- (g) the Contractor's bid dated _____

11. SACC Manual Clauses

A1009C	Work Site Access	2008-05-12
A9006C	Defence Contract	2012-07-16
A9049C	Vehicle Safety	2011-05-16
C2800C	Priority Rating	2013-01-28
C2801C	Priority Rating - Canadian-based Contractors	2011-05-16
D3010C	Dangerous Goods/Hazardous Products	2012-07-16
D5510C	Quality Assurance Authority (DND) - Canadian-based Contractor	2012-07-16
D5515C	Quality Assurance Authority (DND) - Foreign-based and United States Contractor	2010-01-11
D5540C	ISO 9001:2008 Quality Management Systems - Requirements (QAC Q)	2010-08-16
D5604C	Release Documents - Foreign based Contractor	2008-12-12
D5605C	Release Documents - US based Contractors	2010-01-11

D5606C	Release Documents - Canadian-based Contractors	2012-07-16
D9002C	Incomplete Assemblies	2007-11-30
G1005C	Insurance	2008-05-12

12. Inspection and Acceptance

The Technical Authority or his representative is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the Requirements and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

13. Preparation for Delivery

The vehicle / equipment must be serviced, adjusted and delivered in condition for immediate use. The interior and exterior must be cleaned before leaving the factory and being released to inspection authority or consignee personnel at the final delivery location.

The fuel tanks must be at least half full prior to release of the vehicle(s) to inspection authority or consignee.

All vehicles delivered to the consignee are to be delivered between the hours of 8:00 am and 4:00 pm Monday through Friday, except Federal holidays. Any attempt by the carrier to deliver vehicles before or after these hours may be refused unless arrangements have been made for authorized, qualified personnel to be available to perform inspections and to accept the delivery. When the carrier is required to return due to its failure to make an appointment for delivery, Canada will not be liable to pay for additional costs.

14. Shipping Instructions - Delivery at Destination (For Firm quantities)

14.1 The Contractor must ship the goods prepaid DDP - Delivered Duty Paid (as detailed at Annex "A"- Pricing). Unless otherwise directed, delivery must be made by the most economical means. Shipping charges must be shown as a separate item on the Contractor's invoice. The Contractor is responsible for all delivery charges, administration, costs and risks of transport and customs clearance, including the payment of customs duties and taxes.

14.2 The Contractor must deliver the goods by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the contacts specified in Annex "A"- Pricing. The consignee may refuse shipments when prior arrangements have not been made.

15. Release Documents - Distribution

The Contractor must prepare the release documents and distribute them as follows:

- (a) Copy 1: mail to consignee marked: "Attention: Receipts Officer";
- (b) Copies 2 and 3: with shipment (in a waterproof envelope) to the consignee;
- (c) Copy 4: to the Contracting Authority;
- (d) Copy 5: to:
National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A OK2

Attention: DLP _____
- (e) Copy 6: to the Quality Assurance Representative;
- (f) Copy 7: to the Contractor;
- (g) Copy 8: all non-Canadian Contractors to:

DQA/Contract Administration
National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A OK2
E-mail: ContractAdmin.DQA@forces.gc.ca.

16. Post-Contract Award Meeting/Pre-Production Meeting

Within ten (10) working days of the receipt of the Contract, the Contractor must contact the Technical Authority to determine the details of a pre-production meeting. The meeting will be held at the Contractor's plant _____ (specify location). Cost of holding such pre-production meeting must be included in the price of the bid. Please note that the travel and living expenses for Government Personnel will be arranged and paid for by the Canada. The crown reserves the right to carry out the Post-Contract Award Meeting/Pre-Production Meeting via teleconference.

17. Progress Reports

The contractor must prepare and submit monthly progress reports in two (2) copies, one to the Procurement Authority and one copy of the report must also be forwarded to the Contracting Authority.

Each progress report must address the following questions:

- (a) Is the delivery on schedule?
- (b) Is the Contract free of any areas of concern in which the assistance or guidance of Canada may be required?
- (c) Each negative response must be supported with an explanation.

18. Tools and Loose Equipment

For shipment verification, all items and tools, which are shipped loose with the vehicle/equipment must be listed on the Inspection Certificate (CF 1280) or on an attached packing note.

19. Spare Parts Availability

The contractor must ensure that spare parts required to properly maintain and repair the complete vehicle covered by this specification will be available for purchase by the Department of National Defence, or its authorized agents, for a period of 10 years.

20. Material

Material supplied must be new unused and of current production by manufacturer. (2014 model-year or newer).

21. Design Changes

The "Design Change, Design Deviation and Waiver Procedure" as defined in National Defence Standard D-02-006-008/SG-0001 must apply.

22. Interchangeability

Unless changes during the production run are authorized by Procurement Authority, all vehicles supplied against any one item of a contract must be the same make and model, and all like assemblies, sub-assemblies and parts must be interchangeable.

23. Packaging

Solicitation No. - N° de l'invitation

W8476-144753/A

Amd. No. - N° de la modif.

File No. - N° du dossier

hp912W8476-144753

Buyer ID - Id de l'acheteur

hp912

CCC No./N° CCC - FMS No/ N° VME

W8476-144753

The methods used for preservation and packaging must be in conformity with the Contractor's normal standard for domestic shipment or, if necessary, with standards for overseas shipment as below deck cargo.

24. Service at Delivery

The Contractor must send a Service Representative to each delivery destination to perform the assembly/preparation on all vehicles delivered. Cost to provide this service must be included in the price of each vehicle.

ANNEX “A” - PRICING

Item 001 Type I 4x4 Ambulance (Firm Quantity)

The Contractor must deliver the vehicle/equipment including the sample manuals, approved manuals, CD of all manuals, data summary, photographs, warranty letter(s), preventative maintenance replacement parts kit list, Line setting ticket, safety recalls and servicing data, Loose Items documentation and Operator and Maintenance training in accordance with the attached Annex “B” - Purchase Description - Type I and Type III Ambulances

The Type I 4x4 Ambulance and related items must be delivered to:

CFB ASU SHILO
MAJOR EQUIPMENT SECTION
BASE SUPPLY C-101
CFB SHILO
SHILO MB R0K 2A0

Delivery contact: _____ (Name to be inserted by PWGSC at time of contract award.)

Date of delivery: _____ (Date to be inserted by PWGSC at time of contract award.)

Firm unit price of \$ _____ per vehicle, including all equipment and related items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.1 Basis of Payment).

Quantity: one (1)

Item 002 Type I 4x4 Ambulances (Firm Quantity)

The Contractor must deliver the vehicle/equipment including all manuals, warranty letter(s), Line setting ticket, safety recalls and servicing data, Loose Items documentation, and Operator and Maintenance training in accordance with the attached Annex “B” - Purchase Description - Type I and Type III Ambulances

The Type I 4x4 Ambulance and related items must be delivered to:

3 ASG GAGETOWN SUPPLY COMPANY
MAJOR EQUIPMENT SECTION
BLDG B10
OROMOCTO NB E2V 4J5

Delivery contact: _____ (Name to be inserted by PWGSC at time of contract award.)

Date of delivery: _____ (Date to be inserted by PWGSC at time of contract award.)

Firm unit price of \$ _____ per vehicle, including all equipment and related items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.1 Basis of Payment).

Quantity: one (1)

Item 003 Type III 4x2 Ambulance (Firm Quantity)

The Contractor must deliver the vehicle/equipment including all manuals, warranty letter(s), Line setting ticket, safety recalls and servicing data, Loose Items documentation, and Operator and Maintenance training in accordance with the attached Annex "B" - Purchase Description - Type I and Type III Ambulances

The Type III 4x2 Ambulance and related items must be delivered to:

CFB ASU Petawawa
Major Equipment Section
CFB Petawawa
Petawawa Ontario, K8H 2X3

Delivery contact: _____ (Name to be inserted by PWGSC at time of contract award.)

Date of delivery: _____ (Date to be inserted by PWGSC at time of contract award.)

Firm unit price of \$ _____ per vehicle, including all equipment and related items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.1 Basis of Payment).

Quantity: one (1)

Item 004 Type I 4x4 Ambulance (Firm Quantity)

The Contractor must deliver the vehicle/equipment including all manuals, warranty letter(s), Line setting ticket, safety recalls and servicing data, Loose Items documentation, and Operator and Maintenance training in accordance with the attached Annex "B" - Purchase Description - Type I and Type III Ambulances

The Type I 4x4 Ambulance and related items must be delivered to:

LFCA TC Meaford
Major Equipment Section
Bldg M210
MMTC
Meaford Ontario, N4L 1W5

Delivery contact: _____ (Name to be inserted by PWGSC at time of contract award.)

Date of delivery: _____ (Date to be inserted by PWGSC at time of contract award.)

Firm unit price of \$ _____ per vehicle, including all equipment and related items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.1 Basis of Payment).

Quantity: one (1)

Item 005 Type III 4x2 Ambulance (Firm Quantity)

The Contractor must deliver the vehicle/equipment including all manuals, warranty letter(s), Line setting ticket, safety recalls and servicing data, Loose Items documentation, and Operator and Maintenance training in accordance with the attached Annex "B" - Purchase Description - Type I and Type III Ambulances

The Type III 4x2 Ambulance and related items must be delivered to:

CFB ASU Wainwright
Major Equipment Section
Bldg 593
CFB Wainwright
Denwood, Alberta T0B 1B0

Delivery contact: _____ (Name to be inserted by PWGSC at time of contract award.)

Date of delivery: _____ (Date to be inserted by PWGSC at time of contract award.)

Firm unit price of \$ _____ per vehicle, including all equipment and related items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.1 Basis of Payment).

Quantity: one (1)

Item 006 Type I 4x4 Ambulances (Optional Quantity)

If this option is exercised, the Contractor must deliver the vehicle/equipment including all manuals, warranty letter(s), safety recalls and servicing data, Loose Items documentation, and Line setting ticket in accordance with the attached Annex “B” - Purchase Description - Type I and Type III Ambulances

Firm unit price of \$ _____ per vehicle/equipement in accordance with Basis of Payment Type 2 (as detailed at Clause 6.1 Basis of Payment).

Quantity: Up to three (3)

Item 007 Type III 4x2 Ambulances (Optional Quantity)

If this option is exercised, the Contractor must deliver the vehicle/equipment including all manuals, warranty letter(s), safety recalls and servicing data, Loose Items documentation, and Line setting ticket in accordance with the attached Annex “B” - Purchase Description - Type I and Type III Ambulances

Firm unit price of \$ _____ per vehicle/equipement in accordance with Basis of Payment Type 2 (as detailed at Clause 6.1 Basis of Payment).

Quantity: Up to two (2)

Item 008 Transportation Cost (optional Quantities)

If optional vehicles are exercised, the contractor must deliver the vehicle/equipment to final destination detailed below.

The (type of vehicle) and ancillary items must be delivered to:
_____ (to be provided by PWGSC if an option is exercised)

Delivery contact: _____ (Name to be inserted by PWGSC if an option is exercised.)

Date of delivery: _____ (Date to be inserted by PWGSC if an option is exercised.)

Negotiated price: \$(to be negotiated if an option is exercised) per vehicle/equipment, for transportation cost, Delivered Duty Paid at destination, in accordance with Part 6, Basis of Payment Type 3.

Quantity: Up to five (5)

(This item will not be included in the financial evaluation)

Item 009 Operator Training (Option)

If this option is exercised, the Contractor must provide Operator training, in accordance with the attached Annex ‘‘B’’ - Purchase Description - Type I and Type III Ambulances

Firm unit price of \$_____ in accordance with Basis of Payment Type 2 (as detailed at Clause 6.1 Basis of Payment).

Quantity: up to five (5)

Item 010 Maintenance Training (Option)

If this option is exercised, the Contractor must provide maintenance training, in accordance with the attached Annex ‘‘B’’ - Purchase Description - Type I and Type III Ambulances

Firm unit price of \$_____ in accordance with Basis of Payment Type 2 (as detailed at Clause 6.1 Basis of Payment).

Quantity: up to five (5)

Item 011 Travel and Living for Operator/Maintenance Training (Option)

All travel must have the prior authorization of the Technical Authority. All payments are subject to government audit.

All travel and living expenses incurred in the performance of the work outside Canada will be the Contractor’s responsibility.

When requested by Canada, the Contractor must provide an estimated cost for the travel and living.

Estimated cost: _____ Familiarization Instruction/Training, for Travel and Living expenses, Delivered Duty Paid at destination, in accordance with Part 6, Basis of Payment Type 4.

Quantity: up to five (5)

(This item will not be included in the financial evaluation)

Item 012 Optional Extended Warranty Period**Optional warranty coverage available: YES _____ NO _____**

If yes, Canada requests that the Bidder provide details and pricing information of any optional extended warranty period available for the vehicle/equipment and any related items.

(This item will not be included in the financial evaluation)

If exercised, the warranty period will be extended for an additional period of _____ months/calendar days.

Firm unit price of \$_____ Basis of Payment Type 2 (as detailed in Part 6)

Quantity: Up to ten (10)

16 January 2014



NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods.

AVIS

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

**PURCHASE DESCRIPTION
FOR**

TYPE I 4X4 AND TYPE III 4X2, DED, AMBULANCES

ECC 140160, 140161

OPI DSVPM 4 – DAPVS 4

**Issued on Authority of the Chief of the Defence Staff
Publiée avec l'autorisation du Chef d'état-major de la
Défense**

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1. SCOPE

1.1. Overview

This purchase description covers the requirements for a modular aluminum ambulance body on a diesel engine driven, dual rear wheel chassis with a full length walk-through from body to cab. The ambulance body will be used to transport one (1) cot, an attendant and up to three (3) seated passengers via a squad bench. The vehicle cab will also have seating for a driver and a passenger. This purchase description includes the requirements for two (2) different ambulance variants, a Type I chassis 4x4 and a Type III chassis 4x2. Paragraph 3 of this document covers common requirements for both variants while paragraph 4 details the variant specific requirements.

1.2. Instructions

The following instructions apply to this Purchase Description:

- a. Requirements, which are identified by the word "shall", are mandatory. Deviations will not be permitted;
- b. Requirements identified by "shall^(E)" are mandatory. The Technical Authority will consider substitutes/alternatives for acceptance as an Equivalent;
- c. Requirements identified with a "will" define actions to be performed by Canada and require no action/obligation on the Contractor's part;
- d. Where "shall", "shall^(E)", or "will" are not used, the information provided is for guidance only;
- e. In this document "provided" shall mean "provided and installed";
- f. Where a standard or specification is required and the contractor offers an equivalent, that equivalent standard shall be provided upon demand;
- g. Where equipment certification to an SAE standard is required, the contractor shall provide the certification upon request;
- h. Metric measurements shall be used to define the requirement. Other measurements are for reference only and may not be exact conversions; and
- i. Dimensions stated as nominal shall be treated as approximate dimensions. Nominal dimensions reflect a method by which materials or products are generally identified for sale commercially, but which differ from the actual dimensions.

1.3. Definitions

The following definitions apply to the interpretation of this Purchase Description:

- a. "Technical Authority" - The government official responsible for technical content of this requirement;
- b. "Equivalent" - A standard, means, or component type, which has been accepted by the Technical Authority as meeting the specified requirements for form, fit, function and performance; and

- c. The term "Quality Assurance Representative" is defined as the government officer responsible for ensuring that the Contractor quality system, material and services supplied meet the contract requirement;
- d. "Guidance" is defined as a requirement that may be followed. The guidance is provided to indicate a preferred component Make and Model or dimension that would be best for the application. However, deviating from a guidance doesn't consider the bid non-compliant;
- e. "Vehicle" is defined as a Diesel Truck chassis complete with an Ambulance van body; and
- f. "Curb Weight" is the empty weight (no payload included) of a fully equipped vehicle. Curb weight shall include the cab and chassis, Ambulance van body, all attached devices, Contractor supplied equipment, and full fuel tanks, lubricants, and coolants.

1.4. Welding Certification

- a. Manufacturers/Primary OEMs shall^(B) hold certification IAW the Canadian Welding Bureau (CWB) standards to a minimum division three (3) level IAW CSA W47.1 and CSA W47.2.

or

- b. Manufacturers not holding CWB certification shall ensure the following items for consideration by the Technical Authority as an equivalent:
 - i. Individual welders of the manufacturers/primary OEMs shall hold current qualifications IAW CSA W47.1 and CSA W47.2 regulations;
 - ii. A welding engineer shall provide an attestation that the manufacturers/primary OEMs weld standards, weld processes and individual welder's qualifications meet the requirements of CSA W47.1 and CSA W47.2 along with a sample welding procedure and specification.
 - iii. Manufacturers/Primary OEMs shall provide the qualifications of their welding supervisor(s) with capabilities, education, and experience equivalent to requirements set by CWB.

2. APPLICABLE DOCUMENTS

2.1. Publications

The following documents form part of this Purchase Description. Effective dates shall be those in effect upon the date of manufacture. Sources are as shown:

- a. **Canadian Motor Vehicle Safety Standards (CMVSS)**
 Transport Canada,
 Road Vehicle and Motor Vehicle Regulation,
 330 Sparks Street, Tower C,
 Ottawa, Ontario K1A 0N5

<http://www.tc.gc.ca/eng/acts-regulations/menu.htm>

- b. Ontario Provincial Land Ambulance & Emergency Response Vehicle Standard**
VERSION 5.0 - September 28, 2012
Emergency Health Services Branch
Ontario Ministry of Health and Long-Term Care
- c. Transport Canada Consolidation of the Motor Vehicle Safety Act (MVSA) and Motor Vehicle Safety Regulations (MVSR) and all applicable revisions TP4360E**
Canadian Communications Group - Publishing
Ottawa, Canada K1A 0S9
<http://www.tc.gc.ca/eng/acts-regulations/menu.htm>
MVSA - <http://laws-lois.justice.gc.ca/eng/acts/M-10.01/>
MVSR - http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1038/
- d. Canadian General Standards Board**
Publishing and Depository Services
Public Works and Government Services Canada
Ottawa ON K1A 0S5
<http://publications.gc.ca/site/eng/search/advancedSearch.html>
- e. SAE Handbook**
Society of Automotive Engineers Inc.
400 Commonwealth Drive, Warrendale, PA, 15096
<http://www.sae.org/contact/>
- f. Anthropometric Survey of the Land Forces**
1998
- g. Underwriters Laboratories of Canada**
7 Underwriters Road
Toronto, Ontario, Canada
M1R 3A9
<http://www.ul.com/canada/eng/pages/ulcstandards/>
- h. Tire and Rim Association Year book**
3200 West Market Street
Akron, Ohio
USA, 44313
http://www.us-tra.org/documents/TRAPublications_2013_Form.pdf
- i. The American Society for Testing Materials (ASTM)**
http://www.global.ihs.com/ASTM_Standards
- j. The International Standards Organizations (ISO)**
1, ch. de la Voie-Creuse
CP 56 - CH-1211 Geneva 20
Switzerland
Tel: +41 22 749 01 11
http://www.iso.org/iso/home/store/catalogue_ics.htm
- k. Canadian Welding Bureau (CWB)**
<http://eng.cwbgroup.org/Certification/Pages/default.aspx>
- l. American Welding Society (AWS)**
<http://www.aws.org/w/a/certification/index.html>

3. REQUIREMENTS

3.1. Standard Design

The vehicle design shall:

- a. Be based on the chassis manufacturer's latest model;
- b. Be based on an equipment model having demonstrated industry acceptability by having been manufactured and sold commercially, or, be manufactured by a company that has at least 5 years experience in manufacturing Type I or Type III ambulances;
- c. Conform to all applicable laws, regulations and industry standards governing manufacture, safety, noise levels and pollution in effect in Canada at time of manufacture;
- d. Not have system and component capacities increased above published ratings (i.e. product or component brochures);
- e. Include all components, and accessories normally supplied for the intended equipment application, although they may not be specifically described in this Purchase Description; and
- f. Have a centre of gravity within the OEM's engineering specifications.

3.2. Operating Conditions

The vehicle/equipment shall operate safely in the following conditions:

- a. Under the extremes of weather conditions found in Canada in temperatures ranging from -40 to 37 degrees Celsius (-40 to 99 degrees Fahrenheit) and cold starting from -40 degrees Celsius with external aids;
- b. After storage for extended periods of time in ambient temperatures of -50 to 60 degrees Celsius (-58 to 140 degrees Fahrenheit); and
- c. Travelling on paved roads, gravel roads, and unpaved secondary roads. Conditions include year round operation on surfaces that will be covered by snow, mud and or ice dependant on the season.

3.3. Safety Standards

The vehicle/equipment, all systems and components shall:

- a. Be safe and easy to use by a 95th percentile male or 5th percentile female under all operating conditions in accordance with the Anthropometric Survey of the Land Forces, 1998;
- b. Have all entry and exit points equipped with handles and steps suitably positioned to accommodate a 95th percentile male or a 5th percentile female under all operating conditions;
- c. Be equipped, where required for operator safety, with safety features such as warning and instruction plates, non-slip walking surfaces and heat shields;
- d. Include the manufacturer's standard bolsters to protect moving people from openings, projections and obstructions; and

- e. Include the grab handles and grab rails to assist persons moving about, seated or entering/leaving the ambulance.

3.4. Maintainability

The vehicle shall provide ease of maintenance such that:

- a. All maintenance and repair tasks, especially routine operator maintenance, shall be easy to perform with a minimum of special tools and skills;
- b. All major assemblies and components shall be rapidly replaced using a minimum of unique tools and equipment, without the requirement to recover the vehicle to a maintenance facility;
- c. All subsystems shall permit easy access to all items required for periodic servicing and maintenance;
- d. All processor and software controlled designs new to the vehicle shall be provided with built-in test (BIT) diagnostics, readable by crew members without special tools and test equipment;
- e. COTS (Commercial-Off-The-Shelf) items new to vehicle shall be subject to their original manufacturer's specification; and
- f. All interior elements shall be coated, sealed and waterproofed to be impervious to soap, water, disinfectants and mildew.

3.5. Vehicle Performance

The vehicle with the rated payload shall:

- a. Sustain speed of at least 120 km/h (74.6 mph) on flat ground for 30 minutes;
- b. Accelerate from 0 km/h to 90 km/h (55.9 mph in 25 seconds);
- c. Maintain at least 90 km/h (55.9 mph) on a 3% grade; and
- d. Maintain at least 8 km/h (5.0 mph) on a 35% grade.

3.6. Original Equipment Manufacturer (OEM) Cab and Chassis

The ambulance body shall be built on a cab and chassis that can meet all of the requirements outlined in this section.

3.6.1. Chassis Accessories

The vehicle chassis shall^(B) be the Original Equipment Manufacturer's (OEM) standard for a vehicle of this type and size. The chassis shall be equipped with:

- a. Ambulance Prep Package - The OEM ambulance prep package;
- b. Tow Hooks - Two front and two rear tow hooks or loops of sufficient strength and mounting to permit the recovery and tie-down of the fully loaded vehicle. The tow points shall be fully accessible without having to crawl under the vehicle;
- c. License Plate Holders - Front and rear licence plate holders, mounted as per the manufacturer's standard;

- d. Skid Plate - A skid plate(s) on the underside of the Cab/Chassis that provides damage protection for the engine and transmission from road debris; and
- e. Running Board - A running board on each side of the cab with sufficient capacity to support a weight of at least 225 kg (496 lbs). The running boards shall^(E) run from the front mud guard to the ambulance body and have a non-slip surface.

3.6.2. Cab

The vehicle shall be equipped with the OEM standard weatherproof, insulated and sound proofed cab. All exterior surface, including the walls, floor and roof, shall be insulated to the manufacturer's standard "R" value. The cab shall^(E) be equipped with:

- a. Seats - Two OEM leatherette or vinyl seats with arm and high back rests equipped with seatbelts for the driver and front passenger. The seats shall^(E) be horizontally and vertically adjustable without having to move from a seated position;
- b. Kick Plates - Removable plate covers as per the manufacturer's standard design;
- c. Steering Wheel - A steering wheel of the adjustable/tilt type;
- d. Cruise Control - Cruise control for normal highway operations;
- e. Side View Mirrors - Adjustable side-view mirrors positioned for safe reverse operation. Exterior mirrors shall^(E) be heated. The mirrors shall^(E) be a split type with at least 25 percent convex or fully convex. Mirrors shall^(E) be a standard mirror from the OEM;
- f. Convex Spot Mirror - Supplementary circular convex mirrors bolted to the side view mirrors for additional visibility. The non-reflective surface of the mirror shall^(E) be a matte, corrosion resistant material such as plastic or painted stainless steel. The road-side mirror shall^(E) be located below the side view mirror and the curb-side mirror shall^(E) be located above the side view mirror.
- g. Sun Visors - Two (2) dual panel, rotating and pivoting, interior sun visors that can be used simultaneously for forward and side sun blocking;
- h. Windshield Wipers - Electrical power actuated windshield wipers with variable intermittent speeds;
- i. Windshield Washers - Electrical power actuated windshield washers;
- j. Power Windows - Electrical power actuated driver and passenger windows;
- k. Power Locks - Electrical power actuated locks for driver and passenger doors. The Contractor shall supply at least qty four (4) keys with at least qty (2) having remote keyless entry;
- l. Radio - The OEM standard AM/FM radio. The radio shall^(E) include a CD player, audio jack (for portable audio devices) and a clock. The

radio system shall^(E) be connected to an additional speaker installed in the ceiling of the patient compartment above the attendant's seat. Output of this speaker shall^(E) be controlled by means of a volume and on/off switch located at the action wall;

- m. Coat Hooks - Two coat-hooks for hanging coats;
- n. Beverage Holders - Beverage holders shall^(E) be below the level of any vehicle electronics.
- o. Walk-Through - A walk-through passage connecting the Ambulance body and the cab as per paragraph 3.7.1(f);
- p. Front Console - The front console shall^(E) be within easy reach of the driver and passenger.
- q. Airbags - Standard OEM driver and passenger airbags;
- r. Navigation and Backup Camera System - A rear facing colour output camera that activates when the vehicle is reversing. The real time, colour camera display screen shall^(E) be installed in the cab and have a minimum screen size of 7". The Backup Camera System shall^(E) incorporate a commercial Global Positioning System (GPS) suitable for vehicle navigation with in-dash mounting capability. The GPS shall^(E) incorporate a lifetime update aspect to ensure map accuracy.

3.6.3. Cab Communication System

The cab communication system shall provide:

- a. All the required wiring leads and space allocations for installation of the two-way radio. Radio electrical power feed cables provided with fuse protection. Dimensions and power requirements for the radios will be provided at the pre-production meeting;
- b. A P.A. system with sirens and operating modes of hi-lo, yelp, wail, P.A., air horn, and radio re-broadcast. A dual radio hook-up shall be provided and include all electrical and coax cables, antennae and mounts; and
- c. A two-way intercom system for communication between the cab and ambulance body. The two-way intercom system shall have radios mounted on the front console and the action wall.

3.6.4. Engine Components

The following shall^(E) be provided:

- a. Engine - An OEM turbocharged diesel engine with sufficient power for the performance requirements of paragraph 3.5;
- b. Cold Weather Starting Aid - A manufacturer's standard cold weather starting aid to meet the required operating conditions as per paragraph 3.2(a);
- c. Anti-Theft Device - An anti-theft device that locks the steering and shift lever and allows the engine to keep running and all other mechanical and electrical functions are operable, when the driver has removed the ignition key; and

- d. Automatic Engine High-Idle Speed Control - The vehicle shall^(E) be equipped with an engine speed control with the following properties:
- i. A system that is pre-set so when it is activated it will increase the engine RPMs to sustain the ambulance's total continuous electrical load, and maximum heating/air conditioning output;
 - ii. The system shall^(E) be in operating mode whenever the engine is running;
 - iii. The system shall^(E) be activated automatically whenever the voltage of the OEM or the conversion battery falls below 12.5 volts, and whenever the engine has been allowed to idle for more than 5 minutes;
 - iv. The system shall^(E) operate only when the transmission is in "PARK";
 - v. The system shall^(E) disengage when the operator depresses the service brake pedal or the transmission is placed in gear, and automatically re-engage when the service brake is released, or when the transmission is placed in "PARK"; and

3.6.5. Lubricants and Fluids

The following applies:

- a. The vehicle shall^(E) be serviced with standard lubricants and fluids compatible with the delivery location and season; and
- b. The engine shall^(E) operate using OEM standard Oil.

3.6.6. Filtration System

The vehicle shall be provided with, as a minimum, the following filtration systems:

- a. A fuel filter / water separator incorporating a thermostatically controlled heater to prevent freezing;
- b. A replaceable dry type air filter; and
- c. Spin off replaceable oil and fuel filters.

3.6.7. Transmission

The vehicle transmission shall be fully automatic and equipped with an overdrive system and auxiliary oil cooler.

3.6.8. Fuel Tank(s)

The vehicle shall be equipped with a fuel tank or combination of tanks that gives the vehicle a range of at least 500 km (310.7 miles) without refuelling at GVWR travelling over paved roads.

3.6.9. Brakes

A vehicle hydraulic power brake system shall be provided that incorporates an anti-lock braking system (ABS).

3.6.10. Power Steering

The vehicle shall be equipped with power steering.

3.6.11. Suspension

The vehicle front suspension shall be the manufacturer's standard. The rear axle shall be equipped with an air suspension system. The air suspension shall:

- a. Have an integral air tank with a manually operated drain valve to permit the removal of moisture; and
- b. An air dryer to minimize the moisture build-up within the air tank.

3.6.12. Axles

The vehicle front and rear axles shall be the manufacturer's standard. The GAWR for each axle shall be sufficient to support the total load imposed on the axle when the vehicle is fully loaded.

3.6.13. Tires and Wheels

The vehicle tire and wheel requirements shall include:

- a. Steel belted tubeless, with a specified payload, radial ply tire of the same size and ply rating on all wheels. All tires shall be mud/snow type, marked such as "M+S". Ply ratings shall be tabled in the Tire and Rim Association Year book;
- b. Wheels and rims with dual spacing in accordance with Tire and Rim Association Standards that can be operated safely at GVWR in operating conditions. All wheels shall^(E) permit the use of tire chains;
- c. Dual rear wheels and tires;
- d. Rear inner tires with stem valve extension for easy access;
- e. Each tire shall balance within practicable limits wheels, hubs and brakes shall be effectively balanced. Balancing shall be adequate to preclude wheel shimmy at all vehicle speeds;
- f. A spare wheel, rim and tire of same ply and rating;
- g. The wheels shall comply with the axle manufacturer's rating for imposed loads and operating conditions;
- h. Spare Wheel Assembly Mount - The vehicle spare wheel assembly shall be provided and accessible from ground level; and
- i. Tire Changing Tools - Tire changing tools and a heavy-duty jack with sufficient force of lifting the vehicle at GVWR shall be provided. The tools shall^(E) be stored in a compartment accessible from the exterior.

3.6.14. Cab and Chassis Corrosion Protection System

The following shall be provided for the vehicle cab and chassis:

- a. In addition to standard factory rust proofing, aftermarket rust proofing shall be provided. The treatment will normally be applied within the first year of service. The treatment date will be directed by the Technical Authority to optimize seasonal rust prevention benefits. If not demanded prior to delivery, a pre-paid certificate authorizing treatment at an aftermarket outlet shall be provided with the vehicle.

- b. Metal surfaces treated with a rust preventive oily film product having the following properties:
 - i. Moisture displacing.
 - ii. Creeping (capillary action).
 - iii. Low solvent content.
 - iv. Compatibility with rubbers, plastics and all other materials used in automotive construction.
 - v. Non toxic.
 - vi. Minimal dripping.
- c. Written proof of a twelve hour ASTM B117 salt spray endurance test certification by an independent test laboratory prior to first pre-delivery inspection. Krown Rust Kontrol and Rust Check products have been accepted as certified, proof not required; and
- d. The application includes, but is not limited to the underside of fenders and hood, enclosed and boxed-in sections, seams, mouldings, crevices, weld points, under-body and exposed exterior brackets.

3.7. Ambulance Body

The ambulance body shall meet all of the requirements outlined in this section.

3.7.1. Ambulance Outer Body Construction

The ambulance shall^(B) have:

- a. A fully welded extruded aluminum frame clad with an outer skin of aluminum material;
- b. All surfaces, edges, corners and joints that can be exposed to any fluid shall be sealed by an approved waterproof bonding material such as or equivalent to "silaprene";
- c. The Contractor shall^(B) take all necessary action to prevent electrolytic action between dissimilar metals and materials.
- d. An outer roof and floor-pan that are each constructed of a single piece of metal;
- e. Integral Rain Gutter - An integral rain gutter at the roof perimeter extrusion to permit run-off at the body corners. A surface mounted, mechanically fastened rain gutter moulding in this area is not acceptable;
- f. Walk-Through - An open passage between the cab and body to allow vehicle occupants to transit (forward/rearward) between the ambulance body and the cab; and
- g. Rear Wheel Housings - Rear wheel housings that are constructed of a self-cleaning, heavy material used to deflect water and objects thrown

by the tires. The rear wheel housing shall^(E) be equipped with heavy-duty sound-proofing.

3.7.2. Ambulance Body Mounting

The body shall^(E) be mounted to the vehicle with high strength steel bolts and vibration isolating rubber body mounts designed and installed for ease of remounting. All body mounts shall^(E) be designed and installed in accordance with the chassis manufacturer's guidelines. Reinforcements or filler blocks should be used where the mounting device(s) may deform frame flanges. Mounting devices shall^(E) be locked units which will minimize loosening, but may be tightened if necessary, and mounted so as to prevent any shifting of the body.

3.7.3. Ambulance Body Protection Accessories

The vehicle shall^(E) be equipped with the following accessories:

- a. Fenders - Fenders over all wheels and tires. Fender extension(s) shall^(E) be provided where these wheels extend beyond the body of the vehicle;
- b. Front Mud Flaps - Mud flaps for the front wheel openings made of heavy duty aluminum diamond tread plate another material of equivalent performance. Front mud flaps shall^(E) cover the full width of the wheel well;
- c. Rear Mud Flaps - Mud flaps for the rear wheel openings made of heavy duty rubber or another material of equivalent performance. Rear mud flaps shall^(E) cover at least the full width of the rear wheel;
- d. Safety Grab Rails - All safety grab rails shall be yellow and have rubberized grip.
- e. Stone Guard - The manufacturer's standard stone guard, extending from the cab to the front corners of the body. The guard shall^(E) be made of the heavy-duty aluminum diamond tread plate or another material of equivalent performance.
- f. Rear Step Bumper - A rear step bumper that shall:
 - i. Support a weight of at least 225 kg (496 lbs);
 - ii. Be at least 240 mm (9.4 inches) wide and run the width of the rear door opening;
 - iii. Hinge or pivot with the most durable commercially available hardware to permit ambulance attendants to move closer for loading and unloading;
 - iv. Maintain the OEM ground clearance and step bumper angle of departure; and
 - v. Be protected by corner bumper frames with protruding rubber bumperettes with impact rating of at least 8 km/h (5.0 mph).

3.7.4. Exterior Ambulance Body Doors

The exterior ambulance body doors shall be constructed as per paragraph 3.7.6. The exterior ambulance body shall have the following doors:

- a. Side Exit Door - Single door located on the curb-side of the ambulance body that hinges to the right to allow passage between the outside and the patient compartment;
- b. Rear Doors - Double doors on the rear ambulance wall. The doors **shall** be equally sized to allow passage between the outside and the patient compartment.
- c. Compartment Doors - Doors located on the sides of the vehicle to house each external compartment unit described in paragraph 3.7.9. The doors **shall** be hinged so that each door opens towards the front of the vehicle or upwards. The locations of each door will be finalized during the pre-production meeting.

3.7.5. Interior Ambulance Body Doors

The interior ambulance body doors **shall** be constructed as per paragraph 3.7.7 and **shall** be designed and built to avoid unwanted opening in transit or as result of a vehicle collision. The ambulance body **shall**^(E) have at least the following doors:

- a. Interior Storage Compartment Doors - Two sliding doors that open left and right to allow access to each interior storage compartment as described in paragraph 3.7.10(d);
- b. Interior Oxygen Gas Compartment Door - Single door hinged to open towards the front of the vehicle to allow access to the oxygen compartment described in paragraph 3.7.14;
- c. Interior Oxygen Gauge Access Panel - A clear plastic access panel centrally located on oxygen gas compartment door of sufficient size to allow access to the oxygen compartment for reading the pressure gauge and turning on the valve as described in paragraph 3.7.9a; and
- d. Walk-Through Door - A door separating the cab and ambulance body that slides in the direction of the driver's seat;

3.7.6. Ambulance Body Exterior Door Construction

The exterior ambulance body doors **shall**:

- a. Open outwards unless otherwise indicated;
- b. Have maximum construction commonality to the ambulance body;
- c. Be designed to prevent ingress of water, dust, or debris;
- d. Have panel construction that is easily removed and replaced to allow maintenance of door locks and hardware;
- e. Have suitable pneumatic hold-open devices;
- f. Have check straps, metal door stops or equivalent devices to prevent the doors from hitting the ambulance body;
- g. Have paddle lock handles that are flush mounted;
- h. Have heavy-duty door locks designed for exterior use. All locks **shall** be keyed alike;

- i. Have a secondary system that will allow the doors to be opened should the main door lock mechanism(s) fail;
- j. Have full-length piano hinges with a pin of a minimum of 6mm diameter;
- k. The rear doors **shall**:
 - i. Be dual doors with vertical full-length piano hinges;
 - ii. Open independently to at least 150°;
 - iii. Have a rubber tarp strap of at least 560 mm (22.0 inches) with S hooks installed in each of the lower outer corners of the doors. The straps are to provide additional security when hooked to the outside ends of the rear bumper; and
 - iv. Have a fixed window made of automotive grade laminated glass in each door with 20% level of glass tinting to reduce solar heating effects. If aftermarket tinting is used, it **shall**^(E) be a metallic film with 20% "Visible Light Transmission" of a smoke charcoal colour.
- l. The side door **shall**^(E) have:
 - i. A vented window made of automotive grade laminated glass in each door with 20% level of glass tinting to reduce solar heating effects. If aftermarket tinting be used, it **shall**^(E) be a metallic film with 20% "Visible Light Transmission" of a smoke charcoal colour. The window **shall**^(E) be equipped with a lock and a screen.

3.7.7. Ambulance Body Interior Door Construction

The ambulance body interior doors **shall**^(E):

- a. Be designed and built with a positive hold close latch devices to avoid unwanted opening in transit;
- b. The walk-through passage door **shall**^(E) have a release handle on both cab and ambulance body sides of the door, and no locking mechanism;
- c. Have sliding doors made of a heavy duty, transparent, non-shattering material such as Plexiglas or polycarbonate which complies with Transport Canada Regulations;
- d. Have a system that allows the sliding doors in their frame to flip up or down to allow full width and height access to the storage compartment; and
- e. Have handles for ease of opening;

3.7.8. Ambulance Body Floor Construction

The ambulance body floor **shall**:

- a. Be at the lowest level permitted by the chassis/body;
- b. Be reinforced where necessary to support a load of at least 735 kg/m² (151 lb/ft²);

- c. The floor covering shall be bonded to the ambulance body floor. It shall provide slip resistance throughout the thickness of the material, be a minimum of 2mm thick, and be bonded to the sub-floor with a waterproof adhesive. Have a heavy duty, anti-static, seamless, one piece, fireproof, non wax type, mark resistant, and scuff proof safety floor covering for the patient compartment. LONCOIN® shall^(E) be acceptable.
- d. Have rounded edges and return to a height of 100 mm up the walls of the shelter; and
- e. Have protective trim to prevent fluid seepage under cabinets and walls.

3.7.9. Exterior Storage Compartments and Mounting

Exterior storage compartments on the ambulance body shall be made of aluminum. The ambulance body shall^(E) have:

- a. Oxygen Compartment - An oxygen compartment for the oxygen system as per paragraph 3.7.4 accessible from the exterior and interior.
- b. Equipment Compartment (Common Equipment) - An equipment compartment accessible from the exterior;
- c. Half-Height Backboard Compartment - A backboard compartment accessible from the exterior;
- d. Electrical Compartment - An electrical equipment compartment accessible from the exterior;
- e. Spare Wheel Assembly Compartment and Mount - A spare wheel assembly compartment and mount with tire changing tools;
- f. Road Flare Case Securement - The manufacturer's standard quick release bracket for the road flare case provided as per paragraph 3.8(i) located in the one of the exterior storage compartments; and
- g. Extrication Tool Storage - A storage location in one of the exterior compartments for the extrication tools provided as per paragraph 3.8(e);

3.7.10. Interior Shelving, Storage and Mounting

Shelves and storage units within the ambulance body shall^(E) be made of aluminum. The ambulance body shall^(E) have:

- a. Action Wall - An action wall on the road-side of the ambulance body that contains an action area towards the front of the cab that is at a level accessible by the attendant when seated in the attendant's chair;
- b. Clock Mount - A clock mount on the rear of the interior of the ambulance body above the rear doors that allows the clock, provided as per paragraph 3.8(c), to be mounted/dismounted for battery replacement without the use of tools;
- c. Dedicated Container Location - A dedicated location for the waste, hazardous waste, glove and sharps containers, as per paragraphs 3.8(f) and (g), in the patient compartment that is convenient to access when

working in the area of the stretchers. The sharps container shall^(E) be mounted in a compartment under the squad bench accessible via a kick out door;

- d. Interior Storage Compartments - Common storage compartments accessible from the interior through doors as described in paragraph 3.7.5(a);
- e. Incubator Tie-Down - A fixture to secure the rear tie-downs for incubators. Location to be determined at the pre-production meeting;
- f. Cylinder Securement Fixture(s) - The fixture(s) required to secure two jumbo "D" cylinders located in the interior of the patient compartment as part of the oxygen system of paragraph 3.7.14. The fixture(s) shall be appropriate for storing steel or aluminum cylinders;
- g. IV Securement - Two wall or ceiling mounted IV hooks with Velcro securing straps for IV pouch solutions at the midsection of each cot/stretcher location (for a total of four hooks); and
- h. Fire Extinguisher Securement - The manufacturer's standard quick release bracket for two fire extinguishers provided as per paragraph 3.8(h). Locations to be determined during pre-production meeting;

3.7.11. Shelving and Storage Construction

The shelving and storage in the Ambulance body shall have the following components:

- a. The action area as described in paragraph 3.7.10(a) shall:
 - i. Provide a work surface for the attendant seated in the main attendant seat that retains loose material and is easy to clean;
 - ii. Include on the wall near the work surface (the action wall):
 - a. The main oxygen outlet as per paragraph 3.7.14b;
 - b. The suction outlet;
 - c. The IV warmers;
 - d. The controls as per paragraph 3.9.2;
 - e. The fittings for the two way radio as per paragraph 3.6.2(a);
 - f. Thermostat.
 - iii. Include the defibrillator platform described in paragraph 3.8(k).
- b. Interior storage compartments as per paragraph 3.7.10(d) that shall have at least 3 shelves. The shelves shall be adjustable or removable and have sufficient capacity to support loads of 100 kg/m² (20.5 lb/ft²); and
- c. Exterior storage compartments shall have dry deck flooring;
- d. Include an oxygen cylinder storage compartment as per paragraph 3.7.9(a) that shall:
 - i. Have a mounting cradle suitable for storing Types M and MM oxygen cylinders made of aluminum or steel;
 - ii. Be designed for simple cylinder transfer and for cylinder type changeover using only simple hand tools; and

- iii. Have a protective coating on the mounting cradle to prevent damage to aluminum cylinders.

3.7.12. Passenger Securement Layout

The ambulance passenger securement layout shall^(E) include:

- a. Main Cot - The Stryker MX Pro 3 with dual alternate position locations, centerline or towards the roadside of the passenger compartment, oriented with the patient's head pointing toward the cab. The mounting system for the main cot shall be installed so that it has a minimum clearance of 150 mm (5.9 inches) from any surface or obstruction and a minimum of 330 mm (13 inches) from the rear facing attendant's seat;
- b. Main Attendant's Seat - An attendant's seat located at the head of the main stretcher mounted on a seat pedestal of at least 250 mm (9.8 inches) in height;
- c. Bench - A squad bench located along the curb-side wall with a height of at least 405 mm (15.9 inches) and designed to provide an aisle space of at least 335 mm (13.2 inches). The bench shall^(E) have the following:
 - i. A lid for the storage unit located under the bench;
 - ii. A storage surface for use with the squad bench safety netting provided as per paragraph 3.8(1);
 - iii. A seat for up to three passengers; and
 - iv. The posts and wheel cups necessary for mounting a T3 Light Weight Assault Litter while in use. The placement of the mounts shall^(E) be such the stretcher and patient can be accommodated without removing any cushions from the squad bench and to allow maximum aisle space between the litter and the main cot.

Note: The T3 Light Weight Assault Litter is approximately 2540 mm (100 inches) when fully extended.

3.7.13. Passenger Securement Construction

The ambulance passenger securement shall include:

- a. The Stryker Mx Pro 3 or equivalent detachable mount installed for safe use of the main cot described in paragraph 3.7.12(a) in the road-side and centerline positions. Included in the installation shall be the rear door threshold safety hook required for the Stryker Mx Pro 3 cot as well as the one or more fixtures to secure the rear tie-downs for incubators (as per paragraph 3.7.10(e)). The following applies:
 - i. The securement for the cot shall be heavy duty to prevent movement of the cot during transit; and
 - ii. Attachment points for the front and rear securement shall be mounted such that the cot can be mounted in three locations;
- b. A main attendant seat, positioned as per paragraph 3.7.12(b), that shall:

- i. Be a hospital-grade, leatherette padded water-proof seat with a high back and head rest equipped with a retractable three-point seatbelt;
 - ii. Be horizontally and vertically adjustable without having to move from a seating position; and
 - iii. Pivot 180°. The seat shall be lockable at every 45 degree increment.
- c. A squad bench, position as per paragraph 3.7.9(c) that shall:
- i. Be secured with piano hinges;
 - ii. Have sufficient pneumatic hold open device(s) to support the bench in the open position and one or more latches to hold the bench in the closed position;
 - iii. Have seating positions for three passengers;
 - iv. Each seating position shall have hospital grade, leatherette padded water proof seat cushion, back cushion and headrest;
 - v. Each seating position shall include a seat belt;
 - vi. Have the manufacturer's standard net or vertical bolster at the front of the squad bench for protection of passengers in the event of a rapid deceleration meeting CMVSS standard;
 - vii. Have two sets of non-retracting type seatbelts to secure a patient on a T3 Light Weight Assault Litter to the squad bench. The belts shall be long enough to pass over the patient and stretcher.

3.7.14. Oxygen System

The ambulance shall have a hospital type piped oxygen system rated to store and supply medical oxygen. The system shall include:

- a. Storage/securement as per paragraphs 3.7.9(a) and 3.7.f0(f);
- b. Two oxygen medical gas recessed outlets such as MEDAES model #2417806 D.I.S.S. III which shall be located:
 - i. On the action wall; and
 - ii. Near the top of the curb-side wall, located above the head of the forward bench seat.
- c. Colour coding of all components to indicate oxygen; and
- d. Safety protection for both outlets from impact such as a cover for when not in use.

3.7.15. Suction Aspiration System

The ambulance shall be equipped with an electrically powered suction aspiration system which shall:

- a. Be portable;

- b. Be colour coded to indicate suction and labelled with the manufacturer's name and any applicable standard ratings;
- c. Be equipped with a suction outlet with a variable speed switch and a vacuum gauge;
- d. Be connected to a reusable collection jar of a minimum of 1200 mL (40.6 US fluid oz) which uses disposable collection bags; and
- e. Have an electric vacuum pump powered by 12 VDC either through the ambulance on-board system (when plugged in) or by rechargeable batteries when disconnected;

3.8. Accessories supplied by Contractor

The following ambulance accessories **shall**^(E) be supplied by the Contractor:

- a. CPR Board - One CPR board;
- b. Backboards - Two Laerdal BaXstrap or equivalent backboards with attached straps and head beds;
- c. Clock - One battery operated analog or digital clock that displays seconds mounted as per paragraph 3.7.10(b);
- d. Tire Changing Tools - All tools required for changing tires and a heavy-duty jack with sufficient force to lift the loaded vehicle;
- e. Extrication Tools - Extrication tools including at least: an extrication combination tool, a pry bar, bolt cutters, and a tool pouch;
- f. Waste Containers - Two containers of a minimum capacity of 5 L (1.32 US gal), one approved for waste disposal and the other for hazardous waste disposal. The containers **shall** be mounted as per paragraph 3.7.10(c);
- g. Sharps Containers - One sharps container of with a safety design such as Becton Dickinson #367201 "Vacutainer", mounted as per paragraph 3.7.10(c);
- h. Fire Extinguishers - Two 2.3 kg (5 lb) ULC approved and rechargeable fire extinguishers with a minimum rating of 3A10BC equipped with a pressure gauge and service inspection tag, and the ambulance body bracket (paragraph 3.7.9(h));
- i. Road Flares - Four 20-minute type spiked red warning highway flares in a red, cylindrical screw top flare case mounted as per paragraph 3.7.9(f);
- j. Aspiration Collection Bags - 10 disposable collection bags for the collection jar of the suction aspiration system as per paragraph 3.7.15;
- k. Defibrillator and Platform - A Zoll M-series automatic external defibrillator and swivel platform for the defibrillator unit that is mounted in the action area;

- l. Safety Netting - Removable, heavy duty safety netting for the shelves described in paragraph 3.7.10(d)**Error! Reference source not found.** and with a sufficient number of mounting points on the floor and roof to prevent items slipping through the netting;
- m. Main Cot - One Stryker MX Pro 3 cot or equivalent;
- n. Spotlight - A portable spotlight with a connector that can be plugged into a 12 volt power socket outlet. The light shall be equipped with a trigger-like switch for on/off activation.
- o. IV Warmers - Two (2) IV warmers located in the forward-most upper roadside cabinet on the action wall. The Koolatron system shall^(E) be acceptable.

3.9. Controls

The vehicle shall be equipped with the manufacturer's standard controls. In addition, the vehicle shall have the following controls:

3.9.1. Cab Controls

The vehicle cab control panel design shall favour the driver as primary user but allow ready access to control functions from the passenger seat. As a minimum, the following controls shall be situated in the cab and shall^(E) be located on the control panel unless otherwise indicated:

- a. Cab Map Light Switch - A manually operated switch to activate the map light described in paragraph 3.10.1(e);
- b. Siren Controls - The manufacturer's standard controls for the siren and all of the lights;
- c. Anti-Theft Device Switch - A switch for the system described in paragraph 3.6.4(c);
- d. Backup Alarm Switch - A switch to disable the backup warning signal for silent backing in a hospital area. The switch shall reset automatically after a 25 - 35 second delay;
- e. Light Switch - A switch for the rear patient compartment lights;
- f. Spare Switch - At least one spare switch, wired to a spare circuit breaker;
- g. Sure Start Relay - An automatic relay system which allows vehicle starting from the secondary battery when the primary starting battery is drained.

3.9.2. Ambulance Body Controls

All controls shall be recessed or otherwise protected from accidental operation by the attendant's knees or by material on the work surface. The following controls, as a minimum, shall be situated in/on the ambulance body, located on the action wall unless otherwise indicated:

- a. Passenger Door Light Switches - Switches for operating the interior lights and the rear facing floodlights mounted on one of the rear

doors and the side passenger door. The switches **shall** reset when the doors are closed;

- b. Light Disable Switch - Single manually operated switch to disable all light sources inside the ambulance body;
- c. Cabinet Light Switch - A switch to control the lighting of all interior and interior/exterior cabinets described in paragraph 3.10.2(f);
- d. Curb-Side Light Switch - A switch for the curb-side bank of interior ceiling lights (paragraph 3.10.2(e)) with settings high/off/low;
- e. Road-Side Light Switch - A switch for the road-side bank of interior ceiling lights (paragraph 3.10.2(e)) with settings high/off/low;
- f. Reading Light Switch - A switch for the attendant's action wall reading light switch (paragraph 3.10.2(g));
- g. Thermostat Control - A thermostat control for the temperature in the ambulance body located on the action wall that **shall**:
 - i. Allow control of the cabin temperature from the range of at least 15 to 23°C (59 to 74 F);
 - ii. Have a timer that allows the thermostat to be set on a seven-day schedule for a minimum seven days in advance; and
 - iii. Have an override switch that turns the heater on, independent of thermostat setting.
- h. Heater Fan Speed Switch - A two-speed switch located on the action wall that operates the heater fan in three settings: high, low and off positions;
- i. Climate Control Selector - A switch to select whether the heater or air conditioner is used;
- j. Electric Vacuum Pump Switch - A switch to control the electric vacuum pump described in paragraph 3.7.15(e);
- k. Suction Outlet Speed Switch - A variable speed switch to control the suction outlet as described in paragraph 3.7.15(c); and
- l. Spare Switch - At least one spare switch, wired to a spare circuit breaker;

3.9.3. Instruments

The vehicle cab instruments **shall** be readily visible to the driver. Instrument lamps **shall**^(B) have a dimming capability. The following cab instruments, as a minimum **shall**^(B) be provided:

- a. Tachometer - A tachometer;
- b. Odometer - A metric odometer and speedometer;
- c. Temperature Gauge - A gauge to measure coolant temperature;

- d. Pressure Gauge - A gauge to measure oil pressure;
- e. Voltmeter(s) - One or several voltmeters to monitor the voltage of the OEM and the conversion batteries.
- f. Ammeter - An ammeter connected to the alternator output to monitor the total charging system load.

3.10. Lighting

The vehicle shall be supplied with the manufacturer's standard lighting, using LED lights where applicable. The lighting shall include as a minimum:

3.10.1. Cab Lighting

The cab of the vehicle shall^(B) be equipped with, as a minimum, the following lights:

- a. Headlights - Heavy duty OEM standard headlights;
- b. Turn, Hazard and Clearance - The manufacturer's standard turn, hazard and clearance lights, LED if available;
- c. Fog Lamp / Driving Light - Lights recessed into the front bumper and mounted on each side of the vehicle to provide illumination to the area directly to the front;
- d. Dome Light - Manufacturer's standard dome light for general illumination;
- e. Map Light - A goose-neck style map light for illumination of paperwork held by the passenger in the cab.

3.10.2. Ambulance Body Lighting

The ambulance body shall^(B) be equipped with, as a minimum, the following lights:

- a. Brake/Turn/Tail Lights - Heavy duty LED brake/turn/tail lights, arranged as per the manufacturer's standard;
- b. Backup Lights - Heavy duty LED backup lights, arranged as per the manufacturer's standard;
- c. Clearance Lights - Heavy duty LED clearance lights, in red and amber colours arranged as per the manufacturer's standard;
- d. Side Turn Signals - Turn signals mounted on the side of the ambulance body that operate in conjunction with the tail lights in paragraph 3.10.2(a);
- e. Patient Compartment Lighting - The vehicle shall^(B) be equipped with white patient compartment LED lighting arranged in two banks, one on either side of the roof centerline, mounted as close to flush as possible. The lights shall^(B):
 - i. Be operated by two switches in passenger compartment as per paragraph 3.9.2(d) and (e);

- ii. Have the road-side bank of patient compartment lighting activated automatically at the low setting when any patient compartment door is opened; and
- iii. Have the curb-side bank of patient compartment lighting activated by a switch in the cab as per paragraph 3.9.1(e);
- f. Patient Compartment Cabinetry Lighting - Each interior storage cabinet shall^(B) have at least one LED cabinet light which shall^(B):
 - i. Be mounted forward in the cabinet so as to not be covered when the cabinet is filled with supplies;
 - ii. Be controlled by a switch in the passenger compartment as per paragraph 3.9.2(c); and
 - iii. Be controlled by door-mounted switches as per paragraph 3.9.2 in all cabinets that are accessible from the interior and exterior of the cab;
- g. Exterior Compartment Lighting - Each exterior storage compartment shall have LED strip lighting; and
- h. Action Wall Reading Light - An LED light for lighting up the action wall. The light shall^(B) be powered at all times as per paragraph 3.11.5.

3.10.3. Warning Lights

The driver console shall^(B) contain, as a minimum, the following warning lights:

- a. Door Ajar Light - A flashing red warning light to indicate when any of the patient compartment or exterior storage doors is ajar.
- b. Low Oil Pressure Light - A warning light for low oil pressure;
- c. High Coolant Temperature Light - A warning light for high coolant temperature;

3.11. Electrical System

The vehicle shall^(B) be equipped with the manufacturer's standard electrical system for the cab and ambulance conversion. The vehicle shall be equipped with an isolator that allows all batteries to be charged simultaneously, but does not allow the batteries to draw from each other.

3.11.1. Incubator Receptacles

Two incubator plug-ins, installed in the road-side cabinet wall near the head end of the stretcher rack but not on the action wall shall be provided. The incubator plug-ins shall be:

- a. Flush mounted; and
- b. 12 volt polarized outlets that are powered at all times as per paragraph 3.11.5.

3.11.2. Socket-Type Outlets

Four 12 volt, polarized socket-type outlets shall be provided. The outlets shall be powered at all times as per paragraph 3.11.5.

3.11.3. Batteries

The vehicle shall be equipped with the following batteries:

- a. Two (2) standard OEM maintenance free batteries of at least 650 Cold Cranking Amps located in the engine compartment;
- b. Two (2) heavy-duty maintenance free, deep-cycle batteries of at least 900 Cold Cranking Amps located in the ambulance body and labelled "Conversion Battery". Odyssey 65-PC1750 shall^(E) be acceptable;

3.11.4. Alternators

The vehicle shall be equipped with alternator(s) as supplied as part of the OEM ambulance prep package. Alternator(s) output shall be of sufficient amperage to power all vehicle cab and ambulance body requirements and shall be intended for use on 12 VDC charging systems.

3.11.5. Main Conversion Power Switching

Stopping the engine shall trigger the Automated Electrical Shutdown device, which halts delivery of electricity to the ambulance conversion electrical system. The following items are exceptions and shall continue to be powered when the engine is not running:

- a. Incubator receptacles;
- b. Two-way radio power supply;
- c. Socket-type outlets; and
- d. Action wall reading light.

3.11.6. Electrical Control Centre (ECC)

The Contractor shall provide an electrical control centre that shall^(E):

- a. Contain all electrical components;
- b. Be clearly identified, weather-proof and designed for easy access by maintenance personnel; and
- c. Have the location of each device permanently labelled in the ECC (labels on devices which may be replaced during maintenance are not acceptable) as well as an as built electrical diagram on the ECC door or cover that depicts the devices and wiring as located within the ECC.

3.12. 110 Volt Shore Power

The vehicle shall be equipped with a ULC certified 110 Volt AC power system containing the following components.

3.12.1. Inverter

A 12 VDC to 110 volt AC inverter with a minimum power of 1500 watts shall be installed. The inverter shall operate when the engine is running and automatically disconnect when the shore power outlet is energized.

3.12.2. Power Supply Inlet

A Kussmaul auto-eject, ground fault interrupt (GFI) protected 110 volt AC external shore power supply inlet with yellow cover shall^(B) be provided for use when the vehicle is parked and can be plugged into a power supply. The shore power supply shall be the preferred supply and the interior outlets shall be switched over to the shore power supply when it is energized. The system shall be configured to provide constant power to the 110 volt outlets.

3.12.3. Block Heater

The vehicle shall be provided with a 110 volt block heater with a minimum capacity of 1000 watts.

3.12.4. Interior Outlets

Four GFI protected duplex outlets shall be identified and mounted in the interior of the ambulance body.

3.13. Heating, Ventilation and Air Conditioning

The Heating, Ventilation and Air Conditioning system (HVAC) shall maintain fresh air conditions and a comfortable temperature level in the patient compartment. The HVAC system shall have the capacity to completely change the ambient air within the vehicle every 2.5 minutes when stationary.

3.13.1. Cab HVAC

The cab area of the vehicle shall be equipped with the manufacturer's standard heating and air conditioning system and temperature controls. The cab HVAC and controls shall be completely separate from those in the ambulance body.

3.13.2. Ambulance Body HVAC

The ambulance body shall be equipped with an HVAC system that shall:

- a. Meet the requirements of the Ontario Provincial Land Ambulance and Emergency Response Vehicle Standard for ambulance body HVAC;
- b. Be designed so that when power to the ambulance conversion electrical system is turned on (at start up or when shore power is energized), the heating and cooling functions will return to the last settings in use when the power was turned off;
- c. Have a thermostat control and a high-low-off fan control located on the action wall as per paragraph 3.9.2(g) and 3.9.2(h);
- d. Be of high volume capacity with low velocity delivery for minimum draft circulation; and
- e. Be designed to operate using both re-circulated and ambient air. Ambient air shall^(B) be filtered with a HEPA filter before it is circulated.

3.13.3. Supplemental Ambulance Body Heating

The ambulance body shall be equipped with supplementary heating systems as follows:

3.13.3.1. Fuel Heater

The ambulance body shall be equipped with an auxiliary heater for the vehicle that shall:

- a. Be diesel fuelled;

- b. Be connected to the vehicle's fuel source;
- c. Be controlled by the thermostat control switch (paragraph 3.9.2(g); and
- d. Have sufficient capacity to keep the ambulance body within the operating conditions described in paragraph 3.13.2.
- e. Espar® or Webasto® shall^(E) be acceptable.

3.14. Paint, Colours and Finishes

The cab, chassis and ambulance body shall be provided with a high quality paint finish in accordance with the paint manufacturer's recommendations. Details of the decals will be finalized at the pre-production meeting. The following applies:

- a. The manufacturer shall provide warranty against peeling, cracking, blistering, corrosion and UV paint fade; and
- b. The cab and body exterior shall have no mounted components prior to painting to assure full coverage.

3.14.1. Paint Colour

White shall be applied on all exposed exterior surfaces normally painted for commercial trade.

3.14.2. Interior Colours

The interior colours shall be of manufacturer standard of shades of grey and/or blue.

3.15. Decaling Package

The vehicle shall be provided with a custom decaling package consisting of the following:

- a. The Canadian Forces (CF) Base identifier/crest as large as practical shall be affixed to the cab doors;
- b. In an arched format above the CF crest, a Base identifier as large as practical shall be provided in bilingual format;
- c. The lower rear compartment door as large as practical shall be provided with a decal indicating "911";
- d. Reflective striping shall be provided on the left and right side of the vehicle in accordance with the applicable provincial standard for the delivery destination;
- e. A Canadian Maple leaf decal as large as practical shall be provided on the left and right rear section of the cab, sized IAW design limitations;
- f. A Star of Life decal as large as practical shall be provided on the left and right rear section of the cab, sized IAW design limitations;
- g. The word "AMBULANCE" as large as practical shall be provided in mirrored text on the hood section; and

- h. Details of the decaling package will be finalized at the pre-production meeting.

3.16. Identification

The following information shall be permanently marked in a conspicuous and protected location:

- a. Manufacturer's name, model year and serial number;
- b. GVWR rating;
- c. GAWR; and
- d. Payload.

3.17. Warning and Instruction Plates

The vehicle shall be equipped with:

- a. Signage - Signage and warnings in accordance with industry standards for a patient transfer vehicle. Signs shall be bilingual (English and French) with equal sized lettering or in international symbols; and
- b. Safety Strips - Reflective safety strips on the ambulance body as per manufacturer's standard.

4. VARIANT SPECIFIC REQUIREMENTS

4.1. Type I 4x4 Model

The type I 4x4 vehicle shall meet all of the requirements outlined in this section.

4.1.1. Vehicle Rating

The vehicle shall^(B) have the following nominal ratings when equipped as specified:

- a. The GVWR and GAWR of the truck of at least that equal to the curb weight of the completed vehicle with the product tank full, as published in the manufacturer's literature and engineering data; and
- b. Payload of at least 907 kg (2000 lb).

4.1.2. Ambulance Body and Dimensions

The ambulance body shall^(B) have the following nominal dimensions:

- a. Exterior Body Length (BL) of 4,318 mm (170 in);
- b. Exterior Body Width (BW) of 2,413 mm (95 in); and
- c. Body Interior Height (BIH) of 1,829 mm (72 in).

4.1.3. Adjustable Air Ride Suspension

The vehicle rear axle shall be equipped with an air suspension system to allow lowering of the vehicle by a switch in order to facilitate loading the main cot. The switch shall be at the interior rear of the ambulance body (final configuration of the switch will be determined at the pre-production meeting).

4.1.4. Transfer Case

The transfer case shall^(E) be a two-speed transfer case activated by an electric push button system that has the following modes:

- a. Two wheel drive, high range;
- b. Four wheel drive, high range; and
- c. Four wheel drive, low range.

4.2. Type III 4x2 Model

The type III 4x2 vehicle shall meet all of the requirements outlined in this section.

4.2.1. Vehicle Rating

The vehicle shall^(E) have the following ratings when equipped as specified:

- a. The GVWR and GAWR of the truck of at least that equal to the curb weight of the completed vehicle with the product tank full, as published in the manufacturer's literature and engineering data; and
- b. Payload of at least 907 kg (2000 lb).

4.2.2. Ambulance Body Dimensions

The ambulance body shall be fully integrated with the cab and shall^(E) have the following nominal dimensions:

- a. Exterior Body Length (BL) of 4,318 mm (170 in);
- b. Exterior Body Width (BW) of 2,413 mm (95 in); and
- c. Body Interior Height (BIH) of 1,829 mm (72 in).

5. INTEGRATED LOGISTICS SUPPORT

The Contractor is required to ensure that spare parts required to properly maintain and repair the vehicle are available for purchase for a period of 10 years.

5.1. Documentation and Support Items

DND will have the right to translate, copy, and reproduce the documentation specified in this section. The Contractor shall provide the following documentation and support items:

5.1.1. Items with Each Vehicle

The Contractor shall provide the following items with each vehicle:

- a. Line Setting Ticket - One copy of the chassis manufacturer's line setting ticket, or equivalent, describing the components provided on the cab and chassis shall be provided to the Technical Authority. One copy shall accompany the vehicle to the final delivery point;
- b. Vehicle Manuals - The vehicle shall be provided with all manuals required for the safe operation, maintenance and repair of the vehicle and all sub-systems Manuals required for safe operation, maintenance and repair of the vehicle. The Contractor shall provide one (1) complete set of manuals to each destination consisting of items i) through iv) with items i) through iii) in paper format. In addition, each vehicle shall be shipped with the Operator's Manual. It is preferred that complete sets of manuals are provided on CD/DVD-ROM

(without password(s), special installation requirements or requiring an Internet connection). The Vehicle Manuals shall include:

- i. **Operator's Manuals** - Operator's manuals shall be in a bilingual format or as 2 manuals in a single binder (one English, one French). The operator's manual shall be supplied in paper format with each vehicle. The operator's manual shall contain the following information:
 1. Instructions for the safe operation of the vehicle;
 2. Daily operator maintenance instructions/checks (including lubrication);
 3. Safety Warnings; and
 4. Hand signals (as necessary).
- ii. **Parts Manuals** - The Parts Manuals shall be in English. The Parts Manuals shall contain the following information:
 1. Illustrations showing all the components of the vehicle including Equipment and accessories from other manufacturers that is supplied against the requirements of the contract. The illustrations shall have item numbers identifying the parts;
 2. A listing for all itemized parts showing the item number, manufacturer's part numbers, the part name and a brief description of the item; and
 3. Cross reference relating manufacturer part number to the correct figure and item number and to the part number of the original component manufacturer and that manufacturer's code number (NCAGE).
- iii. **Maintenance (Shop Repair) Manuals** - The Maintenance (Shop Repair) Manual shall be in English. The Maintenance (Shop Repair) Manuals shall include:
 1. A trouble shooting guide, showing the steps and tests required to determine the exact cause of a problem and an explanation of what steps would be required to correct a problem;
 2. A listing of the necessary tolerances, torque levels, fluid volumes required and a section listing any special tools (including item part numbers); and
 3. Information on the order of disassembly and assembly of the systems and components of the vehicle.
- c. **Warranty** - Manufacturer's standard warranty shall be provided including the following minimum warranty coverage; 10 year modular ambulance, 5 year Ambulance conversion, 5 year electrical, 2 year for sub-components, 2 year paint, and standard cab and chassis OEM. A paper copy of the completed bilingual Warranty Letter shall be

delivered with each vehicle in paper format. Designated warranty providers shall honour the warranty letter.

5.1.2. Documents Provided to Technical Authority

The Contractor shall provide the following documents to the Technical Authority:

- a. **Data Summary** - A bilingual data summary for each make/model/configuration by completing Technical Authority's template with data and a vehicle picture. The Contractor shall provide a Data Summary, if possible, before shipment of vehicles;
- b. **Photographs** - Two (2) digital pictures, one left-front three-quarter view, and one right-rear three-quarter view. It is preferred that pictures have an uncluttered background. Pictures shall have a size of at least 4 Mega pixels;
- c. **Sample Manuals** - A set of Sample Manuals, including the Operators, Parts and Maintenance Manuals, shall be delivered to the Technical Authority 30 working days before delivery of the first vehicle. Sample manuals will not be returned. The Technical Authority will provide manual approval or comments within 15 days; and
- d. **Warranty Letter** - The Contractor shall send a copy of the Warranty Letter, in electronic format, to the Technical Authority for each vehicle, at shipment.
- e. **Safety Recalls and Servicing Data** - The following information is required to be provided to all customer locations, on a continuing basis, throughout the life expectancy of the vehicle or for no less than 15 years:
 - i. Safety Recalls; and
 - ii. Manufacturers Technical Service Bulletins or equivalent.

NOTE: This service can be made available as an Internet Service.

- f. **Preventive Maintenance Replacement Parts Kit List** - A list of parts needed to perform preventive maintenance on a vehicle/equipment during the first scheduled preventive maintenance. The list shall include additional items recommended by the Original Equipment Manufacturer for review and acceptance by the Technical Authority. The list shall include the following elements:
 - 1. Part description;
 - 2. Original Equipment Manufacturer Part number;
 - 3. Suggested quantity;
 - 4. Unit cost; and
 - 5. Be delivered to the Technical Authority for approval and action. The list shall be supplied in an editable electronic format, preferably as a spreadsheet.

- g. **Loose Items Documentation** - At the vehicle pre-delivery inspection, the Contractor **shall** supply the Technical Authority with a detailed listing of loose equipment and material that will be shipped with the vehicle. A template will be provided at the pre-production meeting;

5.2. **Training**

The Contractor **shall** perform the following bilingual training:

- a. **Training - Maintenance Personnel** - The Contractor **shall** provide a maintenance/repair course. The course **shall** be held for a minimum duration of one (1) day at the delivery destination to provide training of up to four (4) maintenance personnel. Training **shall** be conducted in English or French, dependant upon the delivery destination. The final dates **shall** be arranged with the Technical Authority (TA). After completion of the course the Contractor **shall** have a "PROOF OF MAINTAINER TRAINING" certificate signed by a Crown Representative. The Technical Authority will supply this document in an electronic format. The course curriculum **shall** include:
 - i. Operation and maintenance safety precautions;
 - ii. Preventive maintenance including servicing schedules;
 - iii. Trouble shooting, testing and adjustments; and
 - iv. Special tools and test equipment.
- b. **Training - Operators** - The Contractor **shall** provide an operator course. The course **shall** be given at the delivery destination for a minimum duration of two (2) days to provide training for two separate shifts of up to six (6) DND operators. Training **shall** be conducted in English or French, dependant upon the delivery destination. The final dates **shall** be arranged with the Technical Authority (TA). After completion of the course the Contractor **shall** have a "PROOF OF OPERATOR TRAINING" certificate signed by a Crown Representative for the destination. The Technical Authority will supply this document in an electronic format. The course curriculum **shall** include:
 - i. Safety precautions to be observed while operating and servicing the vehicle;
 - ii. Vehicle/equipment operating characteristics;
 - iii. Vehicle/equipment operating procedures;
 - iv. Pre-operating and pre-shutdown procedures;
 - v. Daily/weekly operator servicing procedures; and
 - vi. A minimum of two (2) hours practical operating experience per operator.

AMBULANCES
TYPE I 4X4 AND TYPE III 4X2
ECC 140160, 140161

TECHNICAL INFORMATION QUESTIONNAIRE

This questionnaire covers technical information, which **shall** be provided for evaluation of the configuration(s) of the vehicle(s) offered.

Where the specification paragraphs below indicate "**Proof of Compliance**", the "**Proof of Compliance**" **shall** be provided for each performance requirement/specification.

Bidders should indicate the requested information and indicate the document name/title and page number where the **Proof of Compliance** can be found.

Definitions for **Equivalent** and **Proof of Compliance** are found in the DEFINITIONS section at the end of this document.

CONTRACTOR INFORMATION

Contractor Name _____

Proposal Date _____

Substitutes/Alternatives

Are any equipment substitutes/alternatives offered as **Equivalent**? YES ☐ NO ☐

If yes, please identify all equipment substitutes/alternatives offered as **Equivalents** below:

**AMBULANCES
TYPE I 4X4 AND TYPE III 4X2
ECC 140160, 140161**

TECHNICAL INFORMATION QUESTIONNAIRE

Proposed Make _____ **- Model** _____

Proposed Chassis

PURCHASE DESCRIPTION PARAGRAPHS

1.4 Welding Certification - Proof of Compliance

Objective evidence of manufacturer's welding quality management system in the form of A) A letter of validation from the CWB, to minimum division three (3) level IAW CSA W47.1 and CSA W47.2 or B) i) a list of qualified individual welders of the manufacturer, ii) a letter of attestation signed by a welding engineer along with a sample welding specification and associated sample welding qualification with company name, welding parameters, and the welding drawing and iii) the curriculum vitae of the manufacturer's qualified welding supervisor can be found in:

Document: _____ Page: _____.

3.1(b) Ambulance Certification - Proof of Compliance

Provincial certification of a Type I or Type III OEM ambulance model issued in the last five (5) years can be found in:

Document: _____ Page: _____.

3.1(c) Ministerial Authorization - Proof of Compliance

A copy of a "Ministerial Authorization" for use of the National Safety Mark issued by Transport Canada relevant to ambulance model for Canadian Contractors. Models proposed by American Contractors should be included in the current edition of the Transport Canada 'List of Vehicles Admissible from the United States. The authorization can be found in:

Document: _____ Page: _____.

3.1(d) Ambulance Brochure - Proof of Compliance

Latest brochure on Ambulances offered can be found in:

Document: _____ Page: _____.

3.1(f) Type I 4x4 Centre of Gravity Calculation - Proof of Compliance

A centre of gravity calculation to verify that the built unit is within the OEM's engineering specification can be found in:

Document: _____ Page: _____.

3.1(f) Type III 4x2 Centre of Gravity Calculation - Proof of Compliance

A centre of gravity calculation to verify that the built unit is within the OEM's engineering specification can be found in:

Document: _____ Page: _____.

3.6 OEM Chassis Certification - Proof of Compliance

Chassis OEM certification verifying that the chassis meets the Chassis OEM's design standards for the ambulance conversion can be found in:

Document: _____ Page: _____.

3.6.13 Type I 4x4 Wheels, rims and tires - Proof of Compliance

Wheel type and size _____.

Front Tires: Make/Model _____ size _____.

Rear Tires: Make/Model _____ size _____.

Type I 4x4 wheel, rim, and tire information can be found in:

Document: _____ Page: _____.

3.6.13 Type III 4x2 Wheels, rims and tires - Proof of Compliance

Wheel type and size _____.

Front Tires: Make/Model _____ size _____.

Rear Tires: Make/Model _____ size _____.

Type III 4x2 wheel, rim, and tire information can be found in:

Document: _____ Page: _____.

3.7.9/3.7.10 Dimensional Drawings - Proof of Compliance

Dimensional layout drawings of the ambulance body detailing storage areas allocated to each item so as to permit the technical evaluation of the compliance with storage requirement can be found in:

Document: _____ Page: _____.

4.1.1 Type I 4x4 Vehicle Rating - Proof of Compliance

GVWR

Payload

Type I 4x4 vehicle ratings can be found in:

Document: _____ Page: _____.

4.1.1 Type I 4x4 Axle Rating - Proof of Compliance

Front axle weight (fully loaded tanks) _____, GAWR (front) _____.

Rear axle weight (fully loaded tanks) _____, GAWR (rear) _____.

Type I 4x4 axle ratings can be found in:

Document: _____ Page: _____.

4.1.2 Type I 4x4 Cab and Chassis Dimensions - Proof of Compliance

Wheelbase

Overall Length

Overall Exterior Width

Overall Height

Type I 4x4 cab and chassis dimensions can be found in:

Document: _____ Page: _____.

4.1.3 Type I 4x4 Ambulance Body Dimensions - Proof of Compliance

Exterior Ambulance Body Length

Exterior Ambulance Body Width

Ambulance Body Interior Height

Type I 4x4 ambulance body dimensions can be found in:

Document: _____ Page: _____.

4.2.1 Type III 4x2 Vehicle Rating - Proof of Compliance

GVWR

Payload

Type III 4x2 vehicle ratings can be found in:

Document: _____ Page: _____.

4.2.1 Type III 4x2 Axle Rating - Proof of Compliance

Front axle weight (fully loaded tanks) _____ , GAWR (front) _____.

Rear axle weight (fully loaded tanks) _____ , GAWR (rear) _____.

Type III 4x2 axle ratings can be found in:

Document: _____ Page: _____.

4.2.2 Type III 4x2 Cab and Chassis Dimensions - Proof of Compliance

Wheelbase

Overall Length

Overall Exterior Width

Overall Height

Type III 4x2 can and chassis dimensions can be found in:

Document: _____ Page: _____.

4.2.3 Type III 4x2 Ambulance Body Dimensions - Proof of Compliance

Exterior Ambulance Body Length

Exterior Ambulance Body Width

Ambulance Body Interior Height

Type III 4x2 ambulance body dimensions can be found in:

Document: _____ Page: _____.

5.1.1(g) Warranty Details

Details of the warranty, including sub-component warranties can be found in:

Document: _____ Page: _____.

DEFINITIONS

The following definitions apply to the interpretation of this Technical Information Questionnaire:

- a) "Equivalent" - A standard, means, or component type, which has been accepted by the Technical Authority as meeting the specified requirements for form, fit, function and performance.
- b) "Proof of Compliance" is defined as an unaltered document, such as a brochure and/or technical literature and/or a third party test report provided by a nationally and/or internationally recognized testing facility and/or a report generated by a nationally and/or internationally recognized third party software. The document **shall** provide detailed information on each performance requirement and/or specification. Where a document submitted as Proof of Compliance does not cover all the performance requirements and/or specifications or when no such document is available or when modifications to the original equipment or customization are required to achieve the performance requirements and/or specifications, a Certificate of Attestation (as a separate document) signed by a senior engineer representing the Original Equipment Manufacturer (OEM) detailing the modifications and how they meet the performance requirements and/or specifications **shall** be provided. The certificate **shall** detail all performance requirements and/or specifications required to substantiate compliance. One certificate can be provided for one or all performance requirements and/or specifications.

ANNEX “C”

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with such request by Canada will also render the bid non-responsive or will constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit HRSDC-Labour's website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Bidder certifies having no work force in Canada.
- ☐ A2. The Bidder certifies being a public sector employer.
- ☐ A3. The Bidder certifies being a federally regulated employer being subject to the *Employment Equity Act*.
- ☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- ☐ A5.1. The Bidder certifies already having a valid and current Agreement to Implement Employment Equity (AIEE) in place with HRSDC-Labour.

OR

- ☐ A5.2. The Bidder certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to HRSDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity

(LAB1168), duly signing it, and transmit it to HRSDC-Labour.

B. Check only one of the following:

☐ B1. The Bidder is not a Joint Venture.

OR

☐ B2. The Bidder is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)