



**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 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

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

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

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

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

Comments - Commentaires

Title - Sujet Wildland Fire Fighting Vehicles	
Solicitation No. - N° de l'invitation W8476-185826/B	Date 2018-06-06
Client Reference No. - N° de référence du client 6000424020	
GETS Reference No. - N° de référence de SEAG PW-\$\$HP-929-74940	
File No. - N° de dossier hp929.W8476-185826	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-07-03	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Way, Stephanie	Buyer Id - Id de l'acheteur hp929
Telephone No. - N° de téléphone (873) 469-3300 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

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

Issuing Office - Bureau de distribution

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

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

This bid solicitation cancels and supersedes previous bid solicitation number W8476-185826/A dated 07 March 2017 with a closing of 14 May 2017 at 2:00 p.m. EDT

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PART 1 - GENERAL INFORMATION

1.1 Requirement

Canada is seeking proposals to procure:

1.1.1 Quantity seven (7), Wildland Fire Fighter Vehicles and ancillary items as described in Annex "A" - Pricing and in accordance with Annex "B"- Purchase Description Wildland Fire Fighter Vehicles.

1.1.2 Irrevocable options identified in Annex "A"- Pricing.

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

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

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

1.2. Debriefings

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

1.3. Trade Agreements

The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

PART 2 - BIDDER INSTRUCTIONS

2.1 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](https://buyandsell.gc.ca/policy-and-guidelines/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.

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

The 2003 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

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

Delete: sixty (60) days

Insert: ninety (90) days

The 2003 standard instructions is amended as follows:

- Section 5, entitled Submission of bids, is amended as follows:
 - subsection 1 is deleted entirely and replaced with the following: "Canada requires that each bid, at solicitation closing date and time or upon request from the Contracting Authority, for example in the case of epost Connect service, be signed by the Bidder or by an authorized representative of the Bidder. If a bid is submitted by a joint venture, it must be in accordance with the section entitled Joint venture."
 - subsection 2.d is deleted entirely and replaced with the following: "send its bid only to the specified Bid Receiving Unit of Public Works and Government Services Canada (PWGSC) identified in the bid solicitation, or to the address specified in the bid solicitation, as applicable;"
 - subsection 2.e is deleted entirely and replaced with the following: "ensure that the Bidder's name, return address and procurement business number, bid solicitation number, and solicitation closing date and time are clearly visible on the bid; and,"
- Section 6, entitled Late bids, is deleted entirely and replaced with the following: "PWGSC will return bids delivered after the stipulated solicitation closing date and time, unless they qualify as a delayed bid as described in the section entitled Delayed bids. For bids submitted using means other than the Canada Post Corporation's epost Connect service, the bid will be returned. For bids submitted using Canada Post Corporation's epost Connect service, conversations initiated by

the Bid Receiving Unit via the epost Connect service that contain access, records and information pertaining to a late bid will be deleted."

- Section 07, entitled Delayed bids, is amended as follows:
 - Subsection 1 is amended to add the following piece of evidence: "d. a CPC epost Connect service date and time record indicated in the epost Connect conversation activity."
- Section 8, entitled Transmission by facsimile, is deleted and replaced by the following:

Transmission by facsimile or by epost Connect

1. Facsimile

- a. Unless specified otherwise in the bid solicitation, bids may be submitted by facsimile. The only acceptable facsimile number for responses to bid solicitations issued by PWGSC headquarters is 819-997-9776 or, if applicable, the facsimile number identified in the bid solicitation. The facsimile number for responses to bid solicitations issued by PWGSC regional offices is identified in the bid solicitation.
- b. For bids transmitted by facsimile, Canada will not be responsible for any failure attributable to the transmission or receipt of the faxed bid including, but not limited to, the following:
 - i. receipt of garbled or incomplete bid;
 - ii. availability or condition of the receiving facsimile equipment;
 - iii. incompatibility between the sending and receiving equipment;
 - iv. delay in transmission or receipt of the bid;
 - v. failure of the Bidder to properly identify the bid;
 - vi. illegibility of the bid; or
 - vii. security of bid data.
- c. A bid transmitted by facsimile constitutes the formal bid of the Bidder and must be submitted in accordance with the section entitled Submission of bids.

2. ePost Connect

- a. Unless specified otherwise in the bid solicitation, bids may be submitted by using the [epost Connect service](https://www.canadapost.ca/web/en/products/details.page?article=epost_connect_send_a) (https://www.canadapost.ca/web/en/products/details.page?article=epost_connect_send_a) provided by Canada Post Corporation.
- b. To submit a bid using epost Connect service, the Bidder must either:
 - i. send directly its bid only to the specified PWGSC Bid Receiving Unit, using its own licensing agreement for epost Connect provided by Canada Post Corporation; or

- ii. send as early as possible, and in any case, at least six business days prior to the solicitation closing date and time, an email that includes the bid solicitation number to the specified PWGSC Bid Receiving Unit requesting to open an epost Connect conversation. Requests to open an epost Connect conversation received after that time may not be answered.
- c. If the Bidder is sending an email to the Bid Receiving Unit, the Bid Receiving Unit will then initiate an epost Connect conversation which will allow the Bidder to transmit its bid afterward at any time prior to the solicitation closing date and time. The epost Connect conversation will create an email notification from Canada Post Corporation prompting the Bidder to access the message within the conversation, and the Bidder can reply to the email notification by transmitting its bid.
- d. If the Bidder is using its own licensing agreement to send its bid, the Bidder must keep the epost Connect conversation open until at least 30 business days after solicitation closing date and time.
- e. The email address of PWGSC Bid Receiving Unit in Headquarters is: TPSGC.DGAreceptiondessoumissions-ABBidReceiving.PWGSC@tpsgc-pwgsc.gc.ca. The solicitation number must be identified in the epost Connect message field of all electronic transfers.
- f. It should be noted that the use of epost Connect service requires a Canadian mailing address. Should a bidder not have a Canadian address, they may use the Bid Receiving Unit address specified on page 1 of the solicitation in order to register for the epost Connect service.
- g. For bids transmitted by epost Connect service, Canada will not be responsible for any failure attributable to the transmission or receipt of the bid including, but not limited to, the following:
 - i. receipt of a garbled or incomplete bid;
 - ii. availability or condition of the epost Connect service;
 - iii. incompatibility between the sending and receiving equipment;
 - iv. delay in transmission or receipt of the bid;
 - v. failure of the Bidder to properly identify the bid;
 - vi. illegibility of the bid;
 - vii. security of bid data; or
 - viii. inability to create an electronic conversation through the epost Connect service.
- h. A bid transmitted by epost Connect service constitutes the formal bid of the Bidder and must be submitted in accordance with the section entitled Submission of bids.

2.2 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.

2.3 Enquiries - Bid Solicitation

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

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

2.4 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.

2.5 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) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 8 of the 2003 standard instructions and as amended in Part 2 - Bidder Instructions, Article 2.1 Standard Instructions, Clauses and Conditions. Bidders are required to provide their bid in a single transmission. The epost Connect service has the capacity to receive multiple documents, up to 1GB per individual attachment.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid
Section II: Financial Bid
Section III: Certifications
Section IV: Additional Information

If the Bidder is simultaneously providing a hard copy of the bid using another acceptable delivery method, and if there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the soft copy will have priority over the wording of the hard copy.

If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (2 hard copies)
Section II: Financial Bid (1 hard copies)
Section III: Certifications (2 hard copies)
Section IV: Additional Information (2 hard copies)

Canada requests that bidders follow the format instructions described below in the preparation of hard copy 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 (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). 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 complete and submit with their bid the following;

- Annex "C" - Technical Evaluation – Wildland Fire Fighting Vehicle

3.1.1 Substitute and Alternatives

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

1. Substitutes and alternatives that are equivalent in form, fit, function and performance will be considered for acceptance by the Technical Authority where the Bidder:
 - (a) Clearly identifies a substitute and/or an alternative;
 - (b) Designates the brand name, model and/or part number of the substitute and/or of the product, where applicable;
 - (c) States that the substitute product is fully interchangeable with the item specified in the technical requirement description;
 - (d) Provides complete specifications and brochures, where applicable;
 - (e) Provides compliance statements that include technical details showing the substitute and/or the alternative meet all technical requirements specified in the technical requirement description; and
 - (f) Clearly identifies those areas in the technical requirement description and in the brochures that support the substitute and/or the alternative compliance with the technical requirements.

2. Substitutes and alternatives offered as equivalent in form, fit, function and performance will not be considered for acceptance by the Technical Authority if:
 - (a) The bid fails to provide all of the information requested to allow the Technical Authority to fully evaluate the evaluate the equivalency; or
 - (b) The substitute and/or the alternative fail to meet or fail to exceed the technical requirements specified in the technical requirement description.

Section II: Financial Bid

Bidders must submit their bid in accordance with the Basis of Payment specified in Part 6 and Annex A - Pricing.

3.1.2 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “D” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “D” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.3 Exchange Rate Fluctuation Risk Mitigation

1. The Bidder may request Canada to assume the risks and benefits of exchange rate fluctuations. If the Bidder claims for an exchange rate adjustment, this request must be clearly indicated in the bid at time of bidding. The Bidder must submit form [PWGSC-TPSGC 450](http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/450-eng.html)  (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/450-eng.html>), Claim for Exchange Rate Adjustments with its bid, indicating the Foreign Currency Component (FCC) in Canadian dollars for each line item for which an exchange rate adjustment is required.
2. The FCC is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuations. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.

3. The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provision in the contract. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease).
4. At time of bidding, the Bidder must complete columns (1) to (4) on form PWGSC-TPSGC 450  (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/450-eng.html>), for each line item where they want to invoke the exchange rate fluctuation provision. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.
5. Alternate rates or calculations proposed by the Bidder will not be accepted for the purposes of this exchange rate fluctuation provision.

Section III: Certifications

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

Section IV Additional Information

Canada requests that bidders submit the following information:

3.1.4 Delivery

While delivery of the vehicle(s) is requested by 1 October 2018, the best delivery that can be offered is as follows:

Item 001 – Quantity one (1) Wildland Fire Fighter Vehicles and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 002 – Quantity one (1) Wildland Fire Fighter Vehicles and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 003 – Quantity one (1) Wildland Fire Fighter Vehicles and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 004 – Quantity Two (2) Wildland Fire Fighter Vehicles and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 005 – Quantity one (1) Wildland Fire Fighter Vehicles and related items will be delivered within _____ calendar days from the effective date of the contract.

Item 006 – Quantity one (1) Wildland Fire Fighter Vehicles and related items will be delivered within _____ calendar days from the effective date of the contract.

Solicitation No. - N° de l'invitation
W8476-185826/B

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur
HP929

Client Ref. No. - N° de réf. du client
W8476-185826

File No. - N° du dossier
hp929 W8476-185826

CCC No./N° CCC - FMS No/ N° VME

Optional Quantity

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

Item 007 – Quantity up to five (5) Wildland Fire Fighter Vehicles and ancillary items will be delivered within _____ calendar days after an option is exercised.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1. 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.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Evaluation Criteria

- a) Bidders must demonstrate their compliance with all technical evaluation criteria detailed in Annex C - Technical Evaluation Matrix, by providing substantial information describing completely and in detail how each requirement is met or addressed. Simply repeating the statement contained in the bid solicitation is not sufficient.
- b) Bidders proposing substitutes and/or alternatives must submit, with their bid all the information requested as detailed in Part 3, section 2 - Substitutes and Alternatives to be considered for evaluation.

4.1.2 Mandatory Financial Evaluation Criteria

4.1.2.1 Bidders must provide, with their bid, the financial information requested in the bid solicitation and at Annex A - Pricing for items 001 through 011.

4.1.2.2 The prices of the bid Bids must be in Canadian dollars, DDP Delivered Duty Paid at destination, Incoterms 2000, for the firm quantity for item 001 through 006 and optional quantity item 007, Canadian dollars for Operator and Maintenance instructions/training (option) item 008, 009, 010 and item 011. Canadian Custom Duties and Excise Taxes included where applicable, and Applicable Taxes are extra.

4.1.2.3 Aggregate Evaluated Price

Bids will be evaluated on an aggregate price basis for the firm quantity, the optional quantity and the Operator and Maintenance instructions/training (option).

4.1.2.4 To determine the total price for the firm quantity, calculation will be as follows:

- a) The firm unit price for the firm quantity will be multiplied by their identified estimated quantities.

4.1.2.5 Since the optional quantities are to be exercised by provinces, the firm unit price for the optional quantity will be averaged.

To determine the average price for the optional quantities, calculation will be as follows:

- a) The firm unit price for the optional quantity for each province identified will be added; and
- b) The sum will be divided by five (5).

4.1.2.6 The firm unit price for the English and French Operator and Maintenance instructions/training (option) will be averaged.

To determine the average price for the Operator and Maintenance/training (option), calculation will be as follows:

- a) The firm unit price for the English and French Operator and Maintenance/Instructions/training (option) will be added; and
- b) The sum will be divided by Four (4).

4.1.2.7 To determine the aggregate evaluated price for the firm quantity, optional quantity and the Operator and Maintenance instructions/training (option), calculation will be as follows:

- a) The average price for the optional quantity obtained in 4.1.2.5 (b) above will be multiplied by the total estimated optional quantity identified;
- b) The average price for the Operator and Maintenance instructions/training (option) obtained in 4.1.2.6 (b) above will be multiplied by the total estimated optional quantity identified; and
- c) The result will be added to the total price for the firm quantity obtained in 4.1.2.4 (a) above.

4.2. Basis of Selection

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

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, 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 made knowingly or unknowingly, 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 and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](#)" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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

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

The Bidder must provide the Contracting Authority with a completed Annex E titled "Federal Contractors Program for Employment Equity – Certification", before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2.3 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 inform the Bidder of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive

5.2.3.1 Product Conformance

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

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

Bidder's authorized representative signature

Date

5.2.3.1 Clause D5540C "ISO 9001:2008 - Quality Management Systems (QAC Q)" – Certification – For items 001 through 007

The Bidder certifies that it meets, and will continue to meet throughout the duration of the contract, all requirements of clause D5540C "ISO 9001:2008 - Quality Management Systems (QAC Q)" found in Part 6.

Bidders' Authorized Representative Signature

Date

5.2.3.3 General Environmental Criteria Certification

The Bidder must select and complete one of the following two certification statements.

- b) The Bidder certifies that the Bidder is registered or meets ISO 14001.

Bidders' Authorized Representative Signature

Date

Or

- c) The Bidder certifies that the Bidder meets and will continue to meet throughout the duration of the contract, a minimum of four (4) out of six (6) criteria identified in the table below.

The Bidder must indicate which four (4) criteria, as a minimum, are met.

Green Practices within the Bidders' organization	Insert a checkmark for each criterion that is met
Promotes a paperless environment through directives, procedures and/or programs	

All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client	
Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification	
Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity.	
Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program.	
A minimum of 50% of office equipment has an energy efficient certification.	

Bidders' Authorized Representative Signature

Date

PART 6 - RESULTING CONTRACT CLAUSES

6.1. Requirement

6.1.1 The Contractor must deliver Quantity seven (7) Wildland Fire Fighter Vehicles and ancillary items as described in Annex "A" - Pricing and in accordance with Annex "B"- Purchase Description Wildland Fire Fighter Vehicles.

6.1.2 The Contractor grants to Canada irrevocable options identified in Annex "A"- Pricing.

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

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

6.1.2.3 The options may be exercised within Twelve (12) months after contract award.

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

6.2.1 General Conditions

2010A (2016-04-04) General Conditions - Goods (Medium Complexity), apply to and form part of the contract.

6.2.1.1 Section 09 of general conditions 2010A is amended by replacing the period of twelve (12) months as follows:

- A minimum fifteen (15) years warranty against defects in both material and workmanship for the tanks;
- A minimum five (5) years for the Fire Fighting Vehicle Conversion;
- A minimum five (5) years for the Fire package electrical system;
- A minimum two (2) years for the sub components;
- A minimum two (2) years for the paint;

- OEM standard warranty for the cab and chassis.

All other provisions of the warranty section remain in effect.

6.3. Term of Contract

6.3.1 Delivery of the Vehicles

6.3.1.1 Firm Quantity

Delivery date of the vehicle must be made as follows:

Item 001 – Quantity one (1) Wildland Fire Fighter Vehicles and ancillary items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 002 – Quantity one (1) Wildland Fire Fighter Vehicles and ancillary items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 003 – Quantity one (1) Wildland Fire Fighter Vehicles and ancillary items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 004 – Quantity two (2) Wildland Fire Fighter Vehicles and ancillary items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 005 – Quantity one (1) Wildland Fire Fighter Vehicles and ancillary items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

Item 006 – Quantity one (1) Wildland Fire Fighter Vehicles and ancillary items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

6.3.1.2 Option Quantity

Item 007 - Quantity five (5) Wildland Fire Fighter Vehicles and ancillary items to be delivered within _____ calendar days after an option is exercised. (Days to be inserted by PWGSC the Contracting Authority at time of contract award.)

6.4. Authorities

6.4.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Stephanie Way
Title: Supply Specialist
Organization: Public Works and Government Services Canada - Acquisitions Branch
LEFT Directorate, HP Division,
7A2, Place du Portage, Phase 3, 11 Laurier Street,
Gatineau Quebec, K1A 0S5
Telephone: 873 469-3300
Facsimile: 819 953-2953
E-mail: Stephanie.way@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.

6.4.2 Procurement Authority

The Procurement Authority for the Contract is:

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

Telephone: ____-____-_____
E-mail: _____

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

6.4.3 Technical Authority:

The Technical Authority for the Contract is:

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

Title: _____

Organization: _____

Telephone: ____ - ____ - ____

E-mail: _____

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

6.4.4 Quality Assurance Authority

The National Defence Quality Assurance Authority is:

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

Title: _____

Organization: _____

Telephone: ____ - ____ - ____

E-mail: _____

DQA is the Quality Assurance Authority of the Department of National Defence for whom the work is being carried out under this Contract. DQA is responsible to monitor the Supplier's Quality Management System to provide confidence that the Supplier has the ability to fulfill the quality requirements in the contract.

6.4.5 Contractor's Representative

Name and telephone number of the person responsible for:

General enquiries

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

Title: _____

Telephone: ____ - ____ - ____

E-mail: _____

Delivery follow-up

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

Title: _____

Telephone: ____ - ____ - ____

E-mail: _____

6.4.6 After Sales Service

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

Item 001

Name: _____

Address: _____

Telephone Number: _____

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

Item 002

Name: _____

Address: _____

Telephone Number: _____

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

Item 003

Name: _____

Address: _____

Telephone Number: _____

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

Item 004

Name: _____
Address: _____

Telephone Number: _____

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

Item 005

Name: _____
Address: _____

Telephone Number: _____

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

Item 006

Name: _____
Address: _____

Telephone Number: _____

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

6.5. Payment

6.5.1 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:

6.5.1.1 Basis of Payment (BOP) Type 1

Firm unit prices in Canadian dollars, Delivered Duty Paid at destination, Incoterms 2000, including Canadian Custom Duties and Excise Taxes included where applicable, and applicable Taxes are extra.

The price paid will be adjusted in accordance with the exchange rate fluctuation provision (as applicable).

6.5.1.2 Basis of Payment (BOP) Type 2

Firm unit prices in Canadian dollars, including Canadian Custom Duties and Excise Taxes included where applicable, and applicable Taxes are extra.

The price paid will be adjusted in accordance with the exchange rate fluctuation provision (as applicable)

6.5.1.3 Basis of Payment (BOP) Type 3

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/d10/v238/en>), 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.

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

The price paid will be adjusted in accordance with the exchange rate fluctuation provision (as applicable).

6.5.2 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic and International);
- b. Electronic Data Interchange (EDI);
- c. Wire Transfer (International Only);

6.5.3 SACC Manual Clauses

C6000C	Limitation of price	2017-08-17
H1001C	Multiple Payments	2008-05-12
C3015C	Exchange rate fluctuation adjustment	2017-08-17

6.6 Invoicing Instructions

6.6.1 The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions including the Ref # BT845. Invoices cannot be submitted until all work identified in the invoice is completed. Offerors /suppliers are requested to provide invoices in electronic format unless otherwise specified by the Contracting Authority or Project Authority, thereby reducing printed material.

Each invoice must be supported by:

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

6.6.2 Invoices must be distributed as follows:

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

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

Attention: DLP _____

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

6.6.3 Holdback

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

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

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

6.7. Certifications

6.7.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

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

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4)" list (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4>) The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

6.8 Applicable Laws

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

6.9 Priority of Documents

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

- (a) the Articles of Agreement;

- (b) 2010A (2016-04-04) General Conditions - Goods (Medium Complexity);
- (c) Annex "A" - Pricing;
- (d) Annex "B" - Purchase Description – Wildland Fire Fighter Vehicles;
- (e) Annex "E", Federal Contractors Program for Employment Equity - Certification;
- (f) the Contractor's bid dated _____

6.10 SACC Manual Clauses

A1009C	Work Site Access	2008-05-12
A9006C	Defence Contract	2012-07-16
A9049C	Vehicle Safety	2011-05-16
A9062C	Canadian Forces Site Regulations	2011-05-16
B4061C	North Atlantic Treaty Organization Codification - Data Requirements	2008-05-12
C2800C	Priority Rating	2013-01-28
C2801C	Priority Rating - Canadian-based Contractors	2017-08-17
D3010C	Delivery of Dangerous Goods / Hazardous Products	2016-01-28
D5510C	Quality Assurance Authority (Department of National Defence) - Canadian-based Contractor	2017-08-17
D5515C	Quality Assurance Authority (DND) - Foreign-based and United States Contractor	2010-01-11
D5540C	ISO 9001:2008 Quality Management Systems - Requirements (QAC Q)	2010-08-16
D5604C	Release Documents - Foreign based Contractor	2008-12-12
D5605C	Release Documents - US based Contractors	2010-01-11
D5606C	Release Documents - Canadian-based Contractors	2012-07-16
D9002C	Incomplete Assemblies	2007-11-30
G1005C	Insurance	2016-01-28

6.11 Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work 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.

6.12 Preparation for Delivery

The vehicle / equipment must be serviced, adjusted and delivered in condition for immediate use. The interior and exterior must be cleaned before leaving the factory and

being released to inspection authority or consignee personnel at the final delivery location.

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

6.13 Shipping Instructions - Delivery at Destination

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

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

6.14 Release Documents - Distribution

The Contractor must prepare the release documents in a current electronic format and distribute them as follows:

- a. One (1) copy mailed to consignee marked: "Attention: Receipts Officer";
- b. Two (2) copies with shipment (in a waterproof envelope) to the consignee;
- c. One (1) copy to the Contracting Authority;
- d. One (1) copy to:
National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A OK2
Attention: _____
- e. One (1) copy to the Quality Assurance Representative;
- f. One (1) copy to the Contractor; and
- g. 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

NOTE: For into-plane refuelling contracts b, c and d above are not required

6.15 Post-Contract Award Meeting/Pre-Production 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 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.

6.16 Progress Reports

The Contractor must submit monthly reports, in electronic format, on the progress of the Work, to both the Technical Authority and the Contracting Authority.

Each progress report must address the following questions:

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

6.17 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 (CF 1280) or on an attached packing note.

6.18 Material

Material supplied must be new unused and of current production by manufacturer. (2018 model-year or newer).

6.19 Design Changes

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

6.20 Interchangeability

Unless changes during the production run are authorized by 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.

6.21 Packaging

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

6.22 Service at Delivery

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

6.23 Vehicle Recall Notices

All vehicle recall notices must be forwarded to:

National Defence Headquarters
MGen George R. Pearkes Building
101 Colonel By Drive
Ottawa, Ontario K1A 0K2

Attention: *(designation and name of TA to be inserted by PWGSC at contract award)*

ANNEX "A" - PRICING

Item 001 Wildland Fire Fighting Vehicle (Firm Quantity)

The Contractor must deliver the vehicle/equipment including the sample manuals, CD and paper of all approved manuals, data summary, photographs, warranty letter(s), preventative maintenance replacement parts kit list, special tools list, Recommended spare parts kit list, Dimensioned Drawings, Bilingual Training Video and Operator and Maintenance training (English or French, one session each) in accordance with the attached Annex "B" -Purchase Description - Wildland Fire Fighting Vehicle.

The Wildland Fire Fighting Vehicle and ancillary items must be delivered to:

ASG Gagetown Supply Company
Major Equipment Section, Bldg B10
CFB Gagetown
Oromocto, NB E2V 4J5
Canada

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

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

Firm unit price of \$ _____ per vehicle, including all equipment and ancillary items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

Quantity: 1

Item 002 Wildland Fire Fighting Vehicle (Firm Quantity)

The Contractor must deliver the vehicle/equipment including the manuals, warranty letter(s), and Operator and Maintenance training (English or French, one session each) in accordance with the attached Annex "B" - Purchase Description - Wildland Fire Fighting Vehicle.

The Wildland Fire Fighting Vehicle and ancillary items must be delivered to:

CFB ASU Petawawa
Major Equipment Section
CFB Petawawa
Petawawa, ON K8H 2X3
Canada

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

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

Firm unit price of \$ _____ per vehicle, including all equipment and ancillary items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

Quantity: 1

Item 003 Wildland Fire Fighting Vehicle (Firm Quantity)

The Contractor must deliver the vehicle/equipment including the approved manuals, warranty letter(s), and Operator and Maintenance training (English or French, one session each) in accordance with the attached Annex "B" - Purchase Description - Wildland Fire Fighting Vehicle.

The Wildland Fire Fighting Vehicle and ancillary items must be delivered to:

CFB Suffield
Base Supply Section
Suffield, AB T0J 2N0
Canada

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

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

Firm unit price of \$ _____ per vehicle, including all equipment and ancillary items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

Quantity: 1

Item 004 Wildland Fire Fighting Vehicle (Firm Quantity)

The Contractor must deliver the vehicle/equipment including the approved manuals, warranty letter(s), and Operator and Maintenance training (English or French, one session each) in accordance with the attached Annex "B" - Purchase Description - Wildland Fire Fighting Vehicle.

The Wildland Fire Fighting Vehicle and ancillary items must be delivered to:

CFB/ASU Wainwright Base Supply
Major Equipment Section Bldg 593
Denwood, AB T0B 1B0
Canada

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

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

Firm unit price of \$ _____ per vehicle, including all equipment and ancillary items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

Quantity: 2

Item 005 Wildland Fire Fighting Vehicle (Firm Quantity)

The Contractor must deliver the vehicle/equipment including the approved manuals, warranty letter(s), and Operator and Maintenance training (English or French, one session each) in accordance with the attached Annex "B" - Purchase Description - Wildland Fire Fighting Vehicle.

The Wildland Fire Fighting Vehicle and ancillary items must be delivered to:

BFC USS Valcartier
Section d'équipement majeur
BAT. 188 (PON COMB)
Garnison Valcartier
Courcelette, QC G0A 4Z0
Canada

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

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

Firm unit price of \$ _____ per vehicle, including all equipment and ancillary items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

Quantity: 1

Item 006 Wildland Fire Fighting Vehicle (Firm Quantity)

The Contractor must deliver the vehicle/equipment including the approved manuals, warranty letter(s), and Operator and Maintenance training (English or French, one session each) in accordance with the attached Annex "B" - Purchase Description - Wildland Fire Fighting Vehicle.

The Wildland Fire Fighting Vehicle and ancillary items must be delivered to:

LFCA TC Meaford
Major Equipment Section
Supply Section Bldg M210
MMTC
Meaford, ON N4L 1W5
Canada

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

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

Firm unit price of \$ _____ per vehicle, including all equipment and ancillary items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

Quantity: 1

Item 007 Wildland Fire Fighting Vehicle (Optional Quantity)

If this option is exercised, the Contractor must deliver the vehicle/equipment including manuals and warranty letters in accordance with the attached Annex "B" - Purchase Description - Wildland Fire Fighting Vehicle

For Destinations in British Columbia;

Firm unit price of \$ _____ per vehicle/equipment in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

For Destinations in Alberta and Saskatchewan;

Firm unit price of \$ _____ per vehicle/equipment in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

For Destinations in Manitoba;

Firm unit price of \$ _____ per vehicle/equipment in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

For Destinations in Ontario and Quebec;

Firm unit price of \$ _____ per vehicle/equipment in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

For Destinations in New Brunswick and Nova Scotia

Firm unit price of \$ _____ per vehicle/equipment in accordance with Basis of Payment Type 1 (as detailed at Clause 6.5.1 Basis of Payment).

Quantity: Up to five (5)

Item 008 Operator training - English (Option)

If this option is exercised, the Contractor must provide Operator instruction/training, in accordance with the attached Annex "B"- Purchase Description - Wildland Fire Fighting Vehicle

Firm unit price of \$ _____ in accordance with Basis of Payment Type 2(as detailed at Clause 6.5.1 Basis of Payment).

Quantity: up to five (5)

Item 009 Maintenance instructions training - English (Option)

If this option is exercised, the Contractor must provide Maintenance instruction/training, in accordance with the attached Annex "B"- Purchase Description - Wildland Fire Fighting Vehicle

Firm unit price of \$ _____ in accordance with Basis of Payment Type 2(as detailed at Clause 6.5.1 Basis of Payment).

Quantity: up to five (5)

Item 010 Operator training - French (Option)

If this option is exercised, the Contractor must provide Operator training, in accordance with the attached Annex "B"- Purchase Description - Wildland Fire Fighting Vehicle

Firm unit price of \$_____ in accordance with Basis of Payment Type 2(as detailed at Clause 6.5.1 Basis of Payment).

Quantity: up to five (5)

Item 011 Maintenance instructions training - French (Option)

If this option is exercised, the Contractor must provide Maintenance instruction/training, in accordance with the attached Annex "B"- Purchase Description - Wildland Fire Fighting Vehicle

Firm unit price of \$_____ in accordance with Basis of Payment Type 2(as detailed at Clause 6.5.1 Basis of Payment).

Quantity: up to five (5)

Item 012 Travel and Living for Operator and Maintenance Instruction/Training (Option)

(Item 012 will not be included in the financial evaluation)

All travel must have the prior authorization of the Technical Authority. All payments are subject to government audit. When requested by Canada, the Contractor must provide an estimated cost for the travel and living.

Estimated cost: \$(to be inserted by PWGSC if an option is exercised)
Operator and Maintenance Instruction/Training, for Travel and Living expenses, Delivered Duty Paid at destination, in accordance with Clause 6.5.1, Basis of Payment Type 3.

Quantity: up to five (5)

ANNEX “D” TO PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts any of the following Electronic Payment Instrument(s):

- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);

ANNEX "E" TO PART 5 OF THE BID SOLICITATION correct

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

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

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\) - Labour's website](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html) (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html>).

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

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a federally regulated employer (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/regulated-industries.html>) being subject to the Employment Equity Act (<http://laws-lois.justice.gc.ca/eng/acts/E-5.401/>).
- A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

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

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

OR

A5.2. The Bidder certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to ESDC – Labour (<https://catalogue.servicecanada.gc.ca/content/EForms/en/Detail.html?Form=LAB1168>). As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC C-Labour.

B. Check only one of the following:

B1. The Bidder is not a Joint Venture.

OR

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



ANNEX B

PURCHASE DESCRIPTION FOR

WILDLAND FIREFIGHTING VEHICLE, WITH COMPRESSED AIR FOAM SYSTEM

ECC 189208

OPI DSVPM 5 – DAVPS 5

Issued on Authority of the Chief of the Defence Staff

Publiée avec l'autorisation du chef d'état-major de la Défense

Canada

RDIMS #4579712



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NOTICE



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

AVIS

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

1. **SCOPE**

1.1 **Purpose** - This Purchase Description describes the requirements for a Range Firefighting Vehicle, including a truck mounted modular type Compressed Air Foam System (CAFS), auxiliary water tank, and hose reels.

1.2 **Instructions** - The following instructions apply to this Purchase Description:

- a) Requirements, which are identified by the word "**must**", are mandatory. Deviations will not be permitted.
- b) Requirements identified with a "will" define actions to be performed by Canada and require no action/obligation on the Contractor's part.
- c) Where "**must**" or "will" are not used, the information provided is for guidance only.
- d) In this document "provided" **must** mean "provided and installed".
- e) Where a technical certification is referred to in this specification, a copy of the certification or an acceptable Proof of Compliance **must** be supplied for the vehicle when requested by the Technical Authority.
- f) Metric measurements are used to define the requirement. Other measurements are for reference only and may not be exact conversions.
- g) Nominal dimensions reflect a method by which materials or products are generally identified, but which differ from the actual measured 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**" - Substitutes and alternatives that are equivalent in product, performance or a standard will be considered for acceptance by the Technical Authority where Proof of Compliance for the requirement is provided.



- c) **“Vehicle”** – The entire vehicle including all systems and sub-systems, in a complete manufactured state in accordance with the requirements in this Purchase Description.
- d) **“5th percentile adult female”** – As defined in the *Motor Vehicle Safety Regulations (C.R.C., c. 1038)* a person having as physical characteristics a mass of 46.3 kg, height of 1499 mm, erect sitting height of 785 mm, normal sitting height of 752 mm, hip sitting breadth of 325 mm, hip sitting circumference of 925 mm, waist sitting circumference of 599 mm, chest depth of 191 mm, bust circumference of 775 mm, chest upper circumference of 757 mm, chest lower circumference of 676 mm, knee height of 455 mm, popliteal height of 356 mm, elbow rest height of 180 mm, thigh clearance height of 104 mm, buttock-to-knee length of 518 mm, buttock-to-poples length of 432 mm, elbow-to-elbow breadth of 312 mm and seat breadth of 312 mm.
- e) **“95th percentile adult male”** – As defined in the *Motor Vehicle Safety Regulations (C.R.C., c. 1038)* a person having as physical characteristics a mass of 97.5 kg, height of 1849 mm, erect sitting height of 965 mm, normal sitting height of 930 mm, hip sitting breadth of 419 mm, hip sitting circumference of 1199 mm, waist sitting circumference of 1080 mm, chest depth of 267 mm, chest circumference of 1130 mm, knee height of 594 mm, popliteal height of 490 mm, elbow rest height of 295 mm, thigh clearance height of 175 mm, buttock-to-knee length of 640 mm, buttock-to-poples length of 549 mm, elbow-to-elbow breadth of 506 mm and seat breadth of 404 mm.
- f) **“Gross Axle Weight Rating (GAWR)”** - The value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interfaces.
- g) **“Gross Vehicle Weight Rating (GVWR)”** - The value specified by the vehicle manufacturer as the loaded weight of a single vehicle.

2. **APPLICABLE DOCUMENTS** - The following documents form part of this Purchase Description. The dates of issue are those in effect on the date of release of the RFP. Sources are as shown:

Canadian Occupational Health and Safety Regulations (COHSR), 2015

<http://laws.justice.gc.ca/eng/regulations/sor-86-304/index.html>

SAE Handbook

Society of Automotive Engineers Inc.

400 Commonwealth Dr,

Warrendale, PA, 15096

<http://www.sae.org>

Motor Vehicle Safety Regulations (MVSR)

Government of Canada / Transport Canada

<http://www.tc.gc.ca/eng/act-regulations/regulations-crc-c1038htm>

ULC-S515- 2013 - Automobile Fire Fighting Vehicle

Underwriters Laboratories of Canada (ULC)

7 Underwriters Road

Toronto, Ontario, M1R 3A9

<http://www.ulc.ca>



NFPA 1901 – 2016 - Standard for Automotive Fire Vehicle

NFPA 1906 – 2016 - Standard for Wildland Fire Vehicle

National Fire Protection Association (NFPA)

1 Batterymarch Park

Quincy, Massachusetts 02169-7471

<http://www.nfpa.org>

3. **REQUIREMENTS**

3.1 **Standard Design**

- a) **Latest Model** - The vehicle design **must** be the manufacturer's latest model.
- b) **Industry Acceptability** - The vehicle design **must** have demonstrated industry acceptability by having been manufactured and sold commercially for at least 2 years, or be manufactured by a company that has at least 5 years of experience in design and manufacturing of a comparable type of equipment of equivalent or greater complexity.
- c) **Engineering Certification** - The vehicle design **must** have engineering certification available, upon demand, for this vehicle/equipment from the original manufacturers of major drive train components and major equipment systems and assemblies.
- d) **Regulations** - The vehicle **must** conform to all applicable laws, regulations and industry standards governing manufacture, safety, noise levels and pollution in effect in Canada at time of manufacture. International equivalent laws, regulations, and industrial standards will be accepted only if certified for equivalency by a professional engineer.
- e) **Published Ratings** - The vehicle **must** have system and component capacities equivalent to published ratings (i.e. product or component brochures).
- f) **Standard Components** - The vehicle **must** include all standard components, equipment and accessories for the model offered, although they may not be specifically described in this Purchase Description.
- g) **Spare Parts** - The manufacturer **must** select components readily available for a minimum period of fifteen (15) years from the date of manufacture.
- h) **CAFS Compatibility** - All firefighting system plumbing **must** be designed to flow CAFS fire suppression.

3.1.1 **Maintainability**

- a) The vehicle **must** permit access to all items required for servicing and maintenance.
- b) Spin on style filters **must** be provided where available.



3.2 Operating Conditions

- 3.2.1 **Weather** - The vehicle excluding fire pump package **must** operate under the extremes of weather conditions found in Canada in temperatures ranging from -40 to 37° C (-40 to 99° F).
- 3.2.2 **Terrain** - The vehicle **must** operate off-road. Terrain conditions **must** include year round operations on snow, mud, swamp, sand and ice.
- 3.2.3 **Visibility** – The vehicle **must** operate in day, night, and during periods of artificial obscuration in fire suppression operations.

3.3 Safety Standards

3.3.1 Vehicle Safety Regulations

- a) The vehicle **must** comply with the Motor Vehicle Safety Regulations (MVSR).
- b) The completed vehicle **must** have Safety Compliance Certification Label with a National Safety Mark (NSM), as a seal of compliance, **or** be accompanied by a Vehicle Import Form containing proof of Inspection by the Registrar of Imported Vehicles.
- c) The completed vehicle **must** comply with the applicable sections of ULC-S515, NFPA 1901, and NFPA 1906, as specified and applicable to this type of vehicle construction.

3.3.2 Human Factors Engineering

- a) The vehicle, all systems, and components **must** comply with the relevant sections of the COHSR.
- b) The vehicle **must** be manufactured/assembled for safety and ease of use by CAF users with anthropometric characteristic measurements ranging from 95th percentile male to 5th percentile female.
- c) The vehicle **must** have entry and exit points equipped with handles and steps sized and positioned to accommodate CAF users with anthropometric characteristic measurements ranging from 95th percentile male to 5th percentile female.
- d) The vehicle **must** be equipped, with warning and instruction plates, non-slip walking surfaces and heat shields, for operator safety.
- e) All access steps and ladders **must not** rely on removable pins for securing during use or transportation.

3.4 Vehicle Performance, Ratings, and Dimensions

3.4.1 Performance

- a) The vehicle, at GVWR, **must** sustain a minimum top speed, of 80 km/hr (50 mph) on a level paved road.
- b) The vehicle centre of mass, under all loading conditions **must** be in front of the rear axle and within the chassis manufacturer's allowable conditions.
- c) The vehicle **must** be designed to meet all specified performance parameters at an elevation of 800m above sea level.



3.4.2 Weight Ratings

- a) The GVWR of the vehicle **must** not be less than the sum of the unloaded vehicle mass, the cargo carrying capacity, and the product obtained by multiplying the designated seating capacity by 68kg as defined in the *Motor Vehicle Safety Regulations (C.R.C., c. 1038)*.
- b) Each GAWR **must** be equal to or less than the load rating of the weakest component in the axle system, i.e., axle housing, suspension, wheels, or tires.
- c) The total load on each axle of the vehicle **must** not exceed the GAWR for that axle.
- d) Axle loads **must** comply with all the provincial weight restrictions across Canada.

3.4.3 Weight Distribution

- a) The vehicle and vehicle suspension system **must** accommodate changes in weight distribution due to variations in water tank level.

3.4.4 Dimensions

- a) In areas other than at the axles, the ground clearance **must** be at least 508 mm (20 inches).
- b) The vehicle **must** have both an angle of approach and an angle of departure of at least 20 degrees.
- c) The maximum overall height of the vehicle **must** be a maximum of 3.75 metres (12.5 feet).
- d) The maximum overall length of the vehicle **must** be a maximum of 9.14 metres (30 feet).
- e) The maximum overall width of vehicle **must** be a maximum of 2.59 metres (8.5 feet).

3.5 Frame

- a) The vehicle frame **must** be of heavy duty construction, manufactured for use in all conditions specified in sections 3.2, 3.3 and 3.3.2.

3.6 Engine

- a) The vehicle engine **must** operate on diesel fuel to the CAN/CGSB Standard 3.517.
- b) Engine manufacturer's certification **must** be available upon request.

3.6.1 Engine Components

- a) Replaceable air filter(s) **must** be provided.
- b) A cooling system **must** be provided.
- c) A combustion air cleaning system **must** be provided, with an air cleaner restriction indicator visible to the operator.
- d) A governor **must** be provided.
- e) A full flow replaceable oil filter **must** be installed.



- f) A fast idle system **must** be provided, to raise engine speed when required for operations.

3.6.2 **Cold Weather Starting Aids**

- a) The engine **must** be equipped with cold weather aids applicable to the operating conditions in section 3.2.
- b) A block heater **must** be provided with a dedicated shoreline receptacle.

3.6.3 **Exhaust System**

- a) The vehicle **must** be equipped with a vertical exhaust system shielded to prevent personnel contacting a heated surface.
- b) The exhaust system **must** prevent entry of rain and water.
- c) If a Selective Catalytic Reduction (SCR) System is used, there **must** be manual deactivation and activation controls for the automatic regeneration of the Diesel Exhaust Fluid (DEF).

3.6.4 **Fuel Tank**

- a) The fuel tank(s) provided **must** comply with ULC-S515 Chapter 11.
- b) The fuel tank(s) **must** have a fuel capacity that will provide the greater of:
 - i. At least 500 km of fully laden cruise; or
 - ii. Ten continuous hours of pumping operations.

3.7 **Drivetrain**

- a) The drivetrain consists of components transmitting power from the engine output shaft to driven wheels.
- b) The vehicle's drivetrain **must** be capable of 2x4 (rear wheel drive), 4x4 HI and 4x4 LO.
- c) The drivetrain **must** include a "Park" or "Neutral" starting interlock.
- d) The drivetrain **must** include limited slip or driver controlled locking differential(s) on the drive axle(s).

3.8 **Transmission**

- a) The vehicle **must** be equipped with fully automatic transmission.
- b) The transmission **must** have an oil cooler.
- c) The transmission **must** have a replaceable oil filter.
- d) The transmission shift control **must** clearly indicate the position of the shift column under all lighting conditions.
- e) A means of checking the transmission oil level **must** be provided.
- f) An audible back-up alarm in compliance with ULC-S515 Chapter 12.11 **must** be installed.



3.9 **Brakes**

- a) The vehicle **must** be equipped with an air brake system, and include a parking brake.
- b) The braking system **must** include an anti-lock (ABS) brake system.
- c) The braking system **must** include an automatic air dryer.
- d) The braking system **must** include brake housing dust shields and visual brake stroke indicators on all wheels.
- e) The braking system **must** include air couplers (glad hands), service and emergency, in a protected location at the front and rear of the Vehicle.
- f) The braking system **must** include automatic slack adjusters on all wheels;
- g) The braking system **must** include heated automatic moisture expelling valve(s) on all tanks and air dryer.
- h) The braking system **must** be equipped with an auto-eject air connection for charging the air system.

3.10 **Suspension System**

- a) The vehicle **must** be equipped with a suspension at the front and rear axles.
- b) The suspension system **must** be provided with double acting shock absorbers on all axles.

3.11 **Steering**

- a) The vehicle **must** be equipped with a power assisted steering system.
- b) The steering system **must** be provided with a telescopic/tilt steering column.

3.12 **Wheels, Rims and Tires**

- a) The vehicle **must** be equipped with Michelin 395/85R20 or approved equivalent, steel-belted, tubeless radial tires.
 - i. All tires **must** have the same load rating, and tread pattern.
 - ii. The tire load rating **must** exceed the imposed load at each tire location, when the vehicle is loaded at the maximum GVWR.
 - iii. The tread pattern **must** be XZL or approved equivalent.
- b) The tires **must** be mounted on balanced two piece hub pilot disc wheels.
- c) Beadlocks **must** be provided on all wheels.

3.13 **Cab**

- a) The vehicle **must** be equipped with a minimum two (2) person conventional weatherproof cab and comply with ULC-S515 Chapter 13.



- b) The cab **must** be equipped with a self-levelling cab suspension, to reduce cab movement under the conditions specified in section 3.2.2.
- c) Driver and passenger seats **must** have dark upholstery and include retractable 3-point seat belts.
- d) Driver and passenger seats **must** be equipped with independent suspension systems.
- e) A minimum of two (2) doors **must** be provided with locks, be keyed alike.
- f) A ventilation/heater and defrosting system **must** be provided, with a multi-speed fan, applicable for the operating conditions as specified in 3.2.
- g) An air conditioning system **must** be provided, equipped with all components and controls required for regulation of the cab interior temperature.
- h) A powered windshield washer system **must** be provided with multi-speed wipers, where the wiper blades **do not** travel from a vertical centre windshield position to a horizontal position near the roof line.
- i) The cab floor or floor mats **must** be weatherproof.
- j) Two rotating interior sun visors **must** be installed.
- k) An AM/FM radio with an auxiliary port **must** be provided.
- l) Two heavy-duty, powered, and heated exterior side mirrors, with convex section, **must** be provided with in-cab controls.
- m) Two (2) USB plugs **must** be provided in the cab within range of the driver seat dedicated for use by the driver.
- n) Two (2) USB plugs **must** be provided in the cab for, and within reach, of the passenger seat.
- o) Audible Warning Devices including Air horn(s), **must** be provided in compliance with ULC-S515 Chapter 12.
- p) Mobile radio power leads and antennae cable **must** be wired into the vehicle, with a service loop terminating in the cab for future installation of radio equipment.
- q) An antennae base **must** be mounted high on the cab exterior.
- r) The front bumper **must** be designed to accommodate the installation of the bumper turret.
- s) The outer edges of the bumper **must** be provided with upright pole style bumper guides.
- t) A volume of 200 mm x 200 mm x 330mm **must** be allocated in the vehicle cab for future installation of communication repeater. Communication repeater will be supplied and installed by the client.

3.14 Walkway

- a) The vehicle **must** be equipped with a walkway positioned directly behind the cab.
- b) The walkway **must** house the external control panel described in Section 3.29.1.



- c) Access from the cab doors to the walkway **must** be designed as a single level access platform
- d) Ground access to the walkway **must** rely on fixed steps with a maximum first step to ground distance of 610 mm (24 inches).
- e) Vertical surfaces at the transverse walkway accessible by the operator **must** be reinforced.
- f) Vertical surfaces at the transverse walkway accessible by the operator **must** be protected with LINE – X spray or approved equivalent.
- g) The outer sides of the walkway **must** be equipped with padded, rip-stop vinyl covered, Mansaver bars or equivalent, to prevent accidental falls.

3.15 **Controls and Instruments**

- a) Each control and instrument **must** be permanently marked to identify the function, in both English and French.
- b) Vehicle controls and instruments **must** be grouped together in the cab and not restrict the operator's field of view.
- c) Control Panel lights **must** be provided for night-time operations.
- d) Controls **must** include:
 - i. Windshield washer sprayer and Intermittent windshield wiper controls;
 - ii. A fast idle feature;
 - iii. A master battery switch, accessible in the cab within reach of the driver; and
 - iv. Electrical horns.
- e) Instruments **must** be metric (unless otherwise indicated) and include as a minimum:
 - i. An engine tachometer;
 - ii. A speedometer;
 - iii. A trip distance indicator;
 - iv. An engine oil pressure indicator, with a low engine oil pressure warning;
 - v. An engine coolant temperature indicator, with a high temperature warning;
 - vi. A transmission oil temperature indicator, with a high temperature warning;
 - vii. An ammeter, voltmeter or charging indicator;
 - viii. An air pressure indicator (s);
 - ix. A fuel level indicator;
 - x. An engine hour meter;



- xi. A transfer case engagement indicator; and
- xii. A differential lock engagement indicator.

3.16 **Miscellaneous Equipment**

- a) License plate mounting provisions **must** be provided at the front and rear of the vehicle.
 - i. The rear license plate area **must** be illuminated.
- b) Heavy duty unmarked mud flaps **must** be provided behind the front and rear tires.
- c) Mid-frame mounted tie down points **must** be provided, with strength to permit tie down operations, and sized to accept one inch diameter tow hooks.
- d) Front and rear accessible frame mounted towing eyes **must** be provided, with strength to permit a direct pull on a single towing eye.
- e) A portable winch **must** be provided.
 - i. The rated winch capacity (measured from first layer onto winch drum) **must** be a minimum of 5454.54 kg (12,000 lbs).
 - ii. The winch **must** have an automatic drag and safety brake, a free spooling feature, and hook and roller fairlead.
 - iii. The winch **must** be equipped with a minimum of 30 metres (100 feet) of synthetic rope, with a capacity matching the winch capacity.
 - iv. The winch **must** be equipped with carry handles and provisions for quick mounting in the front and rear hitch receivers.
 - v. Front and rear hitch receivers **must** be provided, with covers sized to match the winch capacity.
 - vi. The winch **must** have a remote control with sufficient length to distance the operator from the winch.
 - vii. The winch electrical system **must** be provided with quick disconnect at rear and front of vehicle.
 - viii. The winch **must** be provided with removable waterproof cover.

3.16.1 **Equipment to be delivered with the Vehicle**

- a) Three dual faced triangular warning signs with foldaway base, complete with storage case, as per DOT FMVSS 125 **must** be provided;
- b) One (1) 2.5 lbs ABC vehicle type fire extinguisher, mounted in the cab **must** be provided;
- c) Wheel chocks **must** be provided with storage mounted on driver's side;
- d) Hand held LED spotlight, with a minimum 300,000-candle power, with a momentary type control switch, coiled cord, and bracket **must** be provided.



- e) The spot light **must** be securely stored within reach of the seated passenger in the cab, and hard wired into the electrical system.
- f) A towing strap **must** be provided.
- g) A recovery strap **must** be provided.
- h) A drip torch, mounted in one of the compartments **must be** provided.
- i) A first aid kit **must** be provided.
- j) Two (2) 1.6 kg (3.5 lbs) axes complete with fiberglass handle **must** be provided and secured in storage compartments.
- k) Two (2) Pulaski axes complete with fiberglass handle **must** be provided and secured in storage compartments

3.16.2 **Electrical System**

- a) All electrical equipment installed by the vehicle manufacturer **must** conform to current automotive electrical system standards and requirements of the applicable ULC/NFPA Vehicle Standard.
- b) All vehicle electrical circuits **must** be protected from overload.
- c) All exposed wiring **must** be run in loom with a minimum 142 degrees Celsius (289 degrees Fahrenheit) rating.
- d) All wiring looms **must** be supported and attached to body members along the entire run.
- e) Any point where wire or looms **must** pass through metal, grommets **must** be installed to protect the wire from abrasion.
- f) The main low voltage chassis-to-body interface point and distribution panel **must** be provided at the front of the body, in an accessible location, with a distribution panel labelled and containing body electrical relays and wire connection bar.
- g) Electrical connections in exposed areas **must** be made using heat shrink or weather proof connections.
- h) Electrical connections **must** be protected with automatic reset circuit breakers.

3.16.3 **Alternator**

- a) The alternator **must** supply sufficient current to carry all electrical load requirements and voltage outputs.

3.16.4 **Batteries**

- a) The vehicle **must** be supplied with heavy-duty, maintenance free batteries, compliant with ULC-S515 Chapter 12.
- b) Batteries **must** be mounted in an accessible, well protected location, including heat shielding, hold downs, and ventilation.



3.16.5 **Battery Charger**

- a) A 110V Kussmaul super auto-eject 20 amp receptacle or approved equivalent with a hinged weatherproof cover **must** be provided at the left side of the vehicle, to provide power to the battery charger, the air compressor and the flashlight charger.
- b) The bar graph indicator **must** be provided within view of the driver.

3.16.6 **Emergency Starting Systems**

- a) The vehicle **must** be equipped with external battery booster stud receptacles, located near the batteries, equipped with a cut-off switch, and permanently labelled with the voltage.

3.16.7 **General Lighting** - The Vehicle **must** be equipped with **LED** lights were available, including:

- a) Headlights;
- b) Clearance, brake, turn signal and tail lights that comply with the Highway Traffic Regulations;
- c) Ground lighting in accordance with ULC-S515 Chapter 12;
 - i. Ground lighting at entry door positions **must** automatically illuminate when the door(s) open.
 - ii. Ground lighting **must** be provided at all four corners of the vehicle.
- d) One red clearance light **must** be located on each side of the body, as far rearward as practical.
- e) Two red clearance lights **must** be located as far as practical to the outer left and right rear edge of the body.
- f) Three red clearance lights **must** be centered at the rear of the vehicle.
- g) Roof mounted spot/work lights **must** be provided capable of:
 - i. Turn on and off front facing spot/work lights.
 - ii. Turn on and off driver side facing spot/work light.
 - iii. Turn on and off passenger side facing spot/work light.

3.16.8 **Exterior Vehicle Lighting - Emergency Response**

- a) Exterior emergency warning lights complying with NFPA 1901 and ULC-S515 **must** be provided.
- b) A minimum of six (6) perimeter lights **must** be provided.
 - i. Two (2) **must** be surface mounted above the front bumper, inboard of the headlights.
 - ii. Two (2) **must** be provided at the midpoint of the vehicle, one on each side.
 - iii. Two (2) **must** mounted at the rear of the vehicle positioned as far apart as practical.
- c) Two (2) beacon lights or approved equivalent **must** be provided, at the rear of the vehicle positioned above to elevate the lights above the fire package for visibility.



- i. The beacon lights **must** be equipped with dedicated in cab controls.
- d) A wigwag system, with in cab controls **must** be provided.
- e) One (1) roof mounted light bar for Wildland application **must** be provided, with a minimum width of 1.32 metres (52 inches).
- f) A multi-position control for the emergency lighting system **must** be provided with one switch position for each of the following functions:
 - i. Turn off all emergency lighting;
 - ii. Turn on all emergency lighting; and
 - iii. Turn off all lighting positioned below the roof line.
 - iv. The emergency light switch **must** be located in a position that is accessible to the driver's seated position.

3.16.9 **Siren and Speaker**

- a) One (1) 100 watt electronic siren amplifier with PA and control center **must** be provided.
- b) Two (2) 100-watt speakers **must** be provided.
 - i. One speaker **must** be mounted at the front of the vehicle; and
 - ii. One speaker **must** be mounted at the rear of the vehicle area.
- c) The siren and speaker control **must** be accessible by the driver and passenger.

3.16.10 **Rear View Camera System**

- a) The vehicle **must** be equipped with a rear view camera system, with three distinct rear view orientations.
- b) The system **must** include a nominal LCD 7 inch screen, mounted within clear view of the driver.
- c) One (1) camera **must** be rear mounted, and activate when the transmission is in reverse and activated with on / off control switch.
- d) All camera feeds **must** be displayed on the in cab screen, and include night vision and audio.

3.17 **Lubricants, Hydraulic Fluids and Fittings**

- a) All lubricants and fluids provided **must** meet the operating conditions specified in 3.2.

3.18 **Identification** - The following information **must** be permanently affixed in a conspicuous location, inside the cab:

- a) The manufacturer's name, model number, serial number and model year;
- b) The GVWR and GAWR ratings.



3.19 **Warnings, Labels, and Instruction Plates** – The Vehicle **must** be provided with warnings, labels, and equipment operation instruction plates.

- a) All warning, labels, and instruction plates provided on the exterior of the vehicle **must** be engraved.
- b) Instructions and special procedures to be followed **must** be provided.
- c) International symbols as defined in SAE J1362 and/or bilingual (English/French) markings **must** be provided.

3.20 **Water Tank**

- a) The vehicle **must** be equipped with a water tank compliant with the requirements of **NFPA 1906 Section 7.4**.
- b) The water tank **must** have a minimum certified capacity of 4542 litres (1,200 US gallons).
- c) The water tank **must** be constructed from a corrosion resistant material and be designed to resist cracking and fatigue due to movement in off road conditions.
- d) Material **must** be of sufficient thickness to provide complete structural integrity of the tank for the expected life of the vehicle, for the required use.
- e) The tank **must** be designed to allow for an 80% water usage without pump cavitation.

3.20.1 **Vent/Fill Opening**

- a) The water tank **must** be equipped with a combination vent and manual fill opening.
- b) The opening **must** allow air to enter or escape during filling or emptying.
- c) The opening **must** be a minimum of 203 mm (8 inches) by 203 mm (8 inches) or 8 inch diameter.
- d) The opening **must** be equipped with a cover, marked with a label that reads “water fill/vent”.
- e) The opening **must** be readily accessible, covered and designed to prevent spillage.
- f) A 6mm \pm 1 mm mesh debris screen **must** be installed at the opening, and be removable for cleaning.

3.20.2 **Water Tank Mounting**

- a) The water tank **must** be mounted to a steel sub frame structure, the mounting method **must** be designed and constructed to:
 - b) Prevent tank shifting and retain the tank while travelling empty;
 - c) Withstand the maximum gross loading under specified operating conditions; and
 - d) Allow for the independent differences in vehicle and tank flexion (Cradled, cushioned, spring-mounted, etc.), and be protected from undue stress of twisting resulting from severe operating conditions.



3.20.3 Stability

- a) The water tank **must** be equipped with baffles, swash partitions, or a method for dynamic water movement control, to stabilize partial loads of water.

3.20.4 Tank-to-Pump Valve

- a) The water tank **must** be connected to the intake side of the pump with an electric valve, controlled at the pump operator's panel and inside the cab.
- b) The electric valve **must** be a 76 mm (3 inch) equipped with accessible manual override.
- c) The electric valve **must** have an accessible manual override.

3.20.5 Tank Drain and Valve

- a) The drain **must** be a minimum 38 mm (1½ inch) and directed to the ground.
- b) The tank **must** be provided with a drain valve, accessible from a standing position, which will drain all water from the tank.

3.20.6 Manual Tank Fill and Auxiliary Intake

- a) The vehicle **must** be provided with a tank-to-pump fill line, and auxiliary intake, on the curb side and rear.
- b) A manual full flow valve **must** be provided.
- c) The valve **must** be a self-locking swing out design.
- d) Plumbing **must** be sized adequately to permit the full rated performance of the pump.
- e) The auxiliary intake **must** have a 76mm (3 inch) coupling.

3.21 Foam Cell

- a) The vehicle **must** be equipped with a foam cell with a capacity to support at least two complete water tank discharges, 75 litres (20 US gallons) as a minimum.
- b) The foam cell **must** be manufactured from a material that is compatible with "class A" foam solutions.
- c) The foam cell **must** be equipped with an accessible fill tower, covered to prevent foam solution spill caused by agitation or sloshing in expected operating conditions.
- d) The tank outlet **must** be sized to permit the required flow and arranged to permit use of the full tank capacity while on level ground, and a minimum 75% capacity while on a 20% side slope or ascending/descending a 30% grade.
- e) The tank **must** be adequately vented to permit rapid and complete filling without the build-up of excessive pressure, and to permit emptying the tank at maximum design flow without danger of collapse.
- f) A means of flushing or draining the system **must** be provided.



3.21.1 Foam Cell Fill System

- a) An electrically operated foam transfer pump **must** be provided and plumbed to allow the foam tank to be filled or drained, through a nominal 38 mm (1½ inch) hose connection, on the curb side of the vehicle.
- b) A fill hose **must** be provided, with compatible fittings described in 3.21.1 b) to the transfer pump, and adequate length for the suction end to easily reach ground level when connected.
- c) The CAFS air connections **must** be of brass compression type and not quick connection.
- d) The pump and plumbing system **must** be compatible with “class A” foam solution.
- e) Transfer pump controls **must** be installed near the pump connection.
- f) The pump **must** automatically shut off when the foam tank has been filled to a pre-set level.
- g) A check valve **must** be provided to prevent backflow of the concentrate during the connection and disconnection of the fill hose.
- h) The foam fill system **must** minimize foaming of the concentrate during manual fill operations, by introducing concentrate to the bottom of the tank.

3.22 Compressed Air Foam System (CAFS)

- a) A self-contained, slide in type CAFS **must** be provided.
- b) The CAFS **must** discharge water only, water/foam only, air only, and compressed air foam.
- c) The consistency of the compressed air foam **must** be fully adjustable.
- d) The CAFS **must** incorporate, an air cooled compressor.
- e) The CAFS **must** incorporate a water pump.
- f) The CAFS **must** incorporate an operator control panel with associated gauges, switches, controls.
- g) The CAFS **must** be provided with water discharges or outlets as applicable for operation and control of the system.

3.22.1 CAFS Engine

- a) The CAFS **must** be provided with a diesel engine, with sufficient power to meet the specified performance requirements.
- b) The CAFS engine **must** draw fuel directly from the vehicle fuel tank.
- c) The CAFS **must** be equipped with an hour meter.
- d) The engine mounting method **must** absorb vibration from the expected operating conditions.
- e) The engine **must** be water cooled, and be provided with an appropriately sized alternator, dry type air filter, and muffler.



- f) The engine **must** be provided with an oil pan drain extension or other suitable means to drain engine oil.
- g) Filters **must** be easily accessible for servicing.

3.22.2 **CAFS Water Pump**

- a) The CAFS **must** be equipped with an integral single-stage centrifugal design pump.
- b) The pump **must** be provided with a vertically split aluminium case, replaceable bronze impeller, and seal rings.
- c) The pump **must** provide a minimum of 570 l/min (150 GPM) at a pressure of 1375 kPa (200psi).
- d) An oil free priming system **must** be provided, with controls at the operator's panel.
- e) The priming system **must** prime the pump through 6 meters (20 feet) of 76mm (3 inch) hard suction hose, with a minimum 4.88 metre (16 foot) lift.
- f) The pump **must** include a re-circulation line to prevent pump overheating.

3.22.3 **CAFS Air Compressor**

- a) The CAFS **must** be provided with an air compressor with sufficient output to meet the specified performance requirements.
- b) The compressor **must** be an oil injected screw type design.
- c) The compressor **must** be provided with a Gates, Poly Chain Belt Drive System to ensure positive engagement of the compressor drive and prevent belt slippage in the event of inclement weather and or inadvertent contamination of the belt surface through spillage of oil or foam solution onto the belt drive.
- d) The compressor **must** be provided with an automatic means of balancing air pressure to water pressure within plus/minus 5 percent, throughout the operating range.
- e) The compressor oil tank **must** be equipped with a sight gauge.

3.22.4 **CAFS Foam System**

- a) The CAFS **must** be provided with an integrated foam proportioning system compatible with "class A" foam concentrates.
- b) The foam system **must** be plumbed to both hose reels, and the bumper turret monitor.
- c) The foam system **must** be provided with check valves to prevent foam concentrate from entering the water system, and water from entering the foam system.
- d) The system **must** be sized to meet the flow requirements of the hose reels and bumper turret monitor.
- e) The foam proportioning system **must** be a fully automatic design, with direct injection into the discharge side of the pump.
- f) The foam proportioning system **must** deliver accuracy to within 3% of calibrated settings.



3.23 Couplings

- a) All vehicle fire system plumbing couplings **must** be of NPT threading type.
 - i. The vehicle **must** be delivered with a complete set of NPT to Storz couplings and a full set of NPT to cam-lock couplings to be installed by the Government of Canada.

3.24 Discharge and Inlet Plumbing

- a) All plumbing for discharge outlets and suction inlets **must** be schedule 10 stainless steel or heavy duty high pressure wire reinforced flexible hose with stainless steel couplings, to prevent corrosion.
- b) Victaulic couplings **must** be used on the plumbing.
- c) The system **must** be equipped with a master drain valve, designed to allow the complete draining of the pump and all water carrying lines and accessories.

3.24.1 Dump Valve

- a) The water tank **must** be provided with rear discharge dump valve.
- b) The telescopic discharge dump chute **must** extend each side of the vehicle by a minimum of 460mm (16 inch).
- c) The dump valve **must** be a Zico Quic-Flow model QDV-10-UPF 250mm by 250mm (10 inch by 10 inch) valve or equivalent, equipped with telescoping chutes.
- d) The valve **must** have a locking mechanism, to prevent accidental opening.
- e) The telescoping chute **must** be manually operated and designed with a spring-loaded clip, enabling the chute(s) to be locked and released easily and quickly.
- f) The dump valve and telescoping chute **must** be completely disassembled and finish painted to match the vehicle body before installation.

3.24.2 Direct Tank Filling

- a) The vehicle **must** be equipped with two (2) valves on the water tank fill lines to allow water from external sources to fill into water tank.
- b) One 65mm (2½ in) manual valve **must** be provided at the right side pump control panel.
- c) Both tank fill line valves **must** regulate flow, controlled from the pump operator's position.
- d) One (1) 65 mm (2½ inch) checked valve **must** be provided at the rear of the vehicle.
- e) Tank fill inlet **must** flow water into the tank from the top of the tank.

3.24.3 Rear Discharge

- a) The vehicle **must** be provided with one 65mm (2½ inch) discharge, plumbed to flow water only, water/foam only, and compressed air foam, at the rear of the vehicle.
- b) The rear discharge **must** be provided with a 65mm (2½ inch) Akron ball valve.



- c) The rear discharge valve **must** be controlled from the operator control panel.

3.24.4 **Side Discharges**

- a) The vehicle **must** be provided with two 38 mm (1½ inch), side mounted discharge outlets, plumbed to flow water only, water/foam only, and compressed air foam, one on each side of the vehicle.
- b) The side discharge valves **must** be 65mm (2½ inch) Akron ball valves.
- c) The side discharge valves **must** be located near the deck platform.

3.25 **Hose Reels**

- a) Two hose reels **must** be provided, one on each side of the vehicle.
- b) Each hose reels **must** hold a minimum of 60 metres (200 ft) of 38 mm (1½ inch) diameter hose each according to NFPA 1906 Section 15.10.8.
- c) Each hose reel **must** be provided with a 38 mm (1½ inch) Akron swing out valve.
- d) The hose reels **must** be provided with an aluminium frame, electric rewind motors and manual backup function. The control switch **must** be accessible from the ground.
- e) The reels **must** be provided with chrome plated hose guide rollers.
- f) The hoses **must** be ReelTex model 3200 or equivalent.
- g) Each hose **must** be equipped with a low flow, low pressure, combination fog/smooth bore nozzle with single shutoff and pistol grip.
- h) The hoses **must** be equipped to discharge: water only, water/foam only, air only, and compressed air foam.
- i) The hose reel system **must** be equipped with provisions to drain the hoses before storing on the hose reels.
- j) The hose reel system **must** be placed to allow for access from the ground level on each side of the vehicle.

3.26 **Front Bumper**

- a) A bumper of sufficient strength including an apron to incorporate the monitor system **must** be provided.
- b) The bumper and apron **must** be protected with LINE – X spray or approved equivalent on lining or equivalent.

3.27 **Front Bumper Monitor** – A front bumper monitor **must** be mounted on the front bumper of the Vehicle and controlled in the cab.

- a) The monitor provided **must** be Akron 3463 FireFox Electronic Monitor or approved equivalent with Akron 3293 FireFox electric nozzle or approved equivalent.
- b) The monitor nozzle **must** be low flow with minimum discharge range of 30 GPM to 125 GPM.



- c) A joy stick control **must** be mounted in the centre of the drive and passenger seating positions to provide vertical and horizontal monitor control, automatic oscillation control, automatic stow control, on/off electric valve control, and automatic pattern control from straight stream to fog.
- d) The monitor **must** provide a minimum of 90° of horizontal travel to each side of centre and 45° of vertical travel above and below centre.
- e) The monitor **must** be provided with a nominal 51 mm (2 inch) inlet, and nominal 51 mm (2 inch) electric valve.
- f) The monitor **must** be plumbed into the CAFS and discharge water only, foam/water only, and compressed air foam.
- g) The monitor **must** also be provided with a straight bore tube sized.
- h) The monitor **must** be provided with a quick disconnect to allow easy removal for hood tilt operations during vehicle servicing.
- i) The vehicle **must** be equipped with an indicator that will provide the vehicle operator with a visual indication of the monitor's discharge direction from the driver's and passenger seat.

3.28 Under Truck Discharge

- a) The vehicle **must** be provided with a minimum of three under truck discharges.
- b) Each discharge **must** be placed to maximized ground area protection. If an extension is required for a nozzle, each discharge extension **must** be equipped with a flexible nozzle feed hose, terminating in fog type nozzles.
- c) A minimum of one (1) discharge **must** be located at the front of the vehicle.
- d) A minimum of one (1) discharge **must** be provided under the vehicle, at approximately the mid-frame point.
- e) A minimum of one (1) discharge **must** be at the rear of the vehicle.
- f) The discharges **must** have a minimum capacity of 38 litres/min (10 US GPM).
- g) Under truck discharge controls **must** be provided within reach of the driver.
- h) Design of the under truck discharges **must** ensure a full under chassis fogging application, from the front bumper to rear bumper area including coverage of the wheel assemblies.

3.29 Controls and Gauges

3.29.1 Exterior Control Panel

- a) The vehicle **must** be equipped with an exterior control panel that operates in full duplex with the interior cab control console of Section 3.29.2
- b) The control panel **must** be located to provide the operator with a 360° view of the area surrounding the vehicle.
- c) The control panel **must** be designed for use by an operator in a standing position, and provide visibility and accessibility of gauges and controls.



- d) The control panel **must** be equipped with protected LED lighting at the top of the panel, controlled on the operator's panel.
- e) The control panel backing **must** have a black scratch resistant finish.
- f) The control panel **must** have weatherproof controls.
- g) The control panel **must** include all controls required to fully operate the fire suppression system including:
 - i. A water tank level indicator;
 - ii. A foam level indicator;
 - iii. A 65 mm (2½ inch) Master water pressure, liquid filled indicator;
 - iv. A 65 mm (2½ inch) Master vacuum indicator;
 - v. A 65 mm (2½ inch) Master air pressure, liquid filled indicator;
 - vi. Pump Primer controls;
 - vii. CAFS operational controls;
 - viii. Liquid filled pressure indicators for all discharges;
 - ix. Tank to Pump electric butterfly valve control;
 - x. Vernier throttle control;
 - xi. Master drain valve;
 - xii. System Operation Instruction Placard;
 - xiii. CAFS engine oil pressure indicator, with a visual and audible low pressure warning indicator;
 - xiv. CAFS engine water temperature indicator, with a visual and audible high temperature warning indicator;
 - xv. CAFS compressor temperature indicator, with a visual and audible high temperature warning indicator;
 - xvi. Low fuel warning indicator;
 - xvii. Voltmeter;
 - xviii. Hour meter;
 - xix. An unload mode;
 - xx. An automatic setting to provide balancing of the air pressure to water pressure when the CAFS is functioning;
 - xxi. Foam system activation controls;



- xxii. Foam proportioning controls with rates variable from 0.1% to 1.0%;
- xxiii. A low and no concentrate warning indicator;
- xxiv. Manual backup controls;
- xxv. Air pressure indicator; and

3.29.2 Interior Cab Control Console

- a) The vehicle cab **must** be provided with an interior control console located in the cab, between the seats that operates in full duplex with the exterior control panel of Section 3.29.1.
- b) All gauges, controls, and indicators on the control console **must** be permanently identified.
- c) All switches and controls **must** be backlit, and brighten when activated to indicate to the operator that the switch has been turned on.
- d) Electrical components and wiring for console mounted equipment and accessories **must** be secured within the console, and include wiring service loops where applicable.
- e) The interior cab console **must** have a black scratch resistant finish.
- f) The interior cab console **must** include:
 - i. Water tank level indicator;
 - ii. Foam cell level indicator;
 - iii. The front bumper turret controller;
 - iv. CAFS operational controls;
 - v. CAFS engine oil pressure indicator, with a visual and audible low pressure warning indicator;
 - vi. CAFS engine water temperature indicator, with a visual and audible high temperature warning indicator;
 - vii. Compressor temperature indicator, with a visual and audible high temperature warning indicator;
 - viii. Pump pressure indicator;
 - ix. CAFS engine ignition;
 - x. Siren controller;
 - xi. A goose neck map light;
 - xii. A master switch sized to meet the load requirements of the Fire Package and non-OEM added lighting and accessories, independently wired an on/off control;
 - xiii. An electric valve controller for the tank-to-pump valve;



- xiv. Foam system activation controls;
- xv. A low and no concentrate warning indicator; and
- xvi. Air pressure indicator; and

3.29.3 **Water and Foam Level Gauges**

- a) The water tank and foam cell level gauges **must** be FRC or approved equivalent LED miniature level gauges.
- b) The gauges **must** be equipped with a flashing warning, when respective tanks are below 25% full.
- c) Gauges **must** be calibrated for the tank designs.

3.29.4 **Wheel Chocks and Mounting Brackets** -

- a) One set of wheel chocks, sized to meet the manufacturer's recommendations for the GVWR and Wildland application **must** be provided, with mounting brackets installed below the rear deck flatbed platform and not extend below the vehicle frame on driver side.

3.30 **Body**

- a) The vehicle body **must** be fabricated from aluminium for corrosion prevention, durability, strength, and integrity of the body construction.
- b) The vehicle body **must** be equipped with enclosed weather resistant compartments for equipment storage.
- c) The compartments **must** have roll-up doors, equipped with:
 - i. A strap to assist with door closure;
 - ii. Interior door seals; and
 - iii. A means to hold the door in the open position.
- d) The cabinet floors **must** be designed to allow easy sweep out of debris, be ventilated, and have provisions for drainage of moisture.
- e) The cabinet floors **must** be provided with a Turtle tile industrial matting, or equivalent.
- f) Cabinet interiors **must** be lit using protected LED lighting.
- g) Cabinet lights **must** automatically turn on when the door is opened and turn off when the door is closed.
- h) All electrical junctions or wiring within the compartments **must** be protected from mechanical damage resulting from equipment stored within the compartment.

3.30.1 **Body Protection**

- a) The vehicle **must** be equipped with brush guard for all vehicle roof lights.



- b) LINE – X spray lining or equivalent **must** be applied on vehicle roof light brush guards.

3.30.2 Compartments

- a) Compartments doors **must** be equipped with non-keyed locks to secure compartment doors during vehicle movement.
- b) Compartments **must** be ventilated.
- c) Compartments doors **must** be roll-up design.
- d) Each compartment **must** be accessible from the ground by a 5th percentile female as described in section 1.3
- e) Each side of the vehicle (road and curb sides) **must** be provided with a minimum of one compartment.
- f) The total usable volume of storage for side and rear compartments **must** be a minimum of 2.7 cubic metres.
- g) Compartments **must** be sized to store six (6) hose packs. Each hose packs have minimum dimensions of 600 mm (24 inch) x 330 mm (13 inch) x 430 mm (17 inch).
- h) Compartments must be sized to store two (2) portable pumps. Each portable pump have minimal dimensions 600 mm (42 inch) x 485 mm (19 inch) x 430 mm (17 inch).
- i) The top outer surface of the right side compartment **must** be provided with supports for two nominal 3.05 m (10 foot) sections of 76 mm (3 inch) diameter hard suction hose.
- j) The interior wall of the cabinets **must** be provided with provisions to mount 20mm (3/4 inch) plywood sheet. This provision must not reduce total usable volume of storage.

3.30.3 Rear Step

- a) The rear of the vehicle **must** be provided with a stepping surface to facilitate access to the rear compartment.

3.31 Minor Equipment

- a) The vehicle **must** be provided with one (1) self-supporting Wildfire Forestry FireFlex, 5,680 Litre (1500 US gallon) portable pond, or equivalent.
- b) The portable pond **must** be secured to the structure or roof.
- c) Two nominal 3.05 m (10 foot) sections of 76 mm (3 inch) diameter hard suction hose **must** be provided.
- d) One (1) suction hose strainer **must** be provided with a 76mm (3inch) coupling.
- e) Two (2) LED flashlights Pelican model 3765 or approved equivalent **must** be provided with charging docks wired into the vehicles electrical system.
- f) One (1) low-level strainer sized to the suction hose **must** be provided.
- g) One (1) floating strainer sized to the suction hose **must** be provided.



3.32 Paint, Decal, and Corrosion Protection

3.32.1 Paint

- a) All paint **must** be applied to the Vehicle in accordance with the **paint manufacturer's recommendations** and the manufacturer's best production procedures, rendering a durable finish and a smooth appearance, free from runs, sags and orange peel.
- b) The surface **must** include a corrosion-prevention pre-treatment to all bare metal, a sealer/primer, a minimum of two coats of base colour paint, and two coats of clear finish.
- c) All painted components of the Vehicle **must** be painted prior to assembly to ensure full coverage of metal treatments and paint.
- d) If aluminium is penetrated after painting, for mounting purposes, the point of penetration and all mounting hardware **must** be treated with a corrosion inhibiting pre-treatment.
- e) The paint process **must** utilize Akzo-Nobel's high-solid LV products, or equivalent, including:
 - i. Akzo-Nobel Sealer/Primer LV - Acrylic urethane sealer/primer;
 - ii. Akzo-Nobel High Solid LV topcoat - Lead free, chromate-free, high-solid acrylic urethane topcoat; and
 - iii. Akzo-Nobel High Solid LV clear coat.
- f) The vehicle **must** be painted two-tone, consisting of a FLNA 4006 White over FLNA 3225 Red Akzo-Nobel Lead free, chromate-free, high-solid acrylic urethane Paint, with the paint break line determined at the preproduction meeting, or equivalent.
- g) The chassis components **must** be finish painted black.

3.32.2 Decal Package

- a) The vehicle **must** be provided with a decaling package.
- b) The two-tone paint break **must** be covered by a 19mm (3/4") Stripe (12.5mm (1/2") gold stripe, with 3mm (1/8") black outline), with a clear polyurethane coating.
- c) The cab and body **must** be provided with a double white Scotchlite reflective stripe, a nominal 152 mm (6 inches) and 51 mm (2 inches) wide, horizontally around the cab and body, in accordance with ASTM D 4956 and in compliance with NFPA 1901.
- d) All lettering **must** be applied in the ARIAL BLOCK font, in sizes ranging from 51 mm (2 inches) to 152 mm (6 inches) to accommodate the required text, in the outlined areas.
- e) All lettering **must** be gold with a black outline, unless otherwise specified.
- f) Decals **must** be in both official languages on the same side of the vehicle.
- g) Decals **must** be applied using high quality vinyl with a clear polyurethane coating.
- h) The following decals **must** be provided in the following locations:



- i. **“FIRE SERVICE D’INCENDIE”**, 51 mm (2 inches) to 152 mm (6 inches) in height sized to fit, in solid black, applied to the body centred on each side;
- ii. **Base identifier**, 51 mm (2 inches) to 152 mm (6 inches) in height sized to fit, applied to the body centred near the roofline on each side;
- iii. **National Defence Fire Service** logo , horizontally and vertically centred on both the driver and passenger doors (approx. 350mm x 500mm); and
- iv. **Vehicle number** on each side, the rear, and the roof.

3.32.3 Corrosion Protection

- a) The vehicle **must** be designed and manufactured to prevent galvanic corrosion.
- b) The materials used in the vehicle manufacturing **must** resist damage or deterioration as a result of cleaning with hot or cold water, steam, or detergents.
- c) A commercial rust prevention coating **must** be applied to the vehicle, such as Krown Rust Control or Rust Check.
- d) A decal and warranty papers for the rust prevention coating **must** accompany the vehicle.

4. INTEGRATED LOGISTIC SUPPORT

4.1 Vehicle Manuals

- a) All manuals required for the description, operation, maintenance and repair of the complete equipment, including sub-systems, **must** be provided, in compliance with NFPA 414.

4.1.1 Operator’s Manual

- a) The operator’s manual **must** be bilingual (English/French).
- b) The operator’s manual **must** include instructions for the safe operation of the vehicle.
- c) The operator’s manual **must** include daily operator maintenance instructions/checks (including lubrication).
- d) The operator’s manual **must** include safety warnings.
- e) The operator’s manual **must** include hand signals (as necessary).

4.1.2 Parts Manual(s)

- a) The parts manual(s) **must** be in English (bilingual is desirable).
- b) The parts manual **must** have illustrations showing all components of the vehicle including equipment and accessories from other manufacturers that are supplied to meet the requirements of the contract, with numbers for the itemization of the parts.
- c) The parts manual **must** have a listing for all itemized parts showing the Original Equipment Manufacturers (OEM) part number, the part name and a brief description of the item.



- d) The parts manual **must** cross reference the OEM part number to the correct illustration and item number.
- e) The parts manual **must** have a representation of bilingual warning signs and identification labels delivered on the equipment.

4.1.3 **Maintenance (Service) Manuals**

- a) The maintenance manual **must** be English (bilingual is desirable).
- b) The maintenance manual **must** include a trouble shooting guide, showing the steps and tests required to identify the exact cause of a problem and the steps required to correct a problem.
- c) The maintenance manual **must** include a listing of the necessary tolerances, torque levels, fluid volume, and special tools (including item part numbers).
- d) The maintenance manual **must** include information on the order of disassembly and assembly of the systems and components of the vehicle.
- e) The maintenance manual **must** include special tools list as per 4.3.4.
- f) The maintenance manual **must** include schematics for the vehicle plumbing system, engine, drive train components, fire pump, and pump operator's panel.
- g) Electrical wiring diagrams **must** be included, clearly showing the routing and interface of the manufacturer's electrical circuit(s) with the cab and chassis OEM electrical system (Multiplex).

4.1.4 **Manual Delivery to Technical Authority**

- a) Sample manuals **must** be submitted to the Technical Authority (TA) prior to the delivery of the vehicle for each model and or sub-system for approval. Sample manuals will not be returned. TA will provide approval or comments on the manuals within 30 days.
- b) One (1) complete set of approved manuals (Operator's, Maintenance, and Parts) in electronic format **must** be delivered to the Technical Authority.

4.1.5 **Manual Delivery with Vehicle**

- a) Two (2) complete set of manuals (Operator's, Maintenance, and Parts) **must** accompany each vehicle, shipped to each location in electronic format.
- b) One Operator's Manual **must** be in paper format provided in the cab of the vehicle.

4.1.6 **Electronic Format**

- a) Approved copies of the electronic format manuals **must** be delivered on CD/DVD-ROM.
- b) CD/DVD-ROM **must not** require installation, password and/or Internet connection to be accessed and be an unlocked PDF in a searchable format and not containing any .exe files.

4.1.7 **Provisional Manuals**

- a) In the event that approved manuals are not available at the time of delivery of the equipment, manuals marked "Provisional" **must** be supplied with the equipment.



- b) The contractor **must** deliver replacement approved manuals to all destinations where Provisional manuals were delivered.

4.1.8 **Manual Supplements**

- a) The contractor **must** supply manual supplements (Operator's, Maintenance and Parts) to support dealer-installed equipment not covered in the Vehicle Manuals.
- b) Manual supplements **must** be delivered in accordance with 4.1.4 and 4.1.5.

4.1.9 **Translation and Reproduction Rights**

- a) The Canadian Government **must** reserve the right to translate and reproduce, for Government use only, all or any part of the publications supplied, including the training packages delivered against the contract agreement.

4.1.10 **Changes to Manuals**

- a) During the period of the contract, changes to equipment, which affect the contents of manuals, **must** be reflected in the revision of the electronic and paper version of the manuals.
- b) Changes to the manuals **must** conform to the same format and presentation requirements as the original manuals.
- c) The revised electronic version of the manual **must** be sent to the Technical Authority by the Contractor.

4.2 **Warranty Letter**

- a) The warranty letter **must** include a list of all Canadian designated warranty service providers that will honour the warranty for the equipment and attachments (if applicable) procured under this contract, including the contact person and phone number at each warranty service provider.
- b) The warranty letter **must** include additional warranty coverage of sub-systems and a copy of the warranty letter from each sub-system's Original Equipment Manufacturer (OEM).
- c) The warranty letter **must** include warranty period as negotiated in the contract.
- d) The warranty letter **must** include Contractor contact information, name and phone number, for warranty support.

4.2.1 **Warranty Letter Delivery**

- a) The Contractor **must** provide a bilingual warranty letter to the Technical Authority and with each vehicle. If the Technical Authority requires the letter to be in DND format, then they will provide the Contractor a template for the DND acceptable format of the warranty letter.

4.3 **Other ILS Deliverables to Technical Authority**

- a) The following deliverables **must** be provided in electronic format prior to the delivery of the last vehicle.



4.3.1 **Data Summary**

- a) The Contractor **must** provide a bilingual Data Summary for each make/model/configuration of vehicle by completing Technical Authority's template with data and a vehicle picture.

4.3.2 **Photographs** – The Contractor **must** provide photographs in color, taken against a plain background, and in digital JPEG format with a minimum 10 megapixel resolution and with the following views:

- a) One left front three-quarter view of a completed unit; and
b) One right rear three-quarter view of a completed unit.

4.3.3 **Dimensioned Drawing**

- a) One side and front view sketch showing the dimensions **must** be provided. Brochure sketches are acceptable.

4.3.4 **Special Tools List** - The Contractor **must** provide an itemized list of specific special tools required for the servicing and repair of the vehicle or equipment procured under this contract and include:

- a) Item name;
b) Contractor's part number;
c) Manufacturer's part number (OEM);
d) Quantity required per location;
e) Unit price; and
f) Unit of issue.

4.3.5 **Preventive Maintenance Replacement Parts Kit List (PMRPKL)** - The contractor **must** provide a list detailing the parts that are required to perform preventive maintenance to the system for a period of 12 months, and include:

- a) Item name;
b) Contractor's part number;
c) Manufacturer's part number (OEM);
d) Manufacturer's NATO Supply code (NCAGE) or name and address;
e) NSN (NATO Stock Number) (if known);
f) Quantity per equipment;
g) Quantity recommended;
h) Unit price; and
i) Unit of issue.



4.3.6 **Recommended Spare Parts List (RSPL)** – The Contractor **must** provide a list detailing the spare parts deemed necessary to maintain the vehicle for a period of 12 months exclusive of any warranty period, and include:

- a) Item name;
- b) Contractor's part number
- c) Manufacturer's part number (OEM);
- d) Manufacturer's NATO Supply code (NCAGE) or name and address;
- e) NSN (NATO Stock Number) (if known);
- f) Quantity per equipment;
- g) Quantity recommended;
- h) Unit price; and

4.3.7 **Cataloguing Information**

- a) The information **must** be in accordance with the terms of the contract in SACC Clause B4061C with the exception of paragraph 8.
- b) The Contractor **must** provide, upon request, the information necessary to catalogue the parts for the vehicle. The Technical Authority will request information within 30 days of receiving the RSPL.
- c) The Contractor **must** supply the information within 60 days after the request is made.

4.4 **Safety Recalls and Servicing Data**

- a) Safety recalls, and manufacturer's technical service bulletins, or equivalent **must** be provided to the technical authority on a continuing basis, throughout the life expectancy of the vehicle or for no less than 10 years.

4.5 **Training**

4.5.1 **Maintenance Personnel Training**

- a) The Contractor **must** provide a maintenance training course.
- b) The course **must** be given at the delivery destination and be available in both official languages.
- c) The course **must** have a minimum duration of two (2) days to provide training of up to eight (8) maintenance personnel and have the final dates arranged with the Technical Authority.
- d) The course **must** have a syllabus or course outline and schedule available for review seven (7) days prior to the course commencement date.
- e) After completion of the course, the Contractor **must** have a "PROOF OF MAINTENANCE TRAINING" certificate signed by a Canada Representative for the destination. The Technical Authority will supply this document in an electronic format.



4.5.1.1. **Maintenance Personnel Training Curriculum** - The following items **must** be included in the curriculum:

- a) Operator's training detailed in 4.6.2 below;
- b) Operation and maintenance safety precautions;
- c) Preventive maintenance including servicing schedules (10 % of classroom time);
- d) Trouble shooting, testing, and adjustments (70 % of classroom time); and
- e) Special tools and test equipment.

4.5.2 **Operator Training**

- a) The Contractor **must** provide an operator training course.
- b) The course **must** be given twice at each delivery destination and be available in both official languages.
- c) Each course **must** have minimum duration of two (2) days to provide training for up to twelve (12) para-trainers or maintainers and have the final dates arranged with the Technical Authority.
- d) The course **must** have a syllabus or course outline and schedule available for review thirty (30) days prior to the course commencement date. Each participant **must** receive a hard and electronic copy of the training package. Training to include but not limited to:
 - i. Preventive maintenance performed by operators (NFPA 1002 Chap 4),
 - ii. Compressed Air Foam operation (NFPA 1901 Chap 21),
 - iii. Pump Operator Training (NFPA 1002 Chapter 8) including, produce effective stream from tank, produce effective stream from pressurized source, produce effective stream from a static source, refilling the vehicle with water and proportioning rates & concentration for foam/CAF applications.
 - iv. Auxiliary equipment operation including: winch operation and safety, auxiliary lights, warning lights, hose reels, front bumper monitor, under truck nozzles, installation of the Wildfire Forestry FireFlex or approved equivalent and cab control console.
 - v. Written test for all participant.
 - vi. Review of course after written test.
- e) The course **must** be delivered by an instructor who is fully trained and functional on all aspects of the firefighting package, with at least three (3) years of experience within the past five (5) years on the specific vehicle or a vehicle of similar design.

Annex C
Technical Evaluation Matrix

Title:

Wildland Fire Fighting Vehicle

Date:

05-Jun-18

Instructions:

This Technical Evaluation Matrix covers the mandatory technical criteria, which **must** be provided by the Bidder for evaluation of the proposed solution to the requirement specified in the Purchase Description.

“Substantive Information” **must** be provided for each corresponding performance requirement/specification stated in this Technical Evaluation Matrix.

If an **“Equivalent”** is being offered for any requirement in the Purchase Description it **must** be submitted for technical evaluation with Substantive Information proving the equivalency.

Bidders should indicate the document name/title and page number where the Substantive Information can be found for each evaluation criteria.

Definitions for **“Equivalent”** and **“Substantive Information”** are as follows:

“Substantive Information” - This is defined in SACC Clause A9097T.

“Equivalent” - Substitutes and alternatives that are equivalent in product, performance or a standard will be considered for acceptance by the Technical Authority where Substantive Information proving the equivalency for the respective requirement is provided for evaluation.

Annex C
 Technical Evaluation Matrix
 Wildland Fire Fighting Vehicle

Bidder Information

Bidder Name: _____
 Proposal Date: _____
 Proposed Make and Model: _____

Technical Mandatory Criteria			
PD Reference	PD Requirement	Bid Evaluation Requirement	Location in Bid Proposal
3.1b)	<p>Industry Acceptability - The vehicle design must have demonstrated industry acceptability by having been manufactured and sold commercially for at least 2 years, or be manufactured by a company that has at least 5 years of experience in design and manufacturing of a comparable type of equipment of equivalent or greater complexity.</p>	<p>The Bidder must provide client information for industry acceptability and/or experience as specified in the purchase description.</p> <p>Client information must include:</p> <ul style="list-style-type: none"> - Client name and location - Year completed - List of make(s)/model(s). 	

3.4.2	<p>Weight Ratings</p> <p>a) The GVWR of the vehicle must not be less than the sum of the unloaded vehicle mass, the cargo carrying capacity, and the product obtained by multiplying the designated seating capacity by 68kg as defined in the Motor Vehicle Safety Regulations (C.R.C., c. 1038).</p> <p>b) Each GAWR must be equal to or less than the load rating of the weakest component in the axle system, i.e., axle housing, suspension, wheels, or tires.</p> <p>c) The total load on each axle of the vehicle must not exceed the GAWR for that axle.</p>	Substantive Information on vehicle GVWR and GAWR.	
3.4.3 a)	<p>Weight Distribution</p> <p>The vehicle and vehicle suspension system must accommodate changes in weight distribution due to variations in water tank level.</p>	Substantive Information on vehicle weight distribution.	
3.4.4	<p>Dimensions</p> <p>a) In areas other than at the axles, the ground clearance must be at least 508 mm (20 inches).</p> <p>b) The vehicle must have both an angle of approach and an angle of departure of at least 20 degrees.</p> <p>c) The maximum overall height of the vehicle must be a maximum of 3.75 metres (12.5 feet).</p> <p>d) The maximum overall length of the vehicle must be a maximum of 9.14 metres (30 feet).</p> <p>e) The maximum overall width of vehicle must be a maximum of 2.59 metres (8.5 feet).</p>	Substantive Information	
3.12	<p>Wheels, Rims and Tires</p> <p>a) The vehicle must be equipped with Michelin 395/65R20 or approved equivalent, steel-belted, tubeless radial tires.</p> <p>iii. The tread pattern must be XZL or approved equivalent.</p>	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.14	<p>Walkway</p> <p>a) The vehicle must be equipped with a walkway positioned directly behind the cab.</p>	Substantive Information	

3.14	<p>Walkway f) Vertical surfaces at the transverse walkway accessible by the operator must be protected with LINE – X spray or approved equivalent.</p>	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.14	<p>Walkway g) The outer sides of the walkway must be equipped with padded, rip-stop vinyl covered, Mansaver bars or equivalent, to prevent accidental falls.</p>	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.16.5	<p>Battery Charger a) A 110V Kussmaul super auto-eject 20 amp receptacle or approved equivalent with a hinged weatherproof cover must be provided at the left side of the vehicle, to provide power to the battery charger, the air compressor and the flashlight charger.</p>	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.20	<p>Water Tank b) The water tank must have a minimum certified capacity of 4542 litres (1,200 US gallons).</p>	Substantive Information	
3.21	<p>Foam Cell a) The vehicle must be equipped with a foam cell with a capacity to support at least two complete water tank discharges, 75 litres (20 US gallons) as a minimum. b) The foam cell must be manufactured from a material that is compatible with "class A" foam solutions.</p>	Substantive Information	
3.22	<p>Compressed Air Foam System (CAFS) a) A self-contained, slide in type CAFS must be provided.</p>	Substantive Information	
3.24.1	<p>Dump Valve c) The dump valve must be a Zico Quic-Flow model QDV-10-UJPF 250mm by 250mm (10 inch by 10 inch) valves or equivalent, equipped with telescoping chutes.</p>	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	

3.25	Hose Reels a) Two hose reels must be provided, one on each side of the vehicle.	Substantive Information	
3.25	Hose Reels f) The hoses must be ReelTex model 3200 or equivalent.	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.26	Front Bumper b) The bumper and apron must be protected with LINE – X spray or approved equivalent on lining or equivalent.	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.27	Front Bumper Monitor a) The monitor provided must be Akron 3463 FireFox Electronic Monitor or approved equivalent with Akron 3293 FireFox electric nozzle or approved equivalent.	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.29.3	Water and Foam Level Gauges a) The water tank and foam cell level gauges must be FRC or approved equivalent LED miniature level gauges.	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.30.1	Body Protection b) LINE – X spray lining or equivalent must be applied on vehicle roof light brush guard.	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	
3.31	Minor Equipment a) The vehicle must be provided with one (1) self-supporting Wildfire Forestry FireFlex, 5,680 Litre (1500 US gallon) portable pond, or equivalent. e) Two (2) LED flashlights Pelican model 3765 or approved equivalent must be provided with charging docks wired into the vehicles electrical system.	The Bidder must provide product literature attesting that proposed alternate product is equivalent or superior to product described in purchase description.	

Proposed Equivalents			
PD Reference	PD Requirement	Bid Evaluation Requirement	Location in Bid Proposal