



**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**

<b>Title - Sujet</b> Boom Type, Rough Terrain, Fork Lift	
<b>Solicitation No. - N° de l'invitation</b> W8476-144678/A	<b>Date</b> 2013-08-28
<b>Client Reference No. - N° de référence du client</b> W8476-144678	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$HS-597-63388	
<b>File No. - N° de dossier</b> hs597.W8476-144678	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2013-10-08</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Bourassa, Chantal	<b>Buyer Id - Id de l'acheteur</b> hs597
<b>Telephone No. - N° de téléphone</b> (819) 956-6763 ( )	<b>FAX No. - N° de FAX</b> (819) 956-5227
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>  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**  
Industrial Vehicles & Machinery Products Division  
11 Laurier St./11, rue Laurier  
7B1, Place du Portage, Phase III  
Gatineau  
Québec  
K1A 0S5

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

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## **PART 1 - GENERAL INFORMATION**

### **1. Introduction**

The bid solicitation and resulting contract document is divided into seven (7) parts plus annexes as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation and states that the Bidder agrees to be bound by the clauses and conditions contained in all parts of the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Security, Financial and Other Requirements includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The attachments include the Annex A - Pricing, the purchase description and the technical information questionnaire.

### **2. Summary**

The Department of National Defence has a requirement to purchase three (3) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items, including Operator's Training and Maintenance Personnel Training in accordance with Purchase Description for Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck, dated 15 May 2013, and as described at Annex A - Pricing.

The requirement includes an option to purchase up to six (6) additional vehicles and ancillary items to be exercised within twelve (12) months from the effective date of the contract.

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The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement, the North American Free Trade Agreement, the Canada-Columbia Free Trade Agreement, the Canada-Peru Free Trade Agreement, the Canada-Panama Free Trade Agreement and the Agreement on Internal Trade.

### **3. Debriefings**

After contract award, 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 Manual issued by Public Works and Government Services Canada (PWGSC).

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

**Subsection 05.4** of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

**Delete:** Bids will remain open for acceptance for a period of not less than sixty (60) days from the closing date of the bid solicitation

**Insert:** Bids will remain open for acceptance for a period of not less than ninety (90) calendar days from the closing date of the bid solicitation

### 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 in writing 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. 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) calendar days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

#### **6. 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:

The successful bidder will be requested, after contract award, to provide all correspondence including (but not limited to) documents, reports and invoices in electronic format unless otherwise specified by the Contracting Authority, the Technical Authority or the Procurement Authority, thereby reducing printed material.

Bidders 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.

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## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **1. Bid Preparation Instructions**

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

First page of the Request for Proposal signed by the bidder or an authorized representative of the Bidder (1 signed copy)

Section I: Technical Bid (2 hard copies)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

Section IV: Additional Information (1 hard copy)

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 8.5 x 11 inch (216 mm x 279 mm) 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.

#### **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 submit, with their bid, the completed Technical Information Questionnaire.

### **1. Substitutes and Alternatives**

Bidders may propose substitutes and alternatives where "shall<sup>(E)</sup>" is indicated in the technical requirement description (Purchase Description).

1. Substitutes and alternatives that are equivalent in form, fit, function, quality 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. Substitutes and alternatives offered as equivalent in form, fit, function quality 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. Bidders are encouraged to offer or suggest green products whenever possible.

## **Section II: Financial Bid**

Bidders must submit their bid in accordance with the Basis of Payment specified in Part 7 and at Annex A - Pricing. The total amount of applicable taxes must be shown separately.

Bidders should complete Annex A and submit it with their bid.

### **1. SACC Manual Clauses**

## 1.1 Exchange Rate Fluctuation

1. Unless otherwise specified in the bid solicitation, bids must be in Canadian currency.
2. Bidders may request Canada to assume the risk for exchange rate fluctuation. This request must be specifically made at time of bidding.
3. The foreign currency component is defined as the element of the price that will be directly affected by exchange rate fluctuations. It could include the net price FOB foreign manufacturer's plant, costs associated with applicable duty, excise tax and Applicable Taxes, entry fees, transportation costs or delivery charges payable in a foreign currency, and any other charges associated with being the importer of record if they originated from and are required to be paid in a foreign currency.
4. The foreign value of the foreign currency component of the bid or negotiated price must be provided before contract award. Form PWGSC-TPSGC 9411, Claim for Exchange Rate Adjustments, may be used for this purpose. If milestone payments are proposed, it is recommended to indicate on the above form the foreign currency component associated with each milestone event.
5. All bids are evaluated in Canadian currency. Therefore, for evaluation purposes, the noon rate quoted by the Bank of Canada as being in effect on date of bid closing, or such other date as may be specified in the bid solicitation, will be applied as the initial conversion factor for the specified currency. (Column 3 of the above form will be completed by the Contracting Authority.)
6. Rates proposed by bidders will not be accepted for the purposes of this exchange rate adjustment provision.
7. If there are two (2) identical bids, and provided that the bid selected would still be considered the most advantageous to Canada, preference will be given to the Bidder who assumes all or part of the exchange rate adjustment risk over a bidder who does not assume any of this risk. Furthermore, preference will be given to the Bidder who assumes all of the exchange rate adjustment risk over a bidder who assumes only part of this risk.
8. Canada will pay the exchange rate adjustment amount in Canadian currency using the prevailing noon rate on the date of payment by Canada or, as applicable, in accordance with one of the following clauses: C3015C, C3020C, C3025C, or C3030C.

## Section III: Certifications

### 1. Certifications

Bidders must submit the certifications required under Part 5.

**Section IV: Additional Information**

**1. Additional Information**

Canada requests that bidders submit the following information:

**1.1 Delivery**

**1.1.1 Firm Quantity**

While delivery of the equipment/vehicle is requested by **March 28, 2014**, the best delivery that could be offered is as follows:

Item 001 – three (3) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items will be delivered within \_\_\_\_\_ weeks/calendar days from the effective date of the contract.

**1.1.2 Optional Quantity**

The best delivery that could be offered is as follows:

Item 002 - If an option is exercised, up to six (6) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items will be delivered within \_\_\_\_\_ weeks/calendar days.

**1.2 Supplier Contacts**

Name and telephone number of the person responsible for:

General enquiries

Name: \_\_\_\_\_

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

Delivery follow-up

Name: \_\_\_\_\_

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

**1.3 After Sales Service for Kingston, Ontario**

Canada requests that the Bidder provide the names, addresses and telephone numbers of their dealers and/or agents authorized to provide after sales service, maintenance and warranty repairs, and a full range of repair parts for the vehicle/equipment offered. The Bidder should show the

distance between the delivery location and the authorized dealer and/or agent and the delivery location, which should not be more than 100 kilometres.

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

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

#### **1.4 After Sales Service for Petawawa, Ontario**

Canada requests that the Bidder provide the names, addresses and telephone numbers of their dealers and/or agents authorized to provide after sales service, maintenance and warranty repairs, and a full range of repair parts for the vehicle/equipment offered. The Bidder should show the distance between the delivery location and the authorized dealer and/or agent and the delivery location, which should not be more than 100 kilometres.

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

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

#### **1.5 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 or 2000 hours of usage, whichever comes first**. Any additional manufacturer's standard warranty such as those derived from the Original Equipment Manufacturer (OEM) for component/sub-assemblies will form part of the proposed contract.

#### **1.6 Extended Warranty Period**

Canada requests that the Bidder indicate if an extended warranty period is being offered that exceeds the minimum warranty period of twelve (12) months or 2000 hours of usage, whichever comes first.

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

Any extended warranty period offered will not be included in the financial evaluation.

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## **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 Purchase Description and the Technical Information Questionnaire.

##### **1.1.2 Substitutes and/or Alternatives**

Bidders proposing substitutes and/or alternatives must provide with their bid, 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 all financial information requested in the bid solicitation and at Annex A - Pricing for items 001, 002 and 004.

**1.2.2** The prices of the bid must be in Canadian dollars, DDP Delivered Duty Paid at destination, Incoterms 2000, for item 001 the firm quantity and FCA Free Carrier at Contractor's Canadian facility or the Contractor's Canadian Distribution Point, Incoterms 2000 for items 002 (optional quantity) and 004 (optional Operator's Training and Maintenance Personnel Training), 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, the optional quantity and Operator's Training and Maintenance Personnel Training (option) as follows:

a) the firm lot price for the firm quantity, the optional quantity and Operator's Training and Maintenance Personnel Training (option) will be multiplied by their identified estimated quantities; and

b) the sum of all results will determine the evaluated aggregate price.

### **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.

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## **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](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](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.

### **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.

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## 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.

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Bidder's authorized representative signature

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Date

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## **PART 6 - SECURITY AND FINANCIAL REQUIREMENTS**

### **1. Security Requirement**

There is no security requirement associated with this bid solicitation.

### **2. Financial Capability**

<b>SACC Reference</b>	<b>Title</b>	<b>Date</b>
A9033T	Financial Capability	2012-07-16

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## **PART 7 - RESULTING CONTRACT CLAUSES**

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### **1. Requirement**

The Contractor must deliver three (3) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items, including Operator's Training and Maintenance Personnel Training, in accordance with the Purchase Description for Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck, dated 15 May 2013, and as described at Annex A - Pricing.

An option is included to purchase up to six vehicles and ancillary items to be exercised within twelve (12) months from the effective date of the contract.

#### **1.1 Technical Changes, Substitutes and Alternatives**

Any technical changes, substitutes and alternatives proposed by the Contractor must be evaluated for acceptance by the Technical Authority. Any substitutes and alternatives must be equivalent in form, fit, function, quality and performance to what is being replaced and must be at no additional cost to Canada. Substitutes and alternatives that are offered as equivalent will only be acceptable once they are approved by the Technical Authority as an equivalent. A contract amendment or a completed Design Change/Deviation form will be issued.

Should the Technical Authority not accept the substitute or the alternative and the Contractor is unable to meet the technical requirement, Canada may terminate the contract for default in accordance with the general conditions stated in the contract.

#### **1.2 Optional Goods and/or Services**

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described herein under the same conditions and at the prices and or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The option may be exercised at the discretion of Canada in whole or in part or in more than one occasion, up to the maximum quantity identified herein.

The Contracting Authority may exercise the option within twelve (12) months after contract award by sending a written notice to the Contractor.

The Contractor must advise the Technical Authority and Contracting Authority of any design updates that could affect the procurement of additional vehicles/equipment.

## 2. 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 (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

### 2.1 General Conditions

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

Section 09 entitled Warranty of General Conditions 2010A is amended as follows:

At subsection 1, delete the following: "The warranty period will be twelve (12) months" and replace with the following: "The warranty period will be twelve (12) months, or 2,000 hours of usage, whichever comes first".

Delete subsection 2 in its entirety and replace 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), Canada 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.

## 3. Security Requirement

There is no security requirement applicable to this Contract.

## 4. Term of Contract

### 4.1 Delivery Date

Delivery of the vehicle/equipment must be made as follows:

Solicitation No. - N° de l'invitation

W8476-144678/A

Amd. No. - N° de la modif.

File No. - N° du dossier

hs597W8476-144678

Buyer ID - Id de l'acheteur

hs597

Client Ref. No. - N° de réf. du client

W8476-144678

CCC No./N° CCC - FMS No/ N° VME

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## **Firm Quantity**

Item 001 – three (3) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items must be delivered within to be inserted by PWGSC weeks/calendar days from the effective date of the contract.

## **Optional Quantity**

Item 002 - If the option is exercised, up to six (6) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items must be delivered within to be inserted by PWGSC weeks/calendar days after an option is exercised.

## **5. Authorities**

### **5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Chantal Bourassa  
Supply Officer  
Public Works and Government Services Canada  
Acquisitions Branch  
LEFTD - HS Division  
Place du Portage, Phase III, 7B1  
Gatineau, Quebec K1A 0S5  
Telephone: 819-956-6763  
Facsimile: 819-956-5227  
E-mail address: chantal.bourassa@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:

To be inserted by PWGSC

DLP \_\_\_\_\_  
National Defence Headquarters  
Mgen. George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, Ontario K1A 0K2

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hs597

Client Ref. No. - N° de réf. du client

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Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

E-mail address: \_\_\_\_\_

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:

To be inserted by PWGSC

National Defence Headquarters

Mgen. George R. Pearkes Building

101 Colonel By Drive

Ottawa, Ontario K1A 0K2

Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

E-mail address: \_\_\_\_\_

The Technical Authority 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**

#### **General enquiries**

Name: **To be inserted by PWGSC**

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

#### **Delivery follow-up**

Name: **To be inserted by PWGSC**

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

Solicitation No. - N° de l'invitation

W8476-144678/A

Amd. No. - N° de la modif.

File No. - N° du dossier

hs597W8476-144678

Buyer ID - Id de l'acheteur

hs597

Client Ref. No. - N° de réf. du client

W8476-144678

CCC No./N° CCC - FMS No/ N° VME

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E-mail address: \_\_\_\_\_

### **5.5 After Sales Service for Kingston, Ontario**

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:

Distance between the delivery location and the dealer and/or agent: **to be inserted by PWGSC**  
km

Name:

Address:

Telephone Number:

### **5.6 After Sales Service for Petawawa, Ontario**

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:

Distance between the delivery location and the dealer and/or agent: **to be inserted by PWGSC**  
km

Name:

Address:

Telephone Number:

## **6. Payment**

### **6.1 Basis of Payment**

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

#### **6.1.1 Basis of Payment (BOP) Type 1**

Firm lot 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.

#### **6.1.2 Basis of Payment (BOP) Type 2**

Firm lot 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.

### 6.1.3 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 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 relevant information.

### 6.1.4 Basis of Payment (BOP) Type 4

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".

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 and relevant information for the travel and living.

## 6.2 SACC Manual Clauses

SACC Reference	Title	Date
C6000C	Limitation of Price	2011-05-16
H1001C	Multiple Payments	2008-05-12

### 6.3 Exchange Rate/Payment on Delivery

1. The price in Canadian currency includes the foreign currency component in respect of goods, services or both originating outside Canada, as detailed in form PWGSC-TPSGC 9411, Claim for Exchange Rate Adjustments.

2. The price must be adjusted to reflect the exchange rate in effect and applied by Canada Border Services Agency (CBSA) on the date of importation, but only in respect of the foreign currency component detailed in the above form.

3. No price adjustment directly resulting from the application of the provisions contained in this clause will be applied for increases or decreases in the exchange rate within a variation of: plus or minus 2 percent of the exchange rate(s) mentioned above; or plus or minus \$100 of the total cumulative amount claimed for exchange rate adjustment under the Contract.

4. On each invoice or claim for payment submitted under the Contract, the Contractor must indicate the exchange rate adjustment amount (either upward, downward or no change) as a separate item. In addition, the invoice must be accompanied by a copy of CBSA Form B3-3, Canada Customs Coding Form, for the imported goods, services or both.

5. Canada will have the right to audit any revision to costs and prices under this clause.

## **7. Invoicing**

### **7.1 Invoicing Instructions**

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions.

2. Invoices cannot be submitted before delivery, inspection and acceptance of the vehicle/equipment/service.

3. The Applicable Taxes must be calculated on the total amount of the invoice before the holdback is applied. At the time the holdback is claimed, there will be no taxes payable as they were claimed and payable under the previous invoice for the vehicle/equipment/service.

4. Upon delivery, inspection and acceptance of all ancillary items related to such vehicle/equipment/service the Contractor can submit an invoice for the release of the holdback.

5. Each invoice must be supported by:

(a) a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;

6. The Contractor is requested to provide invoices in electronic format unless otherwise specified by the Contracting Authority or Procurement Authority, thereby reducing printed material.

7. Invoices must be distributed as follows:

(a) The original must be forwarded or emailed to the Procurement Authority identified under the section entitled "Authorities" of the Contract for acceptance and payment.

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

(c) One (1) copy must be forwarded to the consignee.

## 7.2 Holdback

1. Canada will apply a ten (10) percent holdback on any due payment for the vehicle/equipment/service (Items 001 to 002) until delivery, inspection and acceptance of all ancillary items related to such vehicle/equipment/service.
2. Subsequent to delivery, inspection and acceptance of all ancillary items related to such vehicle/equipment/service the Contractor must submit an invoice for the release of the Holdback in accordance with "Invoicing Instructions" found in this 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.

## 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) the 2010A (2013-04-25) General Conditions - Medium Complexity - Goods;
- (c) Annex A - Pricing;
- (d) Purchase Description for Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck, dated 15 May 2013;
- (e) The Contractor's bid dated (to be inserted by PWGSC) \_\_\_\_\_, as amended (to be inserted by PWGSC) \_\_\_\_\_.

## 11. SACC Manual Clauses

SACC Reference	Title	Date
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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 Contractors	2011-05-16
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 Document (DND) - Foreign Based Contractor	2008-12-12
D5605C	Release Documents (DND) - United States-based Contractor	2010-01-11
D5606C	Release Documents (DND) - Canadian-based Contractor	2012-07-16
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 its representative. Should any report, document, good or service not be in accordance with the requirements of the Purchase Description 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

1. The vehicle/equipment shall 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 the inspection authority or consignee at the final delivery location.
2. All vehicles/equipment are to be delivered by appointment only. Any attempt by the carrier to deliver the vehicles/equipment without an appointment may be refused. 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 any additional costs.

## 14. Shipping Instructions - Delivery at Destination

1. The Contractor must ship the goods prepaid DDP - Delivered Duty Paid (in accordance with Annex A - Pricing) as specified below. Unless otherwise directed, delivery must be made by the most economical means. The Contractor is responsible for all delivery charges, administration,

costs and risks of transport and customs clearance, including the payment of customs duties and Applicable Taxes.

2. The Contractor must deliver the goods by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the person identified 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 in a current electronic format and distribute them as follows:

One (1) copy mailed to consignee marked: "Attention: Receipts Officer";

Two (2) copies with shipment (in a waterproof envelope) to the consignee;

One (1) copy to the Contracting Authority;

One (1) copy to:

National Defence Headquarters  
Mgen George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, ON K1A OK2  
Attention: \_\_\_\_\_

One (1) copy to the Quality Assurance Representative;

One (1) copy to the Contractor; and

For all non-Canadian contractors, one (1) copy 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**

Within ten (10) calendar days from the effective date of the Contract, the Contractor must contact the Contracting Authority to determine if a post-contract award meeting is required. A meeting will be convened at the discretion of the Technical Authority after contract award to review technical and contractual requirements. The Contractor shall be responsible for the preparation

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and distribution of the minutes of meeting within five (5) calendar days after the meeting has been held. The meeting will be held at the Contractor's facilities or at the Department of National Defence facility or via teleconference, at Canada's discretion at no additional cost to Canada, with representatives of the Contractor, the Department of National Defence and Public Works and Government Services Canada.

### **17. 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 (CF1280) or on an attached packing note.

### **18. Assembly/Preparation at Delivery**

The Contractor must send a Service Representative to each delivery destination to perform the assembly/preparation on all vehicles/equipment delivered. The assembly/preparation must be performed at no additional cost to Canada.

### **19. Interchangeability**

Unless changes during the production run are authorized by the Contracting 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.

### **20. 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:

The Contractor is requested to provide all correspondence including (but not limited to) documents and reports in electronic format unless otherwise specified by the Contracting Authority, the Technical Authority or the Procurement Authority, thereby reducing printed material.

The Contractor 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.

**ANNEX A - PRICING**

**Item 001 – Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck (Firm Quantity)**

The Contractor must deliver three (3) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items such as but not limited to vehicle manuals, data summary, warning sign and identification label, warranty letter(s), photographs, and special tools list including Operator’s Training and Maintenance Personnel Training, in accordance with the attached Purchase Description for Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck, dated 15 May 2013.

Manufacturer: (to be inserted by PWGSC) Model: (to be inserted by PWGSC)

**Destination A**

One (1) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven Boom Type Material Handler Forklift Truck and ancillary items must be delivered to:

CFB Kingston, Ontario

Complete address to be inserted by PWGSC at contract award

\_\_\_\_\_  
\_\_\_\_\_

The contact person at destination is: (to be inserted by PWGSC).

Firm lot price of \$\_\_\_\_\_ per vehicle/equipment and ancillary items, Delivered Duty Paid (... named place of destination), in accordance with Part 7, Basis of Payment Type 1.

**Destination B**

Two (2) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven Boom Type Material Handler Forklift Truck and ancillary items must be delivered to:

CFB Petawawa, Ontario

(Complete address to be inserted by PWGSC at contract award)

\_\_\_\_\_  
\_\_\_\_\_

The contact person at destination is: (to be inserted by PWGSC).

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Firm lot price of \$\_\_\_\_\_ per vehicle/equipment and ancillary items, Delivered Duty Paid (... named place of destination), in accordance with Part 7, Basis of Payment Type 1.

**Item 002 – Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck (Optional Quantity)**

If this option is exercised, the Contractor must deliver up to six (6) Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items such as but not limited to vehicle manuals, data summary, warning sign and identification label, warranty letter(s), photographs, and special tools list, excluding Operator's Training and Maintenance Personnel Training, in accordance with the attached Purchase Description for Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck, dated 15 May 2013.

Firm lot price of \$\_\_\_\_\_ per vehicle/equipment and ancillary items, at Contractor's Canadian facility or Contractor's Canadian distribution point in accordance with Part 7, Basis of Payment Type 2.

Manufacturer: (to be inserted by PWGSC) Model: (to be inserted by PWGSC)

**Item 003 - Transportation Cost (Optional Quantities)**

If an option is exercised in accordance with item 002 above, the Contractor must deliver the vehicle/equipment to destination as follows:

Quantity: (to be inserted by PWGSC if an option is exercised)

The Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck and ancillary items must be delivered to:

(to be inserted by PWGSC if an option is exercised)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The contact person at destination is:(to be inserted by PWGSC if an option is exercised).

Negotiated price of \$(to be negotiated if an option is exercised) per vehicle/equipment, for transportation cost, Delivered Duty Paid (... named place of destination), in accordance with Part 7, Basis of Payment Type 3.

(Item 003 will not be included in the financial evaluation)

**Item 004 - Operator's Training (Option)**

If this option is exercised, the Contractor must provide up to six (6) Operator's Training and Maintenance Personnel Training, in accordance with the attached Purchase Description for Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck, dated 15 May 2013.

Firm unit price of \$\_\_\_\_\_ per Operator's Training and Maintenance Personnel Training in accordance with Part 7, Basis of Payment Type 2.

**Item 005 - Travel and Living for Operator's Training (Option)**

The Contractor must deliver the Operator's Training and Maintenance Personnel Training to:

(to be inserted by PWGSC if an option is exercised)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Estimated Cost: \$(to be inserted by PWGSC if an option is exercised) in accordance with Part 7, Basis of Payment Type 4.

(Item 005 will not be included in the financial evaluation)

**Item 006 Maintenance Personnel Training (Option)**

If this option is exercised, the Contractor must provide up to six (6) Operator's Training and Maintenance Personnel Training, in accordance with the attached Purchase Description for Rough Terrain, Air Transportable, Military Pattern, Diesel Engine Driven, Boom Type Material Handler Forklift Truck, dated 15 May 2013.

Firm unit price of \$\_\_\_\_\_ per Operator's Training and Maintenance Personnel Training in accordance with Part 7, Basis of Payment Type 2.

**Item 007 - Travel and Living for Maintenance Personnel Training (Option)**

The Contractor must deliver the Operator's Training and Maintenance Personnel Training to:

(to be inserted by PWGSC if an option is exercised)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Estimated Cost: \$(to be inserted by PWGSC if an option is exercised) in accordance with Part 7, Basis of Payment Type 4.

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hs597

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(Item 007 will not be included in the financial evaluation)

**Item 008 – Extended Warranty Period**

If the warranty period is extended for an additional period of \_\_\_\_\_ months/calendar days, the Contractor will be paid a firm unit price of \$\_\_\_\_\_ per vehicle/equipment, Goods and Services Tax or the Harmonized Sales Tax extra.

(Item 006 will not be included in the financial evaluation)

**The Canadian Forces Material Handling Equipment**  
**PURCHASE DESCRIPTION (PD) FOR ROUGH TERRAIN, AIR**  
**TRANSPORTABLE, MILITARY PATTERN, DIESEL ENGINE DRIVEN,**  
**BOOM TYPE MATERIAL HANDLER FORKLIFT TRUCK**

15 May 2013

OPI: DSVPM 4/DAPVS 4  
National Defence Headquarters  
Major General George R. Pearkes Building  
Ottawa, Ontario  
K1A 0K2

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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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**APPENDIX A: Integrated Logistic Support (ILS) Requirements**

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## 1. SCOPE

1.1 **Scope** - This purchase description covers the requirements for a military pattern, rough terrain, diesel engine driven extensible boom type material handler forklift truck.

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**<sup>(E)</sup>" 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**<sup>(E)</sup>", or "will" are not used, the information provided is for guidance only;
- (e) In this document "provided" **shall** mean "provided and installed";
- (f) Where technical certification is required, a copy of the certification or an acceptable proof of compliance **shall** be provided upon request;
- (g) Metric measurements **shall** be used to define the requirement. Other measurements are for reference only and may not be exact conversions; and
- (h) 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;
- (c) "Proof of Compliance" - 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; and

- (d) "Quality Assurance Representative" - The Government agent responsible for ensuring that material and services supplied by the contractor conform to the specified requirements.

1.4 **Requirements Summary Table** - Vehicles covered by this Purchase Description are represented as configurations. The following table shows required performance and dimensions by configuration with a clause reference.

CHARACTERISTIC	CLAUSE	UNITS	CONFIGURATION	
			A	B
RATED LOAD CAPACITY @ 24" LOAD CENTRE	3.4.2(a)	kg	4,082	
		lb	9,000	
LIFT HEIGHT WITH RATED LOAD CAPACITY	3.4.2(a)	mm	4,500	
		In	177	
LOAD CAPACITY WITH PARTIAL BOOM EXTENSION	3.4.2(b)	kg	2,041	
		lb	4,500	
BOOM FORWARD REACH	3.4.2(c)	mm	6,096	
		in	240	
LOAD CAPACITY AT FORWARD REACH	3.4.2(d)	kg	1,000	
		lb	2,204	
LIFT HEIGHT AT FORWARD REACH	3.4.2(e)	mm	9,753	
		in	384	
OVERALL HEIGHT	3.4.3(b)	mm	2,692	
		in	106	

SIDE SHIFTER	3.5.1(d)	mm	102	
		in	4	
SUSPENSION SEAT	3.6(b)	-	✓	
AIR CONDITIONER	3.6(d)	-	✓	
FUEL CAPACITY	3.8.2(a)	hour	8	
COLD WEATHER AID	3.8.3	-	✓	
MILITARY GREEN PAINTING	3.19	-	✓	
OPERATOR'S TRAINING	A.7	-	✓	
MAINTENANCE PERSONNEL TRAINING	A.8	-	✓	
PROVISIONING DOCUMENTATION	A.9	-	✓	

**2. APPLICABLE DOCUMENTS**

**2.1 Government Furnished Documents - NOT APPLICABLE**

**2.2 Other Publications** - The following documents form part of this Purchase Description. Web sites for the organization are given when available. Effective documents are those in effect on date of manufacture. Sources are as shown:

**SAE Handbook**

Society of Automotive Engineers Inc.  
400 Commonwealth Dr.,  
Warrendale, PA, 15096  
<http://www.sae.org>

**Yearbook**

Tire and Rim Association Inc.  
3200 West Market St.,  
Akron, Ohio, 44321  
<http://www.us-tra.org/traHome.htm>

**C-01-100-100/AG-005** Acceptance of Commercial & Foreign Government Publications as Adopted Publications

**C-04-007-005/AG-000** Military Guide for Selection of Lubricants, Power Transmission Fluids and Corrosion Preventatives for use in Land Equipment Systems

**D-01-100-214/SF-000** Preparation of Provisioning Documentation

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<b>D-01-100-200/SF-015</b>	Preparation of Data Summaries for Standard Military Pattern Vehicles and Equipment
<b>CAN\CGSB Standard 3.24 -2012</b>	Aviation Turbine Fuel (Military Grade F-34)
<b>Fed-Std-595B</b>	Colors Used in Government Procurement
<b>Mil-DTL-64159 type II</b>	Waterborne Polyurethane CARC
<b>TTC-C-490, Type III</b>	Cleaning Method of Ferrous Surfaces and Pretreatment for Organic Coatings
<b>MIL-DTL-64159, Type II</b>	CARC Topcoat
<b>MIL-PRF-22750 (latest)</b>	Epoxy Topcoat
<b>STANAG 1135 (latest)</b>	Inter-changeability of Fuels, Lubricants and Associated Products used by the Armed Forces of the North Atlantic Treaty Nations

### 3. REQUIREMENTS

#### 3.1 Standard Design - The vehicle/equipment **shall**:

- (a) Be the manufacturer's latest model having demonstrated industry acceptability by having been manufactured and sold commercially for at least 1 year or **shall** be manufactured by a company that has at least 5 years experience in manufacturing equipment to the same standards/regulations;
- (b) Be subject to demonstrations and testing, to demonstrate the vehicle and vehicle system's capability to satisfy performance requirements as detailed in paragraph 5.2;
- (c) Have engineering certification available, upon demand, for this application from the original manufacturers of major equipment systems and assemblies;
- (d) Conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and pollution in effect in Canada at the time of manufacture; and
- (e) Have system and component capacities not greater than their published ratings (i.e. product or component brochures) or accompanied by proof of compliance.

#### 3.2 Operating Conditions

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3.2.1 **Weather** - The vehicle/equipment **shall** operate under the extremes of weather conditions found in Canada and around the world in temperatures ranging from -40 to 49° C (-40 to 120° F).

3.2.2 **Terrain** - The forklift **shall** be capable of being operated on use-roughened concrete floors and deteriorated outdoor uneven paved surfaces while being used stacking, un-stacking and moving general supplies in and around warehouses. The vehicle **shall** be capable of being operated off-road (e.g. construction sites, open fields, ditch with water, holes, and dirt tracks, military training areas). Terrain conditions **shall** include year round operations on snow, mud, sand and ice.

### 3.3 **Safety Standards**

3.3.1 **Noise Level** - The vehicle/equipment noise levels **shall** meet the requirements of legislation relative to Occupational Safety and Health both at the operator's station and exterior to the vehicle.

3.3.2 **Stability** - Vehicle stability **shall**<sup>(B)</sup> be in accordance with CSA B335.

3.3.3 **Maintainability** - All maintenance and repair tasks **shall** be easy to perform with a minimum of special tools. A 95<sup>th</sup> percentile male or 5<sup>th</sup> percentile female **shall** be able to easily access, as a minimum, all wires, brake lines and lighting components for removal/repair. No access panel **shall** be permanently attached (i.e. no riveted plates).

3.3.4 **Human Engineering and Safety** - The vehicle/equipment, all systems and components **shall**:

(a) Be designed for easy performance of all maintenance and repair tasks with a minimum of special tools. A 95<sup>th</sup> percentile male or 5<sup>th</sup> percentile female **shall** be able to easily access all engine components, wires, drive train heating/cooling system, brake lines, electrical and hydraulic components for preventive maintenance, removal and repair tasks. No access panel **shall** be permanently attached (i.e. no riveted plates);

(b) Be safe and easy to use by a 95<sup>th</sup> percentile male or 5<sup>th</sup> percentile female under all operating conditions;

(c) Have all entry and exit points equipped with handles and steps suitably positioned, to accommodate a 95<sup>th</sup> percentile male or a 5<sup>th</sup> percentile female under all operating conditions; and

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- (d) Be equipped, where required for operator safety, with safety features such as warning and instruction plates, non-slip walking surfaces and heat shields.
- 3.3.5 **"DS" Safety Rating** - The vehicle *shall*<sup>(E)</sup> have certification to Type "DS" requirements of UL 558 before delivery. The vehicle *shall*<sup>(E)</sup> have a UL Type "DS" label permanently attached.
- 3.4 **Performance** - Performance *shall* be substantiated with the Proof of Compliance.
- 3.4.1 **Vehicle Performance** - The vehicle *shall*:
- (a) Attain a forward speed of 30 km/h (18 mph) on level ground and 10 km/h (6.2 mph) on rough terrain in an unladen condition;
  - (b) Ascend a 35 per cent grade at a forward speed of no less than 2.4 km/h (1.5 mph) with maximum rated load;
  - (c) Traverse a 10 per cent slope at a forward speed of no less than 2.4 km/h (1.5 mph) with maximum rated load;
  - (d) Traverse a 20 per cent slope at a forward speed of no less than 2.4 km/h (1.5 mph) carrying no load;
  - (e) Negotiate 150 mm (6 inches) of deep mud or incompact snow; and
  - (f) Negotiate a 30 % side slope with full load capacity on the retracted forks and the vertical centre of gravity of the load at a height of no more less than 750 mm (30 inches) above ground level.
- 3.4.2 **Forklift Performance** - Performance characteristics and rated capacities at 600 mm (24 inches) load centre *shall* be:
- (a) A rated load capacity of no less than that given as "**LOAD CAPACITY @ 24" LOAD CENTER**" in the Requirements Summary Table with the boom and fork carriage extended to 1,200 mm (48 inches) and the forks 1,200 mm (48 inches) off the ground. The forks *shall* be able to lift this load from the level position to a height of at least that given as "**LIFT HEIGHT WITH RATED LOAD CAPACITY**" without retracting the boom;
  - (b) A load capacity of no less than that given as "**LOAD CAPACITY WITH PARTIAL BOOM EXTENSION**" in the Requirements Summary Table with the boom and fork carriage extended to 4,000 mm (158 inches) and the forks 1,219 mm (48 inches) off the ground. The forklift shall be able to lift this

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load from the level position to a height of 6,706 mm (264 inches) without retracting the boom;

- (c) A forward reach of no less than that given as "**BOOM FORWARD REACH**" in the Requirements Summary Table with the boom and fork carriage extended and the forks at least 1,200 mm (48 inches) off the ground;
- (d) A load capacity of no less than that given as "**LOAD CAPACITY AT FORWARD REACH**" with the boom and fork carriage extended to at least that given as "**BOOM FORWARD REACH**" in the Requirements Summary Table and the forks 1.2 m (48 inches) off the ground. The forks **shall** be able to lift this load from the level position to a full operating height of at least that given as "**LIFT HEIGHT AT FORWARD REACH**" in the Requirements Summary Table without retracting the boom;
- (e) A fork lifting speed fully retracted of at least 23 metres per minute (75 feet per minute) with the maximum rated load; and
- (f) Having forks to deposit it's load at least 600 mm (24 inches) below ground level when fully extended and at least 100 mm (4 inches) below ground level when fully retracted.

3.4.3 **Dimensions** - Dimensions **shall** be substantiated with the Proof of Compliance. The vehicle weight and dimensions **shall** comply with the air transportability requirements and additionally **shall** have:

- (a) A length of no more than 5,500 mm (216 inches) excluding forks/or with forks folded;
- (b) An overall height of no more than 2,717 mm (107 inches);
- (c) An underclearance at the lowest point of no less than 229 mm (9 inches); and
- (d) Approach and departure angles of no less than 25 degrees.

### 3.5 **Equipment**

3.5.1 **Application Equipment** - Equipment/features below **shall** be provided:

- (a) **Boom** - An extensible hydraulic boom which **shall** provide the lift capacities and heights required to satisfy the performance requirements;
- (b) **Forks** - Manufacturer's standard forks. The nominal length **shall** be 1,066 mm (42 inches). When requested by DND, forks with a nominal length of 1,219 mm (48 inches) **shall**

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be provided. The forks **shall** be shipped with Non-Destructive Test (NDT) certification documents;

- (c) **Forks Carriage** - A fork carriage at least 1,300 mm (51 inches) wide with a fork tilt of not less than 10 degrees backwards and forwards, accomplished through carriage tilt.
- (d) **Fork Positioner and Side Shifter** - A hydraulic fork-positioner capable of adjusting forks individually from the cab, to approximately full width of the carriage and a hydraulic side shifting attachment. The side shifter **shall** be capable of side shifting fully laden forks simultaneously, at least that given as "SIDE SHIFT" in the Requirements Summary Table, to either side of the centre. An integrated side shifter with fork positioning is preferred;
- (e) **Fork-Levelling System** - A fork-leveling system. The leveling system **shall** make the forklift capable of entering into and lifting pallets that are on a slope of 15 percent to either side;
- (f) **36-inch Backrest** - A load backrest with a nominal height of 914 mm (36 inches);
- (g) **Boom Angle Indicator** - A boom angle indicator which **shall** be visible to the operator while seated in the operator's seat;
- (h) **Vehicle Tie-Down Devices** - Vehicle tie-down devices. Permanent and integrally vehicle tie-down devices **shall**:
  - i Be designed to withstand stresses imposed by thrust loads (all directions) with a factor of safety of 1.5 with respect to the ultimate strength of the material;
  - ii Be designed for forward thrust of 4 G, a rearward thrust of 4 G, an upward thrust of 2 G and a side thrust of 1.5 G (1 G = shipping weight of the equipment), loads are not imposed simultaneously;
  - iii Be designed/located to prevent shifting or movement during transport on low-bed trailers, rail car and aboard ships;
  - iv Be located to permit easy attachment of cables or turnbuckles;
  - v Be identified and marked with maximum strain permitted. Markings **shall** be painted using a contrasting colour; and

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- vi Include complete tie down instructions showing locations. This information **shall** be shown in the manual and it is preferred that it is marked in the vehicle cab (in the form of decals).
- (i) **Lifting Attachments** - Lifting attachments. Lifting attachments, to lift the vehicle in travelling/operating position, **shall**:
- i Be capable of carrying not less than 2-1/2 times normal load imposed on each individual attachment (attachments marked with maximum allowable load);
  - ii Have attachments positioned so lifting strain are in line with longitudinal axis of attachment eye;
  - iii Have attachment eyes with inside diameter of not less than 7.6 cm (3 in);
  - iv Have complete diagrams and instructions (preferably in operator's manual) for lifting/securing vehicle on transportation medium including the basic vehicle's shipping weight.
- (j) **Air Transportability (C-130)** - Vehicle **shall** be capable of being transported to theatre by a C-130 cargo aircraft. The equipment **shall**:
- i Have complete diagrams and instructions available to the operator for lifting and securing vehicle on transportation medium including the basic vehicle's shipping weight for determination of capacity of lifting and tie-down provisions;
  - ii Have a maximum reduced vehicle weight not exceeding 12,698 kg (28,000 lbs) and a maximum axle weight not exceeding 5,895 kg (13,000 lbs) per axle;
  - iii Have a maximum height of vehicle stripped for Air Transportation of no more than 2.64 metres (8 ft-8 in), vehicle heights up to 2.66 metres (8 ft-9 in) may be accepted dependent on design;
  - iv Have a maximum length of vehicle stripped for Air Transportation of no more than 12 metres long (39 ft-4 in);
  - v Have a maximum width of vehicle stripped for Air Transportation of no more than 2.59 metres (8 ft-6 in);
  - vi Have a maximum width over exterior of tires of no more than 2.54 metres (8 ft-4 in), with the tire at normally specified pressures;
  - vii Have a ramp break over angle capability of at least 20 degrees;
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- viii Have approach and departure angles of not less than 20 degrees for the laden vehicle;
  - ix Be able move onto and off of the C-130 under it's own power, controlled by an on-board operator, after being prepared for Air Transportation;
  - x Require no more than three hours preparation for shipment by air and reassembly at site; and
  - xi Not require any component weighing more than 90 kg (198 lbs) be lifted into position for the reassembly of the vehicle.
- (k) **Rear-Mounted Pintle Hook** - A swivel type pintle hook mounted at the rear of the vehicle. The pintle hook **shall** be mounted no less than 700 mm (28 inches) and no more than 960 mm (38 inches) above ground level. It is preferred that the pintle has the capacity to tow a trailer of at least 75% of the weight of the vehicle. The pintle hook **shall** be capable of accommodating a lunette with an internal diameter of 76 mm (3 inches) and material thickness of 41 mm (1 5/8 inches);
- (l) **Vandal Protection** - Vandal protection including provision (Padlock hasps preferred) for locking engine covers, filler caps and the cab;
- (m) **Recovery Hooks** - Towing hooks, loops, or a component with equivalent capability at the front and rear of the vehicle. Recovery hooks whose location is other than the vehicle chassis **shall** be approved by the Technical Authority;
- (n) **Tool Compartment** - Tool compartment to hold all tools and minor loose equipment required for daily maintenance, which **shall**:
- i Be protected from elements and road splash or be of weatherproof construction with anti-return type drainage; and
  - ii Have compartment cover equipped with a means to be secured using a padlock. The cover **shall** have a weatherproof seal.
- (o) **Filler Caps** - Clearly/permanently identified filler caps by contents, i.e. "HYDRAULIC OIL ONLY" (preferably specific fluid i.e. "SAE 30"); and
- (p) **Non-Skid Walking Surfaces** - All walking surfaces covered with a coarse non-skid coating for operator safety.

3.6 **Operator Station** - The operator station **shall** include:

- (a) **Cab** - Fully enclosed pressurized, weatherproof, metal

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framed, insulated and soundproof cab(s). The cab **shall**:

- i Have a heater and ventilation and defrosting system capable of keeping windows free from frost and moisture with noise absorbing insulation;
- ii Have safety glass in windows providing all around visibility. The glass **shall** be tinted. Tinting **shall** not be achieved by applying an adhesive film. Adjustable sun visors **shall** be provided;
- iii Have safety glass on the roof with wire meshed guard;
- iv Have electrically power actuated windshield wipers for front and rear windows as well as glass roof with an electrically power operated windshield washer for each wiper. The front windshield wiper **shall** have 2 speeds preferably with an intermittent setting;
- v Have two doors, or one door and at least one window that may be quickly opened and removed as an operator escape route in an emergency. Emergency exits **shall** be visibly labeled; and
- vi Have doors which are lockable, preferably equipped with padlock hasps.

(b) **Suspension Seat** - A full suspension seat in lieu of the standard seat with the same standards with respect to seat belts and adjustments. The seat design **shall** allow operator to operate the vehicle wearing personal protective gears (NSN:8470-21-912-4594) and combat vehicle crewman's helmet(NSN:8470-20-005-7348);

(c) **Mirrors** - Adjustable rear-view mirrors positioned for safe reverse operation. If exterior mirrors are used, they **shall** be heated with separate dashboard switch. It is preferred that mirrors be a split type with at least 25 percent convex or fully convex; and

(d) **Air Conditioner** - An air conditioning system conforming to SAE J1503 and SAE J169. Air conditioning units **shall** not use ozone depleting refrigerants such as CFCs (ChloroFluoroCarbons) but preferably use HFCs (Hydro FluoroCarbons).

3.7 **Chassis** - The vehicle chassis **shall** be the manufacturers standard for a vehicle of this type and size.

3.8 **Engine** - The engine **shall**:

- (a) Be diesel powered; and

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- (b) Be capable of operating on NATO standard single fuel, defined as F-34 in CAN\CGSB Standard 3.24-2005. No reduction of vehicle/equipment performance below the rated requirements will be accepted. Proof of engine ability to operate on NATO standard single fuel **shall** be provided prior to commencement of production, preferably with the proposal. No change or adjustments to the engine by a technician to change from North American commercial fuels to high sulphur fuels will be accepted.

3.8.1 **Engine Components** - Engine components **shall** include:

- (a) A two stage dry type air cleaning system with a cyclonic pre-cleaner. Filters **shall** have a filter restriction gauge, which is preferably visible from the operator's station;
- (b) A muffler or exhaust system suitably located and/or shielded so that personnel will not contact a heated surface; and
- (c) Weather guards or an effective device to prevent entry of water into intake and exhaust stacks.

3.8.2 **Fuel Tank(s)** - The fuel tank(s) **shall**:

- (a) Have at least the fuel tank capacity for continuous operation of the vehicle for a period of that given as "FUEL CAPACITY" in the Requirements Summary Table. The fuel tank(s) **shall** be at least half full when delivered to the destination; and
- (b) Have a switch for selection of the fuel tank and gauge, if more than one fuel tank is provided. The engine **shall** be able to operate from one fuel tank at a time.

3.8.3 **Engine Cold Weather Aids** - The engine **shall** be equipped with cold weather aids to enable the engine (operating with winter grade fuels/oils) to be started at temperatures down to -40° C. External electrical power for the engine and battery heaters **shall** be provided at a location, accessible without lifting the engine covers, with a single cover-protected plug. It is preferred that the plug includes or is accompanied by a light (preferably LED) indicating when power is being supplied to the 110 Volt components. The following **shall** be included:

- (a) 110-volt engine heater(s) with a capacity as recommended by the engine manufacturer or conforming to SAE Information Sheet J1310;
- (b) 110-volt battery heater(s) having wattage matched to battery size to prevent battery damage due to

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overheating. The battery **shall** be housed in an insulated battery box or in a heated cab;

- (c) A water separator/ fuel filter incorporating an electrical heating system to preheat diesel fuel prior to starting;
- (d) An in-line fuel heater. The heater **shall** be thermostatically controlled to prevent fuel temperature from rising above approximately 43°C (110° F). It is preferred that this be a heat exchanger type connected to the cooling system;
- (e) A low temperature starting aid. The engine **shall** have an ether injection system, glow plug or intake air preheat system; and
- (f) **Fuel-Fired Pre-Heater** - A fuel-fired preheat system. The fuel-fired pre-heater **shall** have an output of no less than 31.6 kJ (30,000 BTU). The unit **shall** be complete with an in-cab controller, which includes an automatic timing circuit with a delayed start of no less than 24 hours. The model **shall** be subject to Technical Authority approval. The preferred model is NSN 2990-12-357-4265 (Espar Hydronic D10).

3.9 **Transmission** - The vehicle **shall**<sup>(E)</sup> be equipped with the following:

- (a) A power shift or power shuttle transmission (with at least 3 gear ratios forward and reverse), or an infinitely variable forward and reverse hydrostatic, servo-controlled drive incorporating automatic controls to compensate for speed and load; and
- (b) An inching transmission, clutch or other device incorporated in the driveline of the vehicle, to allow precise vehicle control.

3.9.1 **All Wheel Drive System (Driver-Selected)** - An all wheel drive system (driver-selected) **shall** be provided. A full-time all wheel drive system will be accepted as a substitute for a driver-selected all wheel drive system. The all wheel drive system **shall** provide a 4 X 4 capability by delivering power equally to all wheels.

3.10 **Brake System** - The brake system **shall**<sup>(EA)</sup> conform to CSA B335.1.

3.10.1 **Service Brakes** - The service brakes **shall**<sup>(E)</sup> be hydraulic-actuated, self-adjusting service brakes.

3.10.2 **Parking Brake** - The parking brake **shall** be capable of holding vehicle with rated load on a 15 per cent gradient in both forward and reverse direction. Internal parking brakes

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**shall** include a method of brake release for recovery.

3.11 **Steering** - The vehicle steering system **shall**:

- (a) Be hydraulically boosted mechanical or full hydraulic power steering;
- (b) Provide emergency steering conforming to SAE Vehicle Standard J1511 with engine stopped;
- (c) Provide the following steering modes:
  - i Front wheel steer;
  - ii Coordinated steer; and
  - iii Crab type steer.
- (d) Have steering position and mode indicators located in a position readily visible to operator.

3.12 **Wheels, Rims and Tires** - Tires **shall** be of air filled-type. The wheels, tires and rims **shall** have a tread that is suited for off-road rough terrain use for military operation.

3.13 **Controls** - Controls **shall**:

- (a) Be in weather and moisture proof enclosures;
- (b) Have switches and levers with permanent position markings or diagram of operation visible to operator;
- (c) Have self-centering control levers;
- (d) Have a keyless ignition switch with a safety device ensuring that engine can only be started with the transmission in a neutral position; and
- (e) Have an accelerator control positioned for convenient operation.

3.14 **Instruments** - Instruments **shall** be readily visible to the operator. It is preferred that the instrument lamps have a dimming capability. Instruments **shall**:

- (a) Have an ammeter, voltmeter or charging indicator;
- (b) Have an engine temperature indicator;
- (c) If applicable, have a torque converter oil temperature indicator;
- (d) Have an engine oil pressure indicator;
- (e) Have a fuel gauge; and
- (f) Have a digital read-out hour-meter, which accurately displays accumulated engine running time up to at least 9,999 hours.

3.15 **Military Electrical System** - The contractor **shall** provide the

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Technical Authority for approval, a complete vehicle electrical schematic. The schematic **shall** include the Military Electrical System and the Military Lighting System, complete with a list of all components to be used before installation on the vehicle. Bound wiring harnesses for this equipment **shall** be made on a wiring loom, so that the position at each connection is identical for trouble-shooting and repeatability. Wiring harnesses **shall** incorporate waterproof quick connectors and where multiple wires are to be connected at one location this **shall** be done with a single connector. The Military Electrical System **shall** be a 24-volt negative ground system and **shall**:

- (a) Have the manufacturer's standard battery/batteries and alternator;
- (b) Include a 24 Volt single pin slave starting circuit with an electrical connector/receptacle complete with protective cap (NSN 5935-01-097-9974) mounted in an accessible location near starter motor or battery. The socket **shall** be accessible to a person at ground level outside the vehicle. Positive socket **shall** be connected to starter motor/battery terminal and body grounded;
- (c) A readily accessible driver-operated warning horn;
- (d) A back-up alarm system to alert personnel that the vehicle is in back-up mode. The backup alarm **shall** be connected such that it will not operate when the vehicle is in Blackout mode; and
- (e) Include a military master disconnect switch accessible to the personnel at ground level which **shall** disconnect all power to the vehicle's electrical system. The switch **shall** not incorporate a master relay into the system.

3.16 **Military Lighting System** - The Military Lighting System **shall**:

- (a) Include as a minimum all lighting and signals as required in the CMVSS for a vehicle of this type;
- (b) Have blackout circuit and highway lighting circuit connected to military lighting switch (NSN 5930-01-491-9893). The contractor **shall** obtain approval of the circuitry from the Technical Authority. The blackout circuitry is a controlled goods and the contractor **shall** be certified to handle controlled goods;
- (c) Have service lights, interior lights, horn and backup alarm made inoperable automatically when in blackout mode;
- (d) Have all lights protected with appropriate brush guards. All lights **shall** be easily accessible for

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removal/replacement using common hand tools. The design **shall** facilitate access to repair blackout light assemblies or replace light bulb without removal of assembly or brush guard from vehicle;

- (e) Have a blackout drive light (NSN 6220-01-496-1925) mounted on left front of vehicle to provide maximum forward visibility under blackout drive conditions. The contractor **shall** obtain approval from the Technical Authority for position of the blackout drive light;
- (f) Have stop-tail light, blackout marker lights, quantity 2, (NSN 6220-01-482-6105) mounted on right and left sides at rear of vehicle, lights **shall** be mounted in a position clearly visible by a following vehicle;
- (g) Have combined service and blackout signal lights and markers, quantity 2, (NSN 6220-01-482-6107) mounted on right and left side at front of vehicle, lights **shall** be mounted in a position clearly visible by an oncoming vehicle;
- (h) Have floodlights that allow forklift operations at night, with sufficient lighting for the operator to see the load and fork tips in all positions. This **shall** include an adjustable floodlight;
- (i) A portable spot light, stowed inside the tool box, with a plug-in connector with at least 10 meters (32 ft-10 inches) of cable; and
- (j) Have all gauges operable from the cab and visible at night even in blackout mode.

3.17 **Hydraulic System** - The hydraulic system **shall** be the manufacturer's standard complete with all components required for the operation of the hydraulic equipment specified. Post-nitriding oxidation treatment for hydraulic cylinder rods is preferred.

3.18 **Lubricants and Hydraulic Fluids** - The vehicle **shall** be serviced with military acceptable lubricants and hydraulic fluids approved IAW Annex C to STANAG 1135 or C-04-007-005/AG-000.

3.19 **Military Green Coating System** - Military green coating system **shall** be provided. All interior and exterior metal surfaces of the vehicle and its installed equipment shall be painted IAW NATO STANAG 4360 (Latest Edition) or with the standard Chemical Agent Resistant Coating (CARC) painting specifications, excluding unmodified Government Supplied Materiel (GSM) material and components, tires, glass surfaces, wiring and nameplates, decals, and soft materials.

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The primer, topcoat, preparations and application **shall** comply with the following:

- (a) **Approval** - The equipment manufacturer **shall** submit the coating application plan to the Technical Authority for approval. The Technical Authority approval **shall** be received prior to commencement of coating application;
- (b) **Materials and Process** - Products used shall be from the applicable qualified products list and shall be applied as per manufacturers' instructions in order to meet Mil-DTL-53072 (latest edition);
- (c) **Cleaning** - Prior to any treatment or application of any coating, all surfaces shall be free of soil impurities or corrosion such as grease, oil, welding flux, or other foreign matter that may interfere with treatment or coating;
- (d) **Surface Treatment** - Organic pre-treatment coating for metal components shall be in accordance with TT-C-490 type III (DOD-P-15328);
- (e) **Primer** - The epoxy primer coating shall be in accordance with Mil-P-53022 (latest edition) type II;
- (f) **Topcoat** - Topcoat shall be one of the following:
  - A polyurethane topcoat in accordance with Mil-DTL-64159 type II (latest edition), colour 34094 (flat green) IAW Fed-Std-595B;
  - An epoxy topcoat in accordance with Mil-PRF-22750 (latest edition), colour 17925 (gloss white) IAW Fed-Std-595B for interior surfaces of vehicles;
- (g) **Engines and Other Heated Areas** - Paint and painting of engines (including exhaust manifolds, exhaust pipes, mufflers, and other parts subject to high temperatures in excess of 400 °F) shall be in accordance with the applicable engine specification;
- (h) **Sealing** - Crevices and gaps between non-welded and stagger welded components that could hasten corrosion **shall** be sealed using a silicone-type sealant compatible with the topcoat selected. This **shall** be applied after assembly, and **shall** be painted;
- (i) **Lettering and Symbols** - Lettering and symbols on the outside of the vehicle **shall** be flat black using paint or coating compatible with the topcoat selected. The colour **shall**<sup>(E)</sup> be flat black 37030 in accordance with FED Std 595;
- (j) **Inspection** - The Technical Authority and Quality

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Assurance Representative may verify the application of the coating system in accordance with MIL standards referenced in this document and the Coating Application Plan. Test samples **shall** be made available to DND, on request; and

- 3.19.1 **CARC Records** - Chemical Agent Resistant Coating is a controlled good until applied and cured or pot life expired. Access to controlled goods is subject to the Defence Production Act and the contractor shall be certified to handle controlled goods. The Technical Authority is required to maintain records of CARC used on vehicles. To facilitate this, the Contractor **shall** provide the Technical Authority with form(s) describing the processes used for surface preparation, the priming coat(s) applied and the topcoat(s) applied. The form(s) **shall** include manufacturer, product code(s) and batch number of products used, and also vehicle VIN numbers with dates of application. The form to provide this information will be supplied with the bid or will be available from the Technical Authority.
- 3.20 **Identification** - The following information **shall** be permanently marked in a conspicuous and protected location:
- (a) Manufacturer's name, model and serial number; and
  - (b) Manufacturer's Vehicle Identification Number (VIN), where applicable.
4. **INTEGRATED LOGISTIC SUPPORT (ILS)** - The Contractor is required to ensure that spare parts required to properly maintain and repair vehicles are available for purchase for a period of 15 years. The Contractor **shall** provide ILS documentation and services in accordance with **Appendix A - Integrated Logistic Support (ILS) Requirements** to this Purchase Description.
5. **QUALITY ASSURANCE**
- 5.1 **Quality System Requirements** - The Quality System **shall** be in compliance with ISO 9001:2008. The contractor **shall** be responsible for the Quality System. The DND Quality Assurance Representative (QAR) will assure that the contractor is providing a Quality System. Workmanship, finish and conformance with best trade practices will be assessed
- 5.2 **Performance Verification** - The first vehicle to be delivered **shall** be examined and performance tested by the contractor, under real equivalent load and operating conditions, to ensure item by item conformance to specified requirements. The DND QAR along with DND Technical Authority may witness this testing and operate the unit sufficiently to assess the handling functionalities. The contractor **shall** have a fully equipped vehicle weighed on certified scales. The remaining

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vehicles ***shall*** be tested with or without load to check general performance and operation.

6. **VEHICLE DELIVERY CONDITION** - The vehicle ***shall*** be delivered to destination in a fully operational condition (serviced and adjusted) and both the interior and exterior ***shall*** be cleaned. If the vehicle requires assembly at destination, the Contractor ***shall*** be responsible for all manpower and equipment to perform assembly. The consignee will provide the area required for assembly. For shipment verification, all items such as wheel wrenches, jacks, and all other tools, equipment and accessories, which are shipped loose with the equipment, ***shall*** be listed on the shipping certificate or to an attached packing note.

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## **APPENDIX A: INTEGRATED LOGISTIC SUPPORT (ILS)** **REQUIREMENTS**

### **A.1 TECHNICAL MANUALS**

1. All technical manuals required for the description, operation, maintenance and repair of the complete equipment, including sub-systems, **shall** be provided. As a minimum, the manuals **shall** consist of a Bilingual Operator's manual, and bilingual Maintenance manual and an English Parts manual. Bilingual Parts manuals are desirable. The content of the manuals **shall** be in accordance with Section 2 of C-01-100/AG-005 Acceptance of Commercial and Foreign Government Publications as Adopted Publications.
2. The contractor **shall** submit sample manuals to the Technical Authority (TA) for each equipment model for approval as describe in Section 2 of C-01-100/AG-005 Acceptance of Commercial and Foreign Government Publications as Adopted Publications, not later than 30 days after acceptance of the first production article.

National Défense Headquarters  
LSTL Building  
Mgen George R.Parkes Building  
Ottawa, On, K1A 0K2  
Attention: DSVPM 4-11-1

3. Manuals **shall** be delivered as follows:
  - (a) One complete Operator's manual with each vehicle or equipment (paper format);
  - (b) One complete set of Technical Manuals **shall** accompany the first vehicle or equipment shipped to each units (both paper and electronic format);
  - (c) One complete set of Technical Manuals, electronic and paper format **shall** be shipped to the Technical Authority no later than 30 days after acceptance of the manuals.
4. In the event that approved manuals are not available for the delivery of the equipment, manuals marked "Provisional" **shall** be supplied with the equipment. The contractor **shall** deliver replacement approved manuals to all destinations where Provisional manuals were delivered.

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5. The Canadian Government reserves the right to translate and reproduce, for Government use only, all or any part of the publications supplied, including the training packages, against the contract agreement As describe in Part 1 Para 8 and Para 9 of C-01-100/AG-005 Acceptance of Commercial and Foreign Government Publications as Adopted Publications.
  6. The contractor **shall** supply supplements to manuals to support dealer-installed equipment not covered in approved technical manuals. These supplements **shall** require separate DND approval. These supplements **shall** be provided to each destination in the same quantities and format as the approved Technical Manuals.
  7. Changes to Technical Manuals:
    - (a) During the period of the Contract, changes to equipment, which affect the contents of technical manuals, **shall** be conveyed to DND by revising the electronic and paper version of the technical manuals.
    - (b) Changes to the technical manual **shall** conform to the same format and presentation requirements as the original technical manuals.
    - (c) The revised electronic version of the manual **shall** be sent to the Technical Authority by the Contractor.
  7. Approved copy of the electronic format manuals **shall** be delivered on CD/DVD-ROM as per Para 3. CD/DVD-ROM **shall not** require installation, password and/or Internet connection to be accessed and **shall** be in unlocked PDF searchable format.

## **A.2 DATA SUMMARY**

1. The contractor **shall** provide a bilingual DND equipment Data Summary for each make/model/ configuration as describe in D-01-100-200/SF-015. A representative sample template of the Data Summary, Equipment Configuration Code (ECC) and the publication number will be provided to the Contractor by the Technical Authority.
  - (a) The Data Summary **shall** provide details of all attachments and options.

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- (b) The Contractor **shall** submit a draft of the Data Summary to the Technical Authority for approval in electronic format (MS Word).
  - (c) Within 30 days of the Data Summary approval, the contractor **shall** provide to the Technical Authority one (1) copy in electronic format (MS Word).

### **A.3 WARNING SIGN AND IDENTIFICATION LABEL**

- 1. The contractor **shall** ensure that equipment is delivered with bilingual warning signs and identification labels. Bilingual labels and signs **shall** also be represented in the parts manual.

### **A.4 WARRANTY LETTER**

- 1. The contractor **shall** provide a bilingual Warranty Letter with each vehicle delivered in the approved DND format and include the following details:
  - (a) A list of all Canadian designated warranty service providers that will honor the warranty for the equipment and attachments (if applicable) procured under this contract. Including the person to contact and phone number for each warranty service provider.
  - (b) Details of all additional warranty coverage of sub-systems and a copy of the warranty letter from each sub-system's OEM.
  - (c) Details of the warranty period as negotiated in the contract.
  - (d) Contractor contact information, name and phone number, for warranty support.
- 2. The DND TA will provide the contractor a template for the DND acceptable format of the warranty letter. The Contractor **shall** send a copy of the Warranty Letter, in electronic format, to the Technical Authority for each vehicle, at shipment.

### **A.5 PHOTOGRAPHS**

- 1. Photographs **shall** be submitted to the DND TA in electronic format.

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2. Within 15 days of delivery of the first vehicle or equipment of each make/model/ configuration, the contractor **shall** supply colour photographs, taken against a plain background, in digital Joint Photographic Experts Group (JPEG) format with a minimum 10 megapixel resolution of the following:
    - (a) Left front three-quarter views of a completed unit;
    - (b) Right rear three-quarter views of a completed unit, and;
    - (c) Side and front view sketch showing dimensions. Brochure sketches are acceptable.

#### **A.6 SPECIAL TOOLS LIST**

1. The contractor will be required to prepare an itemized list of all special tools required for the servicing and repair of the vehicle or equipment. The list **shall** include the following information:
  - (a) Item name;
  - (b) Contractor's part number;
  - (c) Manufacturer's part number (OEM);
  - (d) Original manufacturer's NATO Supply code (NCAGE);
  - (f) NSN (NATO Stock Number) (if known);
  - (g) Quantity recommended per delivery location;
  - (h) Unit price; and
  - (i) Unit of issue.
2. These tools **shall** also be listed in the Maintenance manual as describe in Section 2 Para 4 of C-01-100/AG-005 Acceptance of Commercial and Foreign Government Publications as Adopted Publications.

#### **A.7 OPERATOR'S TRAINING**

1. The Contractor **shall** provide an operator training dealing with specific features and capabilities of the equipment. Operator will learn the operator servicing procedures, operate the features of the vehicle safely and efficiently and a minimum of one (1) hours practical operating training per operator. The training should be a minimum of eight (8) hours of operator training for a maximum of six (6) persons at a customer location. Training **shall** be available in both official languages for destinations in the province of Quebec and when requested by DND. Training dates **shall** be coordinated with the TA.

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2. The contractor **shall** provide a copy of the training package to DND TA for approval at least 30 days before training begins.
  3. The contractor **shall** have the "PROOF OF OPERATOR TRAINING" certificate signed by a Crown Representative at training location and return to the DND TA. The DND Technical Authority will supply this document in an electronic format.

#### **A.8 MAINTENANCE PERSONNEL TRAINING**

1. The Contractor **shall** provide maintenance personnel training with an in-depth knowledge so that repairs can be made quickly and efficiently dealing with specific features and capabilities of the equipment. Training **shall** include safety precautions, trouble shooting, test and adjustment and special tools and test equipment. Technicians will also learn the minimum operation and features of the vehicle to be able to maintain safely and efficiently. The maintenance training should be a minimum of two (2) days of training for a maximum of six (6) persons at one of DND locations where the equipment(s) would be delivered. Training **shall** be available in both official languages for destinations in the province of Quebec and when requested by DND. Training dates **shall** be coordinated with the TA and the course curriculum **shall** include:
  2. The contractor **shall** provide a copy of the training package to the DND TA for approval at least 30 days before training begins.
  3. The contractor **shall** have the "PROOF OF MAINTENANCE TRAINING" certificate signed by a Crown Representative at training location and return to the DND TA. The DND Technical Authority will supply this document in an electronic format.

#### **A.9 PROVISIONING DOCUMENTATION**

1. The Contractor **shall** provide the following provisioning documentation (PD) as describe in D-01-100-214/SF-000;
  - (a) Provisioning Parts Breakdown (PPB) as describe at Para 3.1.1 of D-01-100-214/SF-000;
  - (b) Supplementary provisioning technical documentation (SPTD) as describe at Para 3.8 of D-01-100-214/SF-000;

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- (c) The PPB and SPTD shall be provided to the DND Technical Authority (TA) for review. PPB and SPTD **shall** be in accordance with the maintenance concept below; and
  - (d) An Initial Provisioning conference (IPC) will be held at the contractor location at least 30 days after PPB and SPTD has been accepted by the TA.

#### **A.10 MAINTENANCE CONCEPT**

- 1. The Maintenance Concept is the most important element of the support concept for equipment. It is imperative that the Contractor understand the maintenance concept in order to produce and deliver professional and accurate ILS deliverables.
- 2. The maintenance concept for the equipment procured under this contract is based on two different levels of repairs. Based on the definition of levels or repairs below, the Contractor **shall** define the appropriate level of repairs for each maintenance task in order to facilitate DND technicians to carry out the full range of preventive and first and second level corrective maintenance tasks at Canadian Forces Tactical, Operational and Strategic Maintenance Units.
- 3. In absence of maintenance tasks analysis report, the Contractor **shall** use its experience and knowledge to properly define the appropriate level of repairs. In the case where the Contractor is not the OEM, the Contractor **shall** ensure obtaining and providing DND with all information required to properly define level of repairs.

#### **A.11 LEVEL OF REPAIRS DEFINITIONS**

- (a) **Level one:** Level one includes Operator and Technician maintenance which principally includes preventive maintenance, inspection, servicing, preliminary diagnosis of faults, and corrective maintenance. Level One Repairs are considered tasks of a minor nature. The term "minor nature" infers short duration (less than four hours) and relatively simple repairs.
- (b) **Level Two:** Level two includes principally corrective maintenance carried out by the replacement of major assemblies. The duration of tasks is usually limited to 24 hours.

**TECHNICAL INFORMATION QUESTIONNAIRE FOR ROUGH TERRAIN,  
AIR TRANSPORTABLE, MILITARY PATTERN, DIESEL ENGINE  
DRIVEN, BOOM TYPE MATERIAL HANDLER FORKLIFT TRUCK**

**BID SOLICITATION NUMBER**

**CONFIGURATION    A**

**CONTRACTOR INFORMATION:**

**Contractor Name:**

**Date:**

**Introduction**

This questionnaire covers technical information, which **shall** be provided for evaluation of the configurations of the vehicle 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 document name / title and page number where the Proof of Compliance can be found.

**Substitutes/Alternatives**

Are any substitutes/alternatives offered as equivalent? YES  NO

**PURCHASE DESCRIPTION PARAGRAPHS**

3.1 **Standard Design**

(a) Make \_\_\_\_\_ - Model \_\_\_\_\_  
Length of time this model in production/sold commercially  
\_\_\_\_\_ years

3.2 **Operating Conditions**

3.2.1 **Weather**

3.2.2 **Terrain**

3.3 **Safety Standards**

3.3.1 **Noise Level**

3.3.2 **Stability**

3.3.3 **Maintainability**

3.3.4 **Human Engineering and Safety**

3.3.5 **"DS" Rating**

3.4 **Performance**

3.4.1 **Vehicle Performance** - Proof of Compliance

- (a) Forward Speed in document \_\_\_\_\_ on page \_\_\_\_\_
- (b) Ascend in document \_\_\_\_\_ on page \_\_\_\_\_
- (c) Traverse 10% slope with full load in document \_\_\_\_\_ on page \_\_\_\_\_
- (f) Side slope in document \_\_\_\_\_ on page \_\_\_\_\_

3.5.2 **Forklift Performance** - Proof of Compliance

- (a) Capacity at 48 inches extension and a fork height of 177 inches above ground level in document \_\_\_\_\_ on page \_\_\_\_\_
- (b) Capacity at 158 inches extension and a fork height of 264 inches above ground level in document \_\_\_\_\_ on page \_\_\_\_\_
- (c) Boom Forward Reach in document \_\_\_\_\_ on page \_\_\_\_\_
- (d) Capacity at boom forward reach (240 inches extension) and a fork height of 394 inches above ground level in document \_\_\_\_\_ on page \_\_\_\_\_
- (e) Lifting speed loaded in document \_\_\_\_\_ on page \_\_\_\_\_

3.4.3 **Dimensions** - Proof of Compliance

- (a) Length of vehicle less forks in document \_\_\_\_\_ on page \_\_\_\_\_
- (b) Overall height of vehicle in document \_\_\_\_\_ on page \_\_\_\_\_
- (c) Clearance under vehicle in document \_\_\_\_\_ on page \_\_\_\_\_
- (d) Angle of approach and Departure angle in document \_\_\_\_\_ on page \_\_\_\_\_

3.5.1 **Application Equipment**

- (a) **Boom**
- (b) **Forks**
- (c) **Forks Carriage**
- (d) **Fork Positioner/Side Shifter**
- (e) **Fork Levelling System**
- (f) **36-inch Load Backrest**
- (g) **Boom Angle Indicator**
- (h) **Vehicle Tie-Down Devices**
- (i) **Lifting Attachments**
- (j) **Air Transportability (C-130)**
- (k) **Rear-Mounted Pintle Hook**
- (l) **Vandal Protection**
- (m) **Recovery Hooks**
- (n) **Tool Compartment**
- (o) **Filler Caps**
- (p) **Non-Skid Walking Surfaces**

3.6 Operator Station

- (a) Cab
- (b) Suspension Seat
- (c) Heated Mirror(s)
- (d) Air Conditioner

3.t Chasis

3.8 Engine

3.8.1 Engine Components

3.8.2 Fuel Tank

3.8.3 Engine Cold Weather Aids

- (a) 110-Volt Engine heater
- (b) 110-volt Battery heater
- (c) Water Separator/Fuel Filter
- (d) In-line fuel heater
- (e) Starting Aid -  Ether Injection  Glow Plug  Intake Air Preheat
- (f) Fuel-Fired Pre-Heater

3.9 Transmission

- (a) Drive Type
- (b) Inching Transmission - Make \_\_\_\_\_ Model \_\_\_\_\_

3.9.1 All Wheel Drive System (Driver-Selected)

3.10 Brake System

3.11 Steering

3.12 Wheels, Tires and Rims

Tire Material \_\_\_\_\_ - Tread type \_\_\_\_\_

3.13 Controls

3.14 Instruments

3.15 Military Electrical System

- (c) Warning Horn

- (d) Back-up Alarm
- (e) Master Disconnect Switch
- 3.16 Military Lighting System
  - (h) Floodlights
  - (i) Portable Spot Light
- 3.17 Hydraulic System
- 3.18 Lubricants & Hydraulic Fluids
- 3.19 Military Green Coating System
  - Manufacturer \_\_\_\_\_
  - Manufacturer's Codes for Coating \_\_\_\_\_
- 3.20 Identification
- 4. Integrated Logistics Support
- 5. Quality Assurance
  - 5.1 Quality Assurance Requirements
  - 5.2 Performance Verification
- 6. Vehicle Delivery Condition