



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
**Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada**
Room 100,
167 Lombard Ave.
Winnipeg
Manitoba
R3B 0T6
Bid Fax: (204) 983-0338

**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 Adhesion Tester	
Solicitation No. - N° de l'invitation 31970-169131/A	Date 2016-12-09
Client Reference No. - N° de référence du client 31970-169131	
GETS Reference No. - N° de référence de SEAG PW-\$WPG-011-10077	
File No. - N° de dossier WPG-6-39132 (011)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-01-23	Time Zone Fuseau horaire Central Standard Time CST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Palmer, Adele	Buyer Id - Id de l'acheteur wpg011
Telephone No. - N° de téléphone (204) 807-6396 ()	FAX No. - N° de FAX (204) 983-7796
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: NATIONAL RESEARCH COUNCIL CANADA 11421 SASKATCHEWAN DRIVE EDMONTON Alberta T6G2M9 Canada	

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

Public Works and Government Services Canada - Western
Region
Room 100
167 Lombard Ave.
Winnipeg
Manitoba
R3B 0T6

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

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PART 1 - GENERAL INFORMATION

1.1 Requirement

The requirement is detailed under Article 6.2 of the resulting contract clauses.

1.2 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.3 Trade Agreements

The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

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>) 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 (2016-04-04) 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: 60 days

Insert: 90 days

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 in writing to the Contracting Authority no later than 5 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 question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) 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 Manitoba.

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.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

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

Section I: Technical Bid (1 hard copy)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

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

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

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work, as detailed in Annex "A" - Requirement.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with Annex "B" - Basis of Payment. The total amount of Applicable Taxes must be shown separately.

3.1.1 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.

3.1.2 Exchange Rate Fluctuation

[C3011T \(2013-11-06\)](#), Exchange Rate Fluctuation

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3.1.3 SACC Manual Clauses

[B1000T \(2014-06-26\)](#), Condition of Material - Bid

Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

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 Criteria

- a) Ability to perform the full scope of the work as described in Annex "A", Requirement and the entirety of this solicitation package.
- b) Provision of pricing as per the instructions in Annex "B", Basis of Payment.

4.1.2 Financial Evaluation

SACC Manual Clause [A0220T \(2014-06-26\)](#), Evaluation of Price – Bid

4.2 Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated 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 *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, 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 *Ineligibility and Suspension Policy* (<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](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website (http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969).

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.

PART 6 - RESULTING CONTRACT CLAUSES

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

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex "A".

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the *[Standard Acquisition Clauses and Conditions Manual](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.

6.3.1 General Conditions

[2010A \(2016-04-04\)](#), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Delivery Date

All the deliverables detailed in Annex A - Requirement and Annex B - Basis of Payment must be received on or before March 15, 2017.

6.4.2 Delivery Points

Delivery of the requirement will be made to the delivery point specified at Annex "B" of the Contract.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Adèle Palmer
Supply Specialist
Public Works and Government Services Canada
Western Region
Acquisitions Section
Suite 100-167 Lombard Avenue
Winnipeg, MB R3B 0T6

Telephone: (204) 807-6396
Facsimile: (204) 983-7796
E-mail address: adele.palmer@pwgsc-tpsgc.gc.ca

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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.

6.5.2 Project Authority

The Project Authority for the Contract is: **to be inserted upon contract award.**

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone: _____
Facsimile: _____
E-mail address: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project 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.

6.5.3 Contractor's Representative

Name: _____
Title: _____
Address: _____
Telephone: _____
Facsimile: _____
E-mail address: _____

6.6 Payment

6.6.1 Basis of Payment – Firm Price, Firm Unit Price(s) or Firm Lot Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm lot price as specified in Annex “B” for a cost of \$ (**insert at contract award**). Customs duties are included and Applicable Taxes are extra.

6.6.2 Limitation of Price

SACC Manual clause [C6000C](#) (2011-05-16) Limitation of Price

6.6.3 Terms of Payment – Single Payment

SACC Manual clause [H1000C](#) (2008-05-12), Single Payment

6.6.4 Electronic Payment of Invoices – Contract

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

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

6.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
 - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

6.8 Certifications and Additional Information

6.8.1 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.

6.9 Applicable Laws

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

6.10 Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the general conditions [2010A \(2016-04-04\)](#), General Conditions - Goods (Medium Complexity);
- (c) Annex A, Requirement;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated _____.

6.11 SACC Manual Clauses

[B1501C \(2006-06-16\)](#), Electrical Equipment
[B7500C \(2006-06-16\)](#), Excess Goods
[C5201C \(2008-05-12\)](#), Prepaid Transportation Costs
[D4002C \(2013-04-25\)](#), Shipping Instructions - Free on Board Destination and Delivered Duty Paid

6.12 Insurance - Specific Requirements

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The Contractor must comply with the insurance requirements specified in Annex "C". The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. For Canadian-based Contractors, coverage must be placed with an Insurer licensed to carry out business in Canada, however, for Foreign-based Contractors, coverage must be placed with an Insurer with an A.M. Best Rating no less than "A-". The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

ANNEX "A"

REQUIREMENT

National Research Council Canada requires a contract to supply an Adhesion Tester and all the components, software, accessories, warranty, installation and training as detailed herein. The unit and its components must be delivered to NRC, located in Edmonton, Alberta.

All goods supplied must comply with the technical specifications/mandatory criteria as listed below, and in the Basis of Payment, Annex "B".

Delivery is required on or before March 15, 2017.

INSTRUCTIONS:

COMPLIANCE MATRIX – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

A complete list of the minimum mandatory performance specifications are detailed below in the "Compliance Matrix". Bidders are to clearly demonstrate compliance with each mandatory specification.

1. Bidders are requested to provide the Manufacturer and model number offered.
2. Bidders must show compliance by addressing each performance specification in the Compliance Matrix, and should indicate whether the product offered "meets" or "doesn't meet".
3. It is requested that supporting technical documentation, including but not limited to, specification sheets, technical brochures, photographs or illustrations be provided with the bid at solicitation close and be cross-referenced on the Compliance Matrix for each performance specification to outline where in the supporting technical documentation it demonstrates compliance. It is the Bidders responsibility to ensure that the submitted supporting technical documentation provides detail to prove that the proposed product(s) meet the requirements of the Performance Specification. If published supporting technical document is not available, the Bidder should prepare a written narrative complete with a detailed explanation of how its bid demonstrates technical compliance.
4. If the supporting documentation referenced above has not been provided at bid closing, the Contracting Authority will notify the Bidder that they must provide supporting documentation within two (2) business days following notification. Failure to comply with the request of the Contracting Authority within that time period, will deem the bid non-responsive and the bid will be given no further consideration.
5. Canada will not evaluate information such as references to Web site addresses where additional Information can be found.
6. Bidders must address any concerns with the performance specifications in written detail to the Contracting Authority before bid closing as outlined in the Request for Proposal (RFP) document.
7. Failure to meet each performance specification will result in the bid being deemed non-responsive, and be given no further consideration.

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Requirement	Manufacturer Offered:	Model number Offered#
Adhesion Tester		

All of the components detailed in the Compliance matrix must be fully integrated and supported by the vendor.

This unit must integrate the following major sub-systems into a complete operating system:

COMPLIANCE MATRIX - MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

Item #	Performance Specification	Status (M) Mandatory (D) Desirable*	Performance Specification Met? <u>Must</u> indicate either Yes/No	Performance Specification Offered: Bidder should indicate how they meet the performance specification by recording this information in this column	Cross Reference: In this column, Bidders should cross-reference where this performance specification is indicated in their supporting documents.
1.00	LOADING FRAME				
1.01	The dual column-loading frame must be capable of tension, compression, flexure, shear, and reverse stress testing. It must include a digital closed loop command and feedback motion control system with a high performance DC permanent magnet brushed servo motor TENV Protection to IPW44.	M			
1.02	The moving crosshead will be driven by two precision screws each with dual preloaded nuts providing zero backlash during reverse stress loading. Systems with ball screws with single nuts or that are not preloaded are not acceptable.	M			
1.03	For lateral stiffness and robustness purposes, in addition to the two 2 ball screws described above, the load frame must include at least two (2) smooth ground guidance rods that the moving crosshead rides on.	M			
1.04	The ball screws must be fully enclosed to eliminate pinch points and protect the precision surfaces from damage from grips and contamination.	M			
1.05	The load frame must include a ISO approved emergency stop switch. For safety purposes, the system must not restart the crosshead moving when the emergency stop button is released.	M			
1.06	The frame must include dual level mechanical limit switches on the front of the frame that prevent the crosshead from traveling too high or too low. The first level	M			

	switch must stop the crosshead and the second level limit switch must cut the power to the frame should the first level limits ever fail in the future.				
1.07	The frame must include adjustable leveling feet and an integrated graduated measurement scale.	M			
1.08	The total height of the load frame must be a maximum of 1630 mm (64.2 inches) in order to mount on a standard 30 or 32 inch table in a room with 8 foot ceilings.	M			
1.09	The maximum load capacity must be at least 10kN (1,000 kg, 2,250 lbs).	M			
1.10	The speed range must be 0.001 mm to 1,500 mm (0.00004 to 60 in) per minute and must be settable continuously. The return speed must be 1,700 mm/min (67 in/min).	M			
1.11	The steady state speed accuracy must be within $\pm 0.1\%$, of set speed measured over full speed range.	M			
1.12	The maximum load rating at 60 in/min must be at least 10 kN (2,250 lbs).	M			
1.13	The frame must use a 120V plug, 15 A. Using a transformer is not acceptable.	M			
1.14	The frame must include integrated T-slots on the front and back of both column covers for easy mounting of accessories.	M			
1.15	The frame must include an operator panel which can be used to run and stop tests at the frame as opposed to through the PC and software.	M			
1.16	The operator panel must have up to (2) live displays that are in synch with the testing software live displays as well as (2) shortcut keys that can be used to carry out functions such as balancing load, strain or marking data.	M			
1.17	The operator panel must also have a fine position wheel that can be used to move the frame crosshead in small increments to aid in the installation and removal of fixtures.	M			
1.18	The test frame must have a specimen protection feature that prevents unwanted loads from being applied to the test specimen during test setup and jogging. This feature must be able to be activated using the control panel mounted on the test frame.	M			
2.00	LOAD WEIGHING SYSTEM, TRANSDUCERS, & ELECTRONICS				

2.01	The system must be supplied with a +/- 10kN (2,250lb) capacity load cell mounted under its moving crosshead. Additional optional load cells must be available in the capacities of 5kN, 2kN, 1kN, 500N, 100N, 50N, 10N, and 5N to allow company to expand the use of the load frame in the future to testing other types of specimens.	M			
2.02	Load cell and extensometer transducers available for the system must include self-identification (recognition) electronics in the connector directly attached to these transducers which automates the calibration of these devices. For safety and data integrity issues, operators must not have to select the capacity of a load cell from a list or type in a value in order to calibrate different load cells (or extensometers). Manually calibrated load cells or extensometers requiring calibration weights or calibration micrometer fixture are not acceptable. In addition to the above, the system must allow for manual calibration of third party transducers.	M			
2.03	The load weighing system accuracy must be within +/-0.5% of reading down to 1/500 th of the load cell capacity for load cells 500N or higher. Digital signal processing of the load signal must be used to achieve this accuracy throughout the entire range without affecting the resolution of the data by having the operator, software, or electronics to perform manual or automated ranging.	M			
2.04	To avoid expensive repairs and downtime, the tension/compression load cell must have an overload capacity without permanent zero shift of 150% of capacity.	M			
2.05	AC excitation must be used for extensometers and LVDT's because it is less susceptible to noise and drift than DC excitation.	M			
2.06	The system must have a CSA certification for susceptibility and emissions.	M			
3.00	SOFTWARE				
3.01	General a) The control software will be a true graphical user interface meeting all of the Microsoft Windows standards. DOS based software is not acceptable. b) Digital displays on the computer monitor must show live load, displacement, and optional strain values in engineering units that can be selected to be Metric, S.I., U.S. customary. c) The software must allow the user to setup analog meters for all live displays.	M			

<p>3.02</p> <p>d) The software must have an Advanced Programming Interface (API).</p> <p>Test frame control</p> <ul style="list-style-type: none"> a) The testing software must be able to perform tensile, compression, flexure, peel, tear, friction, stress relaxation, creep and simple cyclic tests and include an appropriate calculation list for each type of test. b) The testing software must be able to perform cyclic testing define by blocks that can be customized by the user and include – relative ramps, absolute ramps, triangle waveforms and hold patterns. c) The software must allow for load and strain control of the test system as an option. d) The control software must include set-up of the following: test speed, limits on all channels, calibration and balance of transducers, specimen dimensions, and results tables at a minimum. e) An unlimited number of test methods must be available for storage and retrieval. f) The software must allow the user to specify the test control area – above or below the moving crosshead. g) The software must allow the user to enable a specimen protection safety feature and set a load threshold to prevent damage during gripping and specimen preload. h) The software must allow the user to configure a test method to automatically auto-balance load and/or strain channels before the start of the test. i) The software must allow the user to configure a test method to automatically pre-load or pre-cycle a specimen before the start of a test. j) The software must allow the user to configure a test method to automatically detect a specimen break by a change in rate of load or a percentage drop of the maximum load. k) The software must allow the user to enable an audio alert defined by a load threshold value. 	M			
<p>3.03</p> <p>Data acquisition</p> <ul style="list-style-type: none"> a) Run time screen must be capable of displaying both the real time graph and the calculated results of multiple specimens simultaneously. b) Data must be acquired at a user selectable, continuous rate without gaps. c) Specimen geometry's for each specimen must include rectangular, 	M			

	<p>irregular (area), cube, cylindrical, 3- and 4-point bend specimens, and 90-, 180- and T-peel test geometries and geometries for tear specimens and coefficient of friction tests.</p> <p>d) A real time X-Y plot of two selected variables will be displayed. The variable for each axis will be load, stress, extension, and optional use of either of 2 strain channels as selected by the user. The available system of units for each axis will be US Customary, Metric, or SI and will be independently set by the user. Other graph features will include manual and automatic scaling, legend symbols, to distinguish individual test curves, horizontal and vertical offset between test curves, double-Y axis, multi-channel, and selectable number of test curves per display.</p> <p>e) Test control software must be able to automatically store raw data or calculated results in an ASCII file.</p> <p>f) The software must have the option to integrate any USB camera device (such as a webcam) for video capture of the entire tested specimen and allow for playback of the test with data point selection matching with video frames for analysis.</p>			
<p>3.04</p>	<p>Data manipulation</p> <p>a) The software must offer the following calculations:</p> <ul style="list-style-type: none"> - Maximum Peak (all available channels) - Minimum Peak (all available channels) - Specimen Break Point (all available channels) - Yield (Zero slope, Offset and Energy at Yield) - Modulus (Secant, Tangent, Automatic Young's, User-defined Young's, Chord) - Slope (Secant, Tangent, Automatic Young's, User-defined Young's, Chord) - Unlimited number of Present Points - Unlimited number of User Calculations - Average Load Between 2 Points based on average load, number of peaks, number of troughs, number of peaks and troughs - Total creep & delta creep - Total relaxation & delta relaxation - Seam slippage - Area reduction - Coefficient of friction (static & dynamic) - Local peak 	M		

	<p>- Poisson's ratio</p> <p>b) The software must include the capability to define correction factors such as machine compliance, slack, pretension, load and gauge length.</p> <p>c) The ability to re-analyze past test data using different calculations must be provided.</p> <p>d) The software must provide a direct printout and CSV results output.</p> <p>e) The software must provide CSV raw data output.</p> <p>f) The software must provide the option of storing test reports in one of three formats: MS Word, HTML or PDF.</p>				
4.00	ACCESSORIES				
4.01	A set of 10kN side-action grips must provide testing of specimens up to 1.8" wide specimens. A set of serrated 1x1 inch jaw faces and a specimen centering device must be included with the grips.	M			
4.02	A temperature chamber must be supplied with the system. <ul style="list-style-type: none"> a. This chamber must be rated to 350C, and down to -70C by utilizing CO2 Gas. The gas does not have to be supplied with the unit. b. This chamber must include a set of roller mounting brackets. These roller brackets allow the temperature chamber to be pushed to the back of the frame out of the test space area when testing ambient specimens. c. The chamber must be CSA Approved d. The chamber must include a set of pullrods to use with the 10kN side-action grips. e. The chamber must use 100-120 VAC, 30 A plug. A transformer is not acceptable. 	M			
5.00	SERVICEABILITY AND SYSTEM STATUS				
5.01	Factory trained service engineers must be available for additional training or warranty service.	M			
5.02	It is preferable that factory trained service engineers in 5.01 are based in Alberta, Canada.	D			
5.03	Factory trained service engineers must perform the installation of the system and review all operating instructions and safety mechanisms with the primary users. The supplier must install the system and provide basic on-site training for a minimum of one day. All on-site training must include labour and travel.	M			

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5.04	Factory trained service engineers must provide software training to users of the system and help those users create up to 5 test methods during that session.	M		
5.05	Optional extended warranty plans must be available for 1 and 2 years.	M		
5.06	Optional training classes must be available at the manufacturer's headquarters.	M		
5.07	It is preferable that optional advanced on-site training classes should be available at the customer's location.	D		

Bids which do not meet all of the Minimum Specifications listed above will be deemed non-compliant and given no further consideration.

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ANNEX "B"

BASIS OF PAYMENT

PRICING must be firm unit pricing in Canadian (CDN) funds, all inclusive for the period of the Contract. Rates MUST include ALL costs (freight, offloading, FOB Destination) associated with providing the Goods in accordance with the Requirement at Annex "A". GST, if applicable, is to be shown as a separate item on any resulting invoice. (PST Exempt 390516-0).

FOB Destination: NATIONAL RESEARCH COUNCIL CANADA
 11421 Saskatchewan Drive
 Edmonton, Alberta
 T6G 2M9
Attention: Andrew Myles

ITEM	DESCRIPTION	QTY	UNIT OF ISSUE	FIRM UNIT PRICE CDN \$ (PER UNIT OF ISSUE)	EXTENDED PRICE CDN \$
1	<p>ADHESION TESTER</p> <p>Make: _____</p> <p>Model/Year #: _____</p> <p>Price Includes all costs in accordance with Annex "A", including but not limited to: All Freight, delivery, offloading, FOB destination, options, accessories, travel, on site-training, and warranties.</p> <p>Delivery is required by March 15, 2017.</p>	1	Lot	\$	\$
TOTAL (\$CDN)					\$

ANNEX "C"

INSURANCE REQUIREMENTS

Commercial General Liability Insurance

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.
2. The Commercial General Liability policy must include the following:
 - a. Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
 - b. Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
 - c. Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
 - d. Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
 - e. Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
 - f. Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
 - g. Employees and, if applicable, Volunteers must be included as Additional Insured.
 - h. Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
 - i. Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
 - j. Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
 - k. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

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- I. Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.

For the province of Quebec, send to:

*Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042,
Ottawa, Ontario, K1A 0H8*

For other provinces and territories, send to:

*Senior General Counsel,
Civil Litigation Section,
Department of Justice
234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8*

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

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ANNEX "D" to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

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

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);
- Large Value Transfer System (LVTS) (Over \$25M)

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