

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Public Works Government Services Canada- Bid
Receiving / Réception des soumissions
189 Prince William Street
Room 405
Saint John
New Brunswick
E2L 2B9

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 Province House, Technical/Design	
Solicitation No. - N° de l'invitation ED001-151289/A	Date 2014-12-23
Client Reference No. - N° de référence du client R.073771.008	
GETS Reference No. - N° de référence de SEAG PW-\$PWB-020-3537	
File No. - N° de dossier PWB-4-37098 (020)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-02-03	Time Zone Fuseau horaire Atlantic Standard Time AST
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: Donovan, Janine PWB	Buyer Id - Id de l'acheteur pwb020
Telephone No. - N° de téléphone (506) 636-5347 ()	FAX No. - N° de FAX (506) 636-4376
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA REAL PROPERTY - PROJECT MGMT. 3 QUEEN ST, PO BOX 1268 CHARLOTTETOWN Prince Edward Island C1A4A2 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 Government Services Canada- Bid Receiving
/ Réception des soumissions
189 Prince William Street
Room 405
Saint John
New Bruns
E2L 2B9

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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REQUEST FOR PROPOSAL (RFP)

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SUPPLEMENTARY INSTRUCTIONS TO PROPONENTS (SI)

SI1 INTRODUCTION

1. Public Works and Government Services Canada (PWGSC) intends to retain an individual consulting firm or joint venture to provide the professional services for the project as set out in this Request for Proposal (RFP).
2. This is a single phase selection process. The nature of the requirement and the anticipated limited number of response by the industry leads PWGSC to believe that this approach will not unduly force a large number of firms to expend an overall unreasonable amount of effort in response to PWGSC.
3. Proponents responding to this RFP are requested to submit a full and complete proposal. The proposal will cover not only the qualifications, experience and organization of the proposed Consultant Team, but also the detailed approach to the work, and the pricing and terms offered. A combination of the technical and price of services submissions will constitute the proposal.

SI2 PROPOSAL DOCUMENTS

1. All instructions, general terms, conditions and clauses identified in the RFP by number, date and title, are hereby incorporated by reference into and form part of this solicitation and any resultant contract.

All instructions, general terms, conditions and clauses identified in the RFP by number, date and title, are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

2. The following are the proposal documents:
 - (a) Supplementary Instructions to Proponents (SI);

R1410T (2014-06-26), General Instructions (GI) – Architectural and/or Engineering Services – Request for Proposal;
Submission Requirements and Evaluation (SRE);
 - (b) the general terms, conditions and clauses, as amended, identified in the Agreement clause;
 - (c) Project Brief / Terms of Reference;

- (d) the document entitled "Doing Business";
 - (e) any amendment to the solicitation document issued prior to the date set for receipt of proposals; and
 - (f) the proposal, Declaration/Certifications Form and Price Proposal Form.
3. Submission of a proposal constitutes acknowledgment that the Proponent has read and agrees to be bound by these documents.

SI3 QUESTIONS OR REQUEST FOR CLARIFICATION

Questions or requests for clarification during the solicitation period must be submitted in writing to the Contracting Authority named on the RFP - Page 1 as early as possible. Enquiries should be received no later than five (5) working days prior to the closing date identified on the front page of the Request for Proposal. Enquiries received after that date may not be answered prior to the closing date of the solicitation.

SI4 CANADA'S TRADE AGREEMENTS

This procurement is subject to the provisions of the North American Free Trade Agreement (NAFTA) and the World Trade Organization - Agreement on Government Procurement (WTO-AGP).

SI5 CERTIFICATIONS

1. Integrity Provisions - Associated Information

By submitting a proposal, the Proponent certifies that the Proponent and its Affiliates are in compliance with the provisions as stated in Section G11 Integrity Provisions - Proposal of [R1410T](#) (2014-06-26) General Instructions (GI) – Architectural and/or Engineering Services –Request for Proposal. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

2. Federal Contractors Program for Employment Equity - Proposal Certification

By submitting a proposal, the Proponent certifies that the Proponent, and any of the Proponent's members if the Proponent is a Joint Venture, is not named on

the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Employment and Social Development Canada (ESDC) - Labour's website.

Canada will have the right to declare a proposal non-responsive if the Proponent, or any member of the Proponent if the Proponent 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 Agreement for default if a Consultant, or any member of the Consultant if the Consultant is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Agreement.

The Proponent must provide the Contracting Authority with a completed Federal Contractors Program for Employment Equity - Certification (see Appendix B - Declaration/Certifications Form), before contract award. If the Proponent is a Joint Venture, the Proponent must provide the Contracting Authority with a completed Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

SI6 - CONSTRUCTION COST LIMIT

Construction Cost Estimates prepared by the Consultant shall not exceed the Construction Cost Limit as specified in the Supplementary Conditions.

SI7 - WEBSITES

The connection to some of the Web sites in the RFP is established by the use of hyperlinks. The following is a list of the addresses of the Web sites:

Employment Equity Act

<http://laws-lois.justice.gc.ca/eng/acts/E-5.401/index.html>

Federal Contractors Program (FCP)

http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/index.shtml

Certificate of Commitment to Implement Employment Equity form LAB 1168

<http://www.servicecanada.gc.ca/cgi-bin/search/eforms/index.cgi?app=profile&form=lab1168&dept=sc&lang=e>

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Code of Conduct for Procurement

<http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html>

Consent to a Criminal Record Verification (PWGSC-TPSGC 229 form)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>

Lobbying Act

<http://laws-lois.justice.gc.ca/eng/acts/L-12.4/?noCookie>

Contracts Canada

<https://buyandsell.gc.ca/>

Supplier Registration Information

<https://srisupplier.contractsCanada.gc.ca>

Consultant Performance Evaluation Report Form

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913-1.pdf>

Canadian economic sanctions

<http://www.international.gc.ca/sanctions/index.aspx?lang=eng>

National Joint Council (NJC) Travel Directive

<http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>

TERMS, CONDITIONS AND CLAUSES

AGREEMENT

1. The Consultant understands and agrees that upon acceptance of the offer by Canada, a binding Agreement shall be formed between Canada and the Consultant and the documents forming the Agreement shall be the following:
 - (a) the Front Page and this Agreement clause;
 - (b) the General Terms, Conditions and Clauses, as amended, identified as:
 - R1210D (2014-06-26), General Condition (GC) 1 - General Provisions – Architectural and/or Engineering Services
 - R1215D (2014-06-26), General Condition (GC) 2 - Administration of the Contract
 - R1220D (2011-05-16), General Condition (GC) 3 - Consultant Services
 - R1225D (2012-07-16), General Condition (GC) 4 - Intellectual Property
 - R1230D (2012-07-16), General Condition (GC) 5 - Terms of Payment
 - R1235D (2011-05-16), General Condition (GC) 6 - Changes
 - R1240D (2011-05-16), General Condition (GC) 7 - Taking the Services Out of the Consultant's Hands, Suspension or Termination
 - R1245D (2012-07-16), General Condition (GC) 8 - Dispute Resolution
 - R1250D (2012-07-16) R1650D (2012-07-16), General Condition (GC) 9 - Indemnification and Insurance
 - Supplementary Conditions
 - Agreement Particulars
 - (c) Project Brief / Terms of Reference;
 - (d) the document entitled "Doing Business";
 - (e) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
 - (f) the proposal, the Declaration/Certifications Form and the Price Proposal Form.

2. The documents identified above by title, number and date are hereby incorporated by reference into and form part of this Agreement, as though expressly set out herein, subject to any other express terms and conditions herein contained.

The documents identified above by title, number and date are set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

3. If there is a discrepancy between the wordings of any documents that appear on the following 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) any amendment or variation in the Agreement that is made in accordance with the terms and conditions of the Agreement;
 - (b) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
 - (c) this Agreement clause;
 - (d) Supplementary Conditions;
 - (e) General Terms, Conditions and Clauses;
 - (f) Agreement Particulars;
 - (g) Project Brief / Terms of Reference;
 - (h) the document entitled "Doing Business";
 - (i) the proposal.

SUPPLEMENTARY CONDITIONS (SC)

SC1 SECURITY REQUIREMENT

There is no security requirement applicable to this Agreement.

SC2 LANGUAGE REQUIREMENTS

1. Communication between Canada and the Consultant shall be in the language of choice of the Consultant Team, which shall be deemed to be the language of the Consultant's proposal.
2. The Consultant's services during construction tender call (such as addenda preparation, tenderers' briefing meetings, technical answers to questions by bidders) shall be provided expeditiously in both languages, as necessary.
3. The Consultant's services during construction shall be provided in the language of choice of the Contractor. The successful Contractor will be asked to commit to one or other of Canada's official languages upon award of the Construction Contract and, thereafter construction and contract administration services will be conducted in the language chosen by the Contractor.
4. Other required services in both of Canada's official languages (such as construction documentation) are described in detail in the Project Brief.

5. The Consultant Team, including the Prime Consultant, Sub-Consultants and Specialists Consultants shall ensure that the services being provided in either language shall be to a professional standard.

SC3 CONSTRUCTION COST LIMIT

1. The Construction Cost Limit is \$15,000,000.00 including contingencies (Applicable Taxes Extra).
2. In accordance with R1220D (2011-05-16) GC 3.11 Cost Control, throughout Project Development, the Construction Cost Estimate prepared by the Consultant shall not exceed the Construction Cost Limit as specified above. This disclosure of available funds does not commit Canada to pay Consultant fees based on such an amount.

SC4 FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - DEFAULT BY THE CONSULTANT

The Consultant understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Consultant 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 Consultant will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by ESDC will constitute the Consultant in default as per the terms of the contract.

AGREEMENT PARTICULARS

The Agreement Particulars will be issued at time of award of contract and will identify the fee to be paid to the Consultant for the services determined in the Price Proposal Form.

APPENDIX A - TEAM IDENTIFICATION FORMAT

The prime consultant and other members of the Consultant Team shall be, or eligible to be, licensed, certified or otherwise authorized to provide the necessary professional services to the full extent that may be required by provincial law.

I. Prime Consultant (Proponent - Architect):

Firm or Joint Venture Name:

.....

.....

Key Individuals and provincial professional licensing status and/or professional accreditation:

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II. Key Sub Consultants:

Conservation Structural Engineer

Firm Name:

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Key Individuals and provincial professional licensing status and/or professional accreditation:

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Mechanical Engineer

Firm Name:
.....
.....

Key Individuals and provincial professional licensing status and/or professional accreditation:

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Electrical Engineer

Firm Name:
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Key Individuals and provincial professional licensing status and/or professional accreditation:

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III. Specialists:

Masonry Conservator

Firm Name:
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Key Individuals and provincial professional licensing status and/or professional accreditation:

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Cost Specialist

Firm Name:
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Key Individuals and provincial professional licensing status and/or professional accreditation:

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APPENDIX B - DECLARATION/CERTIFICATIONS FORM

Project Title:

Name of Proponent:

Street Address:

Mailing Address:

Telephone Number: ()

Fax Number: ()

E-Mail:

Procurement Business Number:

Type of Organization:	Size of Organization:
<input type="checkbox"/> Sole Proprietorship	Number of Employees _____
<input type="checkbox"/> Partnership	Graduate Architects / Professional Engineers _____
<input type="checkbox"/> Corporation	Other Professionals _____
<input type="checkbox"/> Joint Venture	Technical Support _____
	Other _____

APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)

Federal Contractors Program for Employment Equity - Certification

I, the Proponent, 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 proposal non-responsive, or will declare a consultant in default, if a certification is found to be untrue, whether during the proposal evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Proponent's certifications. Failure to comply with any request or requirement imposed by Canada may render the proposal 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.

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

Complete both A and B.

A. Check only one of the following:

- () A1. The Proponent certifies having no work force in Canada.
- () A2. The Proponent certifies being a public sector employer.
- () A3. The Proponent certifies being a federally regulated employer being subject to the *Employment Equity Act*.
- () A4. The Proponent 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 Proponent has a combined work force in Canada of 100 or more employees; and

APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)

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

OR

- A5.2. The Proponent certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- B1. The Proponent is not a Joint Venture.

OR

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

APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)

Former Public Servant (FPS) - Certification

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, proponents must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of proposals is completed, Canada will inform the Proponent of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the proposal non-responsive.

Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- (a) an individual;
- (b) an individual who has incorporated;
- (c) a partnership made of former public servants; or
- (d) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members*

APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)

of Parliament Retiring Allowances Act, R.S., 1985, c.M-5, and that portion of pension payable to the Canada Pension Plan Act, R.S., 1985, c.C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Proponent a FPS in receipt of a pension?
YES () NO ()

If so, the Proponent must provide the following information, for all FPS in receipt of a pension, as applicable:

- (a) name of former public servant;
- (b) date of termination of employment or retirement from the Public Service.

By providing this information, proponents agree that the successful Proponent's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Proponent a FPS who received a lump sum payment pursuant to the terms of a work force reduction program? YES () NO ()

If so, the Proponent must provide the following information:

- (a) name of former public servant;
- (b) conditions of the lump sum payment incentive;
- (c) date of termination of employment;
- (d) amount of lump sum payment;
- (e) rate of pay on which lump sum payment is based;
- (f) period of lump sum payment including start date, end date and number of weeks;
- (g) number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)

Name of Proponent:

DECLARATION:

I, the undersigned, being a principal of the proponent, hereby certify that the information given on this form and in the attached proposal is accurate to the best of my knowledge. If any proposal is submitted by a partnership or joint venture, then the following is required from each component entity.

..... name signature
..... title	
I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture	
..... name signature
..... title	
I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture	
..... name signature
..... title	
I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture	

During proposal evaluation period, PWGSC contact will be with the following person: _____.

Telephone Number: () _____ Fax Number: () _____

E-mail: _____

This Appendix "B" should be completed and submitted with the proposal, but may be submitted afterwards as follows: if Appendix "B" is not completed and submitted with the proposal, the Contracting Authority will inform the Proponent 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 proposal non-responsive.

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APPENDIX C - PRICE PROPOSAL FORM

INSTRUCTIONS: Complete this Price Proposal Form and submit in a **separate sealed envelope** with the Name of Proponent, Name of Project, PWGSC Solicitation Number, and the words "PRICE PROPOSAL FORM" typed on the outside of the envelope. Price Proposals are not to include Applicable Taxes.

PROponents SHALL NOT ALTER THIS FORM

Project Title: Province House Conservation - Charlottetown, P.E.I.

Name of Proponent:

The following will form part of the evaluation process:

REQUIRED SERVICES

PERCENTAGE FEE (R1230D (2012-07-16), GC 5 - Terms of Payment)

Firm Percentage Fee _____% X \$15,000,000.00 Indicative Estimate of Construction Cost (Class D, including allowances, reserves and contingencies, excluding applicable taxes)

ESTIMATED TOTAL PERCENTAGE FEE \$ _____

The actual percentage fee for Required Services will recognize the variability of the Construction Cost Estimate as the project develops (refer to formula specified in GC 5.2 Fee Arrangement(s) for Services). Payments will be made as specified in GC 5.4 Payments for Services.

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

TIME BASED FEES* (R1230D (2012-07-16), GC 5 - Terms of Payment)

Resident Site Services	ESTIMATED HOURS Column A	HOURLY RATES** Column B	TIME BASED FEE Columns AxB
consultant's site representative, 20 hours per week X 60 weeks	1,200	\$.....	\$.....
MAXIMUM TIME BASED FEE #1			\$.....

Masonry Conservator Services	ESTIMATED HOURS Column A	HOURLY RATES** Column B	TIME BASED FEE Columns AxB
Masonry conservator services including one site visit per 10 hours	160	\$.....	\$.....
MAXIMUM TIME BASED FEE #2			\$.....

*Payment will be based on actual hours spent. Travel time and/or expenses will not be reimbursed separately.

** All inclusive hourly rate is applicable to both normal working hours and any other shift work as required.

Optional Services A

Percentage Fee (R1230D (2012-07-16), GC 5 - Terms of Payment)

Firm Percentage fee of _____ %
 To be the rate applied to *additional* Estimate of Construction Cost of from
 \$15,000,001.00 to 20,000,000.00 X \$ 4,999,999.00

ESTIMATED "Option A" TOTAL PERCENTAGE FEE \$ _____

The actual percentage fee for Optional Services A will recognize the variability of the Construction Cost Estimate as the project develops (refer to formula specified in GC 5.2 Fee Arrangement(s) for Services). Payments will be made as specified in GC 5.4 Payments for Services.

Note: Additional time-based Resident Site Services and or Masonry Conservator services related to Optional Services A may be engaged at the rates indicated for the Required Services. These services will not form part of the evaluated fee.

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APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

The following will NOT form part of the evaluation process

Canada may accept or reject any of the following fees, disbursements and/or hourly rates. Canada reserves the right to negotiate on these fees, disbursements and/or hourly rates.

DISBURSEMENTS

At cost without allowance for mark-up or profit, supported by invoices/receipts - see clause R1230D (2012-07-16), GC 5 - Terms of Payment, section GC5.12

Disbursements:

Investigative Trades Support (See RS-1).....\$250,000.00
Materials Testing.....\$75,000.00

FEES

Negotiated at provided rates

see clause R1230D (2012-07-16), GC 5 - Terms of Payment, section GC5.12

Professional Time RS 1 Services (See RS 1).....\$400,000.00

MAXIMUM UPSET AMOUNT FOR FEES and DISBURSEMENTS.....\$725,000.00

Solicitation No. - N° de l'invitation
ED001-151289/A
Client Ref. No. - N° de réf. du client
R.073771.008

Amd. No. - N° de la modif.
File No. - N° du dossier
PWB-4-37098

Buyer ID - Id de l'acheteur
pwb020
CCC No./N° CCC - FMS No./N° VME

APPENDIX D – DOING BUSINESS



Doing Business



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Appendix 'A'	Checklist for the Submission of Construction Documents
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Appendix 'C'	Sample Index for Drawings and Specifications
Appendix 'D'	User Manual on Directory Structure and Naming Conventions Standards for Construction Tender Documents on CDROM, dated May 2005
Appendix 'E'	Basic Reference Guide on Converting Construction Drawings into Portable Document Format (PDF), dated May 2005

SECTION 1 INTRODUCTION

This document must be used in conjunction with the Terms of Reference (TOR), as the two documents are complimentary. The TOR describes project-specific requirements while this document deals with information common to all projects. In case of a conflict between the two documents, the requirements of the TOR override this document.

SECTION 2 PWGSC NATIONAL CADD STANDARD

Drawings shall be in accordance with PWGSC National CADD Standards and Canadian Standards Association (CSA) B78.3.

Refer to:

<http://www.tpsgc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html>

The above link is subject to change. The Consultant shall check with the Project Manager to ensure that the link and related information are current and relevant with regards to PWGSC National CADD Standards.

SECTION 3 GUIDE TO PREPARATION OF CONSTRUCTION DOCUMENTS FOR PWGSC

1 Purpose

This document provides direction in the preparation of construction contract documents (namely specifications, drawings and addenda) for Public Works and Government Services Canada (PWGSC).

Drawings, specifications and addenda must be complete and clear, so that a contractor can prepare a bid without guesswork. Standard practice for the preparation of construction contract documents requires that:

- y drawings are the graphic means of showing work to be done, as they depict shape, dimension, location, quantity of materials and relationship between building components.
- y specifications are written descriptions of materials and construction processes in relation to quality, colour, pattern, performance and characteristics of materials, installation and quality of work requirements.
- y Addenda are changes to the construction contract documents or tendering procedures, issued during the tendering process.

2 Principles of PWGSC Contract Documents

PWGSC's contract documents are based on common public procurement principles. PWGSC does not use Canadian Construction Document Committee (CCDC) documents.

The terms and conditions are prepared and issued by PWGSC as well as other related bidding and contractual documents. For information, the clauses are available on the following web site: <http://sacc.pwgsc.gc.ca/sacc/query-e.jsp>. Any questions should be directed to the Project Manager.

3 Quality Assurance

Consultants are required to undertake their own quality control process and must review, correct and coordinate (between disciplines) their documents before sending them to PWGSC.

SPECIFICATIONS

1 National Master Specification

The National Master Specification (NMS) is a master construction specification available in both official languages, which is divided into 48 Divisions and used for a wide range of construction and/or renovation projects. In preparing project specifications, the Consultant must use the current edition of the NMS in accordance with the "NMS User's Guide".

The Consultant retains overriding responsibility for content and shall edit, amend and supplement the NMS as deemed necessary to produce an appropriate project specification free from conflict and ambiguity.

2 Specification Organization

Narrowscope sections describing single units of work are preferred for more complex work, however, broadscope sections may be more suitable for less complex work. Use either the NMS 1/3 - 2/3 page format or the Construction Specifications Canada full-page format.

Start each Section on a new page and show Project Number, Section Title, Section Number and Page Number on each page. Specification date, project title, and consultant's name are not to be indicated.

3 Terminology

Use the term "Departmental Representative" instead of Engineer, PWGSC, Owner, Consultant or Architect. "Departmental Representative" means the person designated in the Contract, or by written notice to the Contractor, to act as the Departmental Representative for the purposes of the Contract, and includes a person, designated and authorized in writing by the Departmental Representative to the Contractor.

Notations such as: "verify on site", "as instructed", "to match existing", "example", "equal to" or "equivalent to", "to be determined on site by "Departmental Representative", should not be indicated in the specifications as this promotes inaccurate and inflated bids. Specifications must permit bidders to calculate all quantities and bid accurately. If quantities are impossible to identify (i.e. cracks to be repaired) give an estimated quantity for bid purposes (unit prices). Ensure that the terminology used throughout the specifications is consistent and does not contradict the applicable standard construction contract documents.

4 Dimensions

Dimensions are to be in metric only (no dual dimensioning).

5 Standards

As references in the NMS may not be up to date, it is the responsibility of the consultant to ensure that the project specification uses the latest applicable edition of all references quoted. The following is a list of some of the Internet websites which provide the most current publications of standards for reference in the construction specification document.

- y CSA standards: <http://www.csa.ca>
- y CGSB standards: <http://www.pwgsc.gc.ca/cgsb>
- y ANSI standards: <http://www.ansi.org>
- y ASTM Standards: <http://www.astm.org>
- y ULC standards: <http://www.ulc.ca>
- y General reference of standards: <http://www.cssinfo.com>

The NMS website (<http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/index-eng.html>) also links to other documents references in the NMS under its "Links" feature.

6 Specifying Materials

The practice of specifying actual brand names, model numbers, etc., is against departmental policy except for special circumstances. The method of specifying materials shall be by using recognized standards such as those produced by Canadian Gas Association (CGA), Canadian General Standards Board (CGSB), Canadian Standards Association (CSA), and Underwriters' Laboratories of Canada (ULC), or by trade associations such as Canadian Roofing Contractors' Association (CRCA) and Terrazzo, Tile, Marble Association of Canada (TTMAC). Canadian standards should be used wherever possible.

If the above method cannot be used and where no standards exist, specify by a non-restrictive, non-trade name "prescription" or "performance" specifications.

In exceptional or justifiable circumstances or if no standards exist and when a suitable non-restrictive, non-trade name "prescription" or "performance" specification cannot be developed, specify by trade name. Include all known materials acceptable for the purpose intended, and in the case of equipment, identify by type and model number.

Acceptable Materials: set up the paragraph format as follows:

Acceptable Materials:

1. ABC Co. Model [_____].
2. DEF Co. Model [_____].
3. GHI Co. Model [_____].

Alternative materials to those specified may be considered during the solicitation period, however, the onus will be on the Consultant to review and evaluate all requests for approval of alternative materials.

The term "Acceptable Manufacturers" should not be used, as this restricts competition and does not ensure the actual material or product will be acceptable. A list of words and phrases that should be avoided is included in the NMS User's Guide.

Sole Sourcing: Sole sourcing for materials and work can be used for proprietary systems (ie. fire alarm systems, EMCS systems). **Substantiation and/or justification will be required.**

Wording for the sole source of work should be in Part 1 as:

Designated Contractor

- .1 Hire the services of [_____] to do the work of this section."

Wording for the sole source of EMCS systems should be in Part 1 as

Designated Contractor

- .1 Hire the services of [_____] or its authorized representative to complete the work of all EMCS sections."

and in Part 2 as Materials

- .1 There is an existing [_____] system presently installed in the building. All materials must be selected to ensure compatibility with the existing [_____] system.

Wording for the sole source of materials (ie. fire alarm systems) should be in Part 2 as:

Acceptable materials

.1 The only acceptable materials are [_____] .”

Prior to including sole source materials and/or work, the Consultant should contact the Project Manager to obtain the approval for the sole sourcing.

7 Unit Prices

Unit prices are used where the quantity can only be estimated (eg. earth work) and the approval of the Project Manager must be sought in advance of their use.

Use the following wording:

[The work for this section] or [define the specific work if required, e.g. rock excavation] will be paid based on the actual quantities measured on site and the unit prices stated in the Bid and Acceptance Form.

In each applicable NMS section, replace paragraph title "Measurement for Payment" with "Unit Prices”.

Sample of Unit Price Table:

The Unit Price Table designates the Work to which a Unit Price Arrangement applies.

- (a) The Price per Unit and the Estimated Total Price must be entered for each Item listed.
- (b) Work included in each item is as described in the referenced specification section.

Item	Specification Reference	Class of Labour, Plant or Material	Unit of Measurement	Estimated Quantity	Price per Unit GST/HST extra	Estimated Total Price GST / HST extra
TOTAL ESTIMATED AMOUNT						
Transfer amount to subparagraph 1)(b) of BA03						

8 Cash Allowances

Construction contract documents should be complete and contain all of the requirements for the contractual work. Cash allowances are to be used only under exceptional circumstances (ie. utility companies, municipalities), where no other method of specifying is appropriate. Obtain approval from the Project Manager in advance to include cash allowances and then use “Section 01 21 00 - Allowances” of the NMS to specify the criteria.

9 Warranties

It is the practice of PWGSC to have a 12 month warranty and to avoid extending warranties for more than 24 months. When necessary to extend beyond the 12 month warranty period provided for in the General Conditions of the contract, use the following wording in Part 1 of the applicable technical sections, under the heading "Extended Warranty":

- y "For the work of this Section [_____] , the 12 month warranty period is extended to 24 months.
- y Where the extended warranty is intended to apply to a particular part of a specification section modify the above as follows: "For [_____] the 12 month ... [_____] months."

Delete all references to manufacturers' guarantees.

10 Scope of Work

No paragraphs noted as "Scope of Work" are to be included.

11 Summary and Section Includes in Part -1 General of Section

Do not use "Summary" and "Section Includes."

12 Related Sections

In every section of the specification at 1.1 "Related Sections": coordinate the list of related sections and appendices. Ensure co-ordination among the sections of the specification and ensure not to reference any section or appendices which do not exist.

13 Index

List all the plans and specification sections with correct number of pages, section names and correct drawing titles in the format shown in Appendix A.

14 Regional Guide

The Consultant should contact the Project Manager to obtain the region's requirements for Division 01 or other short form specifications as might be appropriate. For example, it is required in the National Capital Region that regional Section 01 00 10 - General Instructions be used on all projects.

15 Health and Safety

It is required that all project specifications include "Section 01 35 29.06 - Health and Safety Requirements." Confirm with the Project Manager to determine if there are any instructions to meet regional requirements.

16 Designated Substances Report

Include "Section 01 14 25 - Designated Substances Report"

17 Subsurface Investigation Reports

Subsurface Investigation Report(s) are to be included after Section 31 and the following paragraph should be added to Section 31:

Subsurface investigation report(s)

.1 Subsurface investigation report(s) are included in the specification following this section.

When the Project Manager determines that it is not practical to include the subsurface investigation report(s), alternate instructions will be provided.

Where tender documents are to be issued in both official languages, the subsurface investigation report(s) shall be issued in both languages.

In addition to the provision of the Subsurface Investigation Report, the foundation information required by the National Building Code of Canada 2005 (Division C, Part 2, 2.2.4.6) shall be included on foundation drawings.

18 Experience and Qualifications

Remove experience and qualification requirements from specification sections.

19 Prequalification and Pre-award submissions

Do not include in the specification any mandatory contractor and/or subcontractor prequalification or pre-award submission requirements that could become a contract award condition. If a prequalification process or a pre-award submission is required, contact the Project Manager.

There should be no references to certificates, transcripts or license numbers of a trade or subcontractor being included with the bid.

20 Contracting Issues

Specifications describe the workmanship and quality of the work. Contracting issues should not appear in the specifications. Division 00 of the NMS is not used for PWGSC projects.

Remove all references within the specifications, to the following:

- y General Instructions to Bidders
- y General Conditions
- y CCDC documents
- y Priority of documents
- y Security clauses
- y Terms of payment or holdback
- y Tendering process
- y Bonding requirements
- y Insurance requirements
- y Alternative and separate pricing
- y Site visit (Mandatory or Optional)
- y Release of Lien and deficiency holdbacks

DRAWINGS

1 Title Blocks

Use PWGSC title block for drawings and sketches (including addenda).

2 Dimensions

Dimensions are to be in metric only (no dual dimensioning).

3 Trade Names

Trade names on drawings are not acceptable. Refer to SECTION 3, SPECIFICATIONS, 6.0 Specifying Materials for specifying materials by trade name.

4 Specification Notes

No specification type notes are to appear on any drawing.

5 Terminology

Use the term "Departmental Representative" instead of Engineer, PWGSC, Owner, Consultant or Architect. "Departmental Representative" means the person designated in the Contract, or by written notice to the Contractor, to act as the Departmental Representative for the purposes of the Contract, and includes a person, designated and authorized in writing by the Departmental Representative to the Contractor.

Notations such as: "verify on site", "as instructed", "to match existing", "example", "equal to" or "equivalent to", "to be determined on site by "Departmental Representative", should not be indicated in the specifications as this promotes inaccurate and inflated bids. Specifications must permit bidders to calculate all quantities and bid accurately. If quantities are impossible to identify (i.e. cracks to be repaired) give an estimated quantity for bid purposes (unit prices). Ensure that the terminology used throughout the specifications is consistent and does not contradict the applicable standard construction contract documents.

6 Information to be included

Drawings should show the quantity and configuration of the project, the dimensions and details of how it is constructed. There should be no references to future work and no any information that will be changed by future addenda. The scope of work should be clearly detailed and elements not in contract should be eliminated or kept to an absolute minimum.

7 Drawing Numbers: Number drawings in sets according to the type of drawing and the discipline involved as follows (The requirements of SECTION 2 PWGSC NATIONAL CADD STANDARD will supercede these requirements, where warranted).

During the Design Phase of the project each submission and review must be noted on the Notes block of the drawing title, but at the time of construction document preparation, all revision notes should be removed.

Discipline	Drawing
Demolition	D1, D2, etc.
Architectural	A1, A2, etc.
Civil	C1, C2, etc.
Landscaping	L1, L2, etc.
Mechanical	M1, M2, etc.
Electrical	E1, E2, etc.
Structural	S1, S2, etc.
Interior Design	ID1, ID2, etc.

- 8 Presentation Requirements:** Present drawings in sets comprising the applicable demolition, architectural, structural, mechanical and electrical drawings in that order. All drawings should be of uniform standard size.
- 9 Prints:** Print with black lines on white paper. Blue prints are acceptable for document submissions at 33%, 66% and 99% stages. Confirm with Project Manager the size of prints to be provided for review purposes.
- 10 Binding:** Staple or otherwise bind prints into sets. Where presentations exceed 20 sheets, the drawings for each discipline may be bound separately for convenience and ease of handling.
- 11 Legends:** Provide a legend of symbols, abbreviations, references, etc., on the front sheet of each set of drawings or, in large sets of drawings, immediately after the title sheet and index sheets.
- 12 Schedules:** Where schedules occupy entire sheets, locate them next to the plan sheets or at the back of each set of drawings for convenient reference. See *CGSB 33-GP-7 Architectural Drawing Practices for schedule arrangements*.
- 13 North Points:** On all plans include a north point. Orient all plans in the same direction for easy cross-referencing. Wherever possible, lay out plans so that the north point is at the top of the sheet.
- 14 Drawing Symbols:** Follow generally accepted drawing conventions, understandable by the construction trades, and in accordance with PWGSC publications.

ADDENDA

1 Format

Prepare addenda using the format shown in Appendix B. No signature type information is to appear.

Every page of the addendum (including attachments) must be numbered consecutively. All pages must have the PWGSC project number and the appropriate addendum number. Sketches shall appear in the PWGSC format, stamped and signed.

No Consultant information (name, address, phone #, consultant project # etc.) should appear in the addendum or its attachments (except on sketches).

2 Content

Each item should refer to an existing paragraph of the specification or note/detail on the drawings. The clarification style is not acceptable.

DOCUMENTATION

Translation

When required, all documentation included in the construction contract documents shall be in both official languages.

Ensure that English and French documents are equal in all respects. There can be no statement that one version takes precedence over the other.

Consultant shall provide:

- y Per construction document submission, a completed and signed Checklist for the Submission of Construction Documents. See Appendix 'A'.
- y Specification: originals printed one side on 216 mm x 280 mm white bond paper.
- y Index: as per Appendix 'C'
- y Addenda (if required): as per Appendix 'B' (to be issued by PWGSC).
- y Drawings: reproducible originals, sealed and signed by the design authority.
- y Tender information:
 - y Including a description of all units and estimated quantities to be included in unit price table.
 - y Including a list of significant trades including costs. PWGSC will then determine which trades, if any, will be tendered through the Bid Depository.
 - y Government Electronic Tendering System (MERX): Consultants to provide an electronic true copy of the final documents (specifications and drawings) on one or multiple CD-ROM in Portable Document Format (PDF) without password protection and printing restrictions. The electronic copy of drawings and specifications is for bidding purposes only and do not require to be signed and sealed. See Appendix 'D' and Appendix 'E'.

PWGSC shall provide:

- y General and Special Instructions to Bidders
- y Bid and Acceptance Form
- y Standard Construction Contract Documents



SECTION 4 CLASSES OF CONSTRUCTION COST ESTIMATES USED BY PWGSC

DESCRIPTION OF THE CLASSES OF ESTIMATES USED BY PWGSC FOR CONSTRUCTION COSTING OF BUILDINGS PROJECTS

Class 'D' (Indicative) Estimate:

Based upon a comprehensive statement of requirements, and an outline of potential solutions, this estimate is to provide an indication of the final project cost, and allow for ranking all the options being considered.

Submit Class D cost estimates in elemental cost analysis format latest edition issued by the Canadian Institute of Quantity Surveyors with cost per m² for current industry statistical data for the appropriate building type and location. Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.

The level of accuracy of a class D cost estimate shall be such that no more than a 20% contingency allowance is required.

Class 'C' Estimate:

Based on a comprehensive list of requirements and assumptions, including a full description of the preferred schematic design option, construction/design experience, and market conditions. This estimate must be sufficient for making the correct investment decision.

Submit Class C cost estimates in elemental cost analysis format latest edition issued by the Canadian Institute of Quantity Surveyors with cost per m² for current industry statistical data for the appropriate building type and location. Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.

The level of accuracy of a class C cost estimate shall be such that no more than a 15% contingency allowance is required.

Class 'B' (Substantive) Estimate:

Based on design development drawings and outline specifications, which include the design of all major systems and subsystems, as well as the results of all site/installation investigations. This estimate must provide for the establishment of realistic cost objectives and be sufficient to obtain effective project approval.

Submit Class B cost estimates in elemental cost analysis format latest edition issued by the Canadian Institute of Quantity Surveyors. Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.

The level of accuracy of a class B cost estimate shall be such that no more than a 10% design contingency allowance is required.

Class 'A' (Pre-Tender) Estimate:

Based on completed construction drawings and specifications prepared prior to calling competitive tenders. This estimate must be sufficient to allow a detailed reconciliation/negotiation with any contractor's tender.

Submit Class A cost estimates in both elemental cost analysis format and trade divisional format latest edition issued by the Canadian Institute of Quantity Surveyors. Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.

The level of accuracy of a class A cost estimate shall be such that no more than a 5% design contingency allowance is required.

SECTION 5 TIME MANAGEMENT

1 Time Management, Planning, and Control

The Time Management, Planning, and Control Specialist (scheduler) shall provide a Project Planning and Control System (Control System) for Planning, Scheduling, Progress Monitoring and Reporting and a Time Management, Planning, and Control Report (Progress Report). It is required that a fully qualified and experienced Scheduler play a major role in providing services in the development and monitoring of the project schedule.

The scheduler will follow good industry practices for schedule development and maintenance as recognized by the Project Management Institute (PMI).

PWGSC presently utilizes the Primavera Suite software and MicroSoft Project for its current Control Systems and any software used by the consultant should be fully integrated with these, using one of the many commercially available software packages.

1.1 Schedule Design

Project Schedules are used as a guide for execution of the project as well as to communicate to the project team when activities are to happen, based on network techniques using Critical Path Method (CPM).

When building a Control System you must consider:

1. The level of detail required for control and reporting;
2. The reporting cycle- monthly and what is identified in the Terms of Reference, but also includes Exception Reports;
3. That the duration must be in days;
4. What is required for reporting in the Project Teams Communications Plan and
5. The nomenclature and coding structure for naming and reporting requirements of activities, schedules and reports.

1.2 Schedule Development

For purposes of monitoring and reporting of project progress and ease of schedule review it is important to maintain a standard for all schedules and reports starting with the Work Breakdown Structure (WBS), identification of Milestones, naming of activities as well as schedule outputs and paper sizing and orientation.

Work Breakdown Structure

When developing the schedule the consultant needs to use PWGSC standards and practices. Two basic requirements are the National Project Management System

(NPMS) and a Work Breakdown Structure (WBS), structured supporting the NPMS (Levels 1-4).

The WBS is as follows:

- Level 1 Project Title (NPMS)
- Level 2 Project Stage (NPMS)
- Level 3 Project Phase (NPMS)
- Level 4 Processes to meet Deliverables/Control Points Milestones (NPMS)
- Level 5 Sub-Processes and Deliverables in support of Level 4
- Level 6 Discrete activities. (Work Package)

Not all the Stages, Phases and Processes in the NPMS will be required on all the projects, however the structure remains the same.

Major and Minor Milestones

The Major Milestones are standard Deliverables and Control Points within NPMS and are required in all schedule development. These Milestones will be used in Management Reporting within PWGSC as well as used for monitoring project progress using Variance Analysis. The Minor milestones are process deliverables (Level 4) or sub-process deliverables (level 5) also used in Variance Analysis.

Each Milestone will also be assigned appropriate coding for Status Reporting and Management Reporting.

Milestones must have zero duration and are used for measuring project progress.

Milestones may also be external constraints such as the completion of an activity, exterior to the project, affecting the project.

Activities

All activities will need to be developed based on Project Objectives, Project Scope , Major and Minor Milestones, meetings with the project team and the scheduler's full understanding of the project and it's processes.

Subdivide the elements down into smaller more manageable pieces that organize and define the total scope of work in Levels 5-6 that can be scheduled, costed, monitored and controlled. This process will develop the Activity List for the project.

Each activity is a discrete element of work and is the responsibility of one person to perform.

Each activity will describe the work to be performed using a verb and noun combination (i.e. Review Design Development Report).

Activities should not have durations longer than 2 update cycles, with exception of activities not yet defined in a "Rolling Wave".

Each activity will be assigned at WBS level 6 and appropriately coded for Status Reporting and Management Reporting.

These elements will become activities, interdependently linked in Project Schedules.

Project Logic

Once the WBS, Milestones and Activity List have been developed the activities and milestones can be linked in a logical manner starting with a Project Start Milestone. Every activity and milestone must be linked in a logical manner using either a Finish to Start (FS), Finish to Finish (FF), Start to Start (SS) or Start to Finish (SF) relationship. There can be no open-ended activities or milestones.

A Finish to Start (FS) is the preferred relationship.

When developing relationships avoid the use of lags and constraints in place of activities and logic.

Activity Duration

The activity duration (in days) is the estimated length of time it will take to accomplish a task.

Consideration needs to be taken in how many resources are needed and are available, to accomplish any activity. (Example: availability of Framers during a "Housing Boom".) Other factors are the type or skill level of the available resources, available hours of work, weather etc.

There will be several types of lists and schedules produced from this process, which will form part of the Progress Report.

Activity List

An Activity List identifies all activities including milestones required to complete the whole project.

Milestone List

A Milestone List identifies all project Major and Minor milestones.

Master Schedule

A Master Schedule is a schedule used for reporting to management at WBS level 4 and 5 that identifies the major activities and milestones derived from the detailed schedule. Cash Flow projections can be assigned at WBS level 5 for monitoring the Spending Plan.

Detailed Project Schedule

A Detailed Project Schedule is a schedule in reasonable detail (down to WBS Level 6 and 7) for progress monitoring and control, this will ensure that the schedule shall be in sufficient detail to ensure adequate planning and control.

1.3 Schedule Review and Approval

Once the scheduler has identified and properly coded all the activities; put them into a logical order and then determined the appropriate durations. The scheduler can then analyze the schedule to see if the milestone dates meet the contractual requirements and then adjust the schedule accordingly by changing durations, resource leveling or changing logic.

When the schedule has been satisfactorily prepared the scheduler can present the detailed schedule to the Project Team for approval and be Baseline. There may be several iterations before the schedule meets with the Project Teams agreement and the contractual requirements.

The final agreed version must be copied and saved as the Baseline to monitor variances for reporting purposes.

1.4 Schedule Monitoring and Control

Once Baseline the schedule can be better monitored, controlled and reports can be produced.

Monitoring is performed by, comparing the baseline activities % complete and milestone dates to the actual and forecast dates to identify the variance and record any potential delays, outstanding issues and concerns and provide options for dealing with any serious planning and scheduling issues in report form.

Analyze and report from early start sequence on all activities due to start, underway, or finished for the complete project.

There will be several reports generated from the analysis of the baseline schedule and will form part of the Time Management Report in the Required Services Sections (RS)

Progress Reports

A Progress Report reflects the progress of each activity to the date of the report, any logic changes, both historic and planned, projections of progress and completion the actual start and finish dates of all activities being monitored.

The Progress Report includes:

A Narrative Report, detailing the work performed to date, comparing work progress to planned, and presenting current forecasts. This report should summarize the progress to date, explaining current and possible deviations and delays and the required actions to resolve delays and problems with respect to the Detail Schedule, and Critical Paths.

Narrative reporting begins with a statement on the general status of the project followed by a summarization of delays, potential problems and project status criticality, any

potential delays, outstanding issues and concerns and options for dealing with any serious planning and scheduling issues.

A Variance Report, with supporting schedule documentation, detailing the work performed to date, comparing work progress to planned. This report should summarize the progress to date, explaining all causes of deviations and delays and the required actions to resolve delays and problems with respect to the Detail Schedule, and Critical Paths.

A Criticality Report identifying all activities and milestones with negative, zero and up to five days Total Float used as a first sort for ready identification of the critical, or near critical paths through the entire project.

Included in the Progress Report as attachments are: WBS chart, Activity Lists, Milestone Lists, Master Schedules, Detailed Project Schedule

Exception Report

The Scheduler is to provide continuous monitoring and control, timely identification and early warning of all unforeseen or critical issues that affect or potentially affect the project.

If unforeseen or critical issues arise, the Scheduler will advise the Project Manager and submit proposed alternative solutions in the form of an Exception Report.

An Exception Report will include sufficient description and detail to clearly identify:

1. Scope Change: Identifying the nature, reason and total impact of all identified and potential project scope changes affecting the project.
2. Delays and accelerations: Identifying the nature, the reason and the total impact of all identified and potential duration variations.
3. Options Enabling a Return to the project baseline: Identifying the nature and potential effects of all identified options proposed to return the project within baselined duration.

1.5 Standard Submissions

At each submission or deliverable stage provide a complete and updated Progress Report, the contents of each report will vary with requirements and at each project phase. Typically a Progress Report has:

1. Executive Summary;
2. Narrative Report;
3. Variances Report;
4. Criticality Report;
5. Exception Report (as required)
6. Work Breakdown Structure Chart;
7. Activity List;
8. Milestone List;
9. Master Schedule with Cash Flow Projections;
10. Detail Project Schedule (Network Diagram or Bar Charts);

1.6 Schedule Outputs and Reporting Formats

The sheet sizing and orientation is more a suggestion that a role, changes to the paper format may vary to accommodate the information and column information required.

Progress Reports

Paper Size: Letter

Paper Format: Portrait

Title Format: Project Title; Report Type; Print Date; Data Date; Revision Block

Body Text: Narratives for each report to match other reports generated in the D.S.S.

Variance Report Columns: Activity ID, Activity Name, Planned Finish, Revised Finish, Variance, Activity % Complete,

Criticality Report Columns: Activity ID, Activity Name, Duration, Start, Finish, Activity % Complete, Total Float.

Exception Reports

Paper Size: Letter

Paper Format: Portrait

Title Format: Project Title; Report Type; Print Date; Data Date; Revision

Body Text: Narrative to match other reports generated in the D.S.S.

Paper Size: Letter

Paper Format: Landscape

Title Format: Project Title; Report Type; Print Date; Data Date; Revision

Columns: Activity ID, Activity Name, Duration, Remaining Duration, Start, Finish, Total Float.

Work Breakdown Structure (indent tree):

Paper Size: Letter

Paper Format: Portrait

Columns: WBS Code, WBS Name, Duration, Cost estimate, start and finish dates.

Footer Format: Project Title; Report Type; Print Date; Data Date; Revision Block

Activity Lists

Paper Size: Letter

Paper Format: Portrait

Columns: Activity ID, Activity Name, Start, Finish, Predecessor, Successor.

Footer Format: Project Title; Report Type; Print Date; Data Date; Revision Block

Sort with Early Start, then Early Finish, then Activity ID and with the WBS.

Milestone Lists

Paper Size: Letter

Paper Format: Portrait

Footer Format: Project Title; Report Type; Print Date; Data Date; Revision Block
Columns: Activity ID, Activity Name, Start, Finish.

Sort with Early Start, then Early Finish, then Activity ID and without the WBS.

Master Schedule (Bar Chart)

Paper Size: 11X17
Paper Format: Landscape
Footer Format: Project Title; Report Type; Print Date; Data Date; Revision Block
Columns: Activity ID, Activity Name, Duration, Activity % Complete, Start, Finish,
Total Float.

Sort with Early Start, then Early Finish, then Activity ID and with the WBS.

Detailed Project Schedules (Bar Chart)

Paper Size: 11X17
Paper Format: Landscape
Footer Format: Project Title; Report Type; Print Date; Data Date; Revision Block
Columns: Activity ID, Activity Name, Duration, Activity % Complete, Start, Finish,
Total Float.

Sort with Early Start, then Early Finish, then Activity ID and with the WBS.

APPENDIX 'A' - Checklist for the Submission of Construction Documents to PWGSC

Last updated November 21, 2012

Date:		
Project Title:	Project Location:	
Project Number:	Contract Number:	
Consultant's Name:	PWGSC Project Manager:	
Review Stage:	66%	99%
	100%	

Item	Verified by:	Comments:	Action by:
Specifications:			
1 National Master Specifications			
1a The current edition of the NMS has been used.			
1b Sections have been included for all work identified on drawings and sections edited.			
2 Specification Organization			
2a Either the NMS 1/3 - 2/3 page format or the Construction Specifications Canada full page format is used.			
2b Each Section starts on a new page and the Project Number, Section Title, Section Number and Page Number show on each page.			
2c Specification date and consultant's name are not indicated.			
3 Terminology			
3a The term Departmental Representative is used instead of Engineer, PWGSC, Owner, Consultant or Architect.			
3b Notations such as: "verify on site", "as instructed", "to match existing", "example", "equal to", "equivalent to" and "to be determined on site by" are not used.			
4 Dimensions			
4a Dimensions are provided in metric only.			
5 Standards			
5a The latest edition of all references quoted is used.			

6 Specifications Materials			
6a The method of specifying materials uses recognized standards. Actual brand names and model numbers are not specified.			
6b Materials are specified using standards and performance criteria (if not, the correct form of acceptable materials has been used).			
6c Identify if non-restrictive, non-trade name “prescription” or “performance” specifications are used.			
6d Indicate if a list of acceptable materials have been used.			
6e The term “Acceptable Manufacturers” is not used.			
6f No sole sourcing has been used.			
6g If sole sourcing has been used, the correct wording has been used and a justification provided to RPCD for the sole sourced products.			
7 Unit Prices			
7a Unit prices are used only for work that is difficult to estimate.			
8 Cash Allowances			
8a Indicate if cash allowances have been used.			
9 Warranties			
9a Indicate if warranties extend more than a 12 or 24 months period.			
9b Manufacturers guarantees are not indicated.			
10 Scope of Work			
10 No paragraphs noted as “Scope of Work” are included.			
11 Summary and Section Includes			
11a In part 1 of section, paragraphs “Summary” and “Section Includes” are not used.			
12 Related Sections			
12a The list of related sections and appendices are coordinated.			
13 Index			
13a The index shows a complete list of plans and specification sections with the correct number of pages and correct drawing titles and section names.			
14 Regional Guide Specifications			
14a General Instructions is included (Section 01 00 10 in the NCA).			

15 Health and Safety			
15a Section 01 35 29.06 - Health and Safety Requirements is included.			
16 Designated Substances Report			
16 a Section 01 14 25 - Designated Substances Report is included.			
17 Subsurface Investigation Reports			
17a Subsurface Investigation Reports are included in Division 31.			
18 Experience and qualifications			
18a Experience and qualification requirements do not appear in the specification sections			
19 Pre-qualifications			
19a There are no mandatory contractor and/or subcontractor pre-qualification requirements or references to certificates, transcripts or license numbers of a trade or subcontractor being included in the bid.			
20 Contracting Issues			
20a Contracting issues do not appear in the specifications.			
20b Division 00 of the NMS is not used.			
21 Quality Issues			
21a There are no specification clauses with square brackets “[]” or lines “_” indicating that the document is incomplete or missing information.			

Item	Verified by:	Comments:	Action By:
Drawings:			
1 Title Blocks			
1a The PWGSC title block is used.			
2 Dimensions			
2a Dimensions are provided in metric only.			
3 Trade Names			
3a Trade names are not used.			
4 Specification Notes			
4a There is no specification type notes.			
5 Terminology			
5a The term Departmental Representative is used instead of Engineer, PWGSC, Owner,			

Consultant or Architect.			
5b Notations such as: “verify on site”, “as instructed”, “to match existing”, “example”, “equal to”, “equivalent to” and “to be determined on site by” are not used.			
6 Information to be included			
6a Architectural and Engineering Drawings have been stamped and signed by the design authority.			
6b The project quantity and configuration, dimensions and construction details are included.			
6c References to future work and elements not in contract do not appear or are kept to an absolute minimum and clearly marked.			

I confirm that the plans and specifications have been thoroughly reviewed and that the items listed above have been addressed or incorporated. I acknowledge and accept that by signing, I am certifying that all items noted above have been addressed.

Consultant's Representative: _____

Firm name: _____

Signature: _____ Date: _____

APPENDIX 'B' - Sample of Addendum

Last updated April 22, 2008

ADDENDUM No. _____

Project Number: _____

The following changes in the bid documents are effective immediately. This addendum will form part of the contract documents

DRAWINGS

SPEC NOTE: indicate drawing number and title, then list changes or indicate revision number and date, and re-issue drawing with addendum.

- 1 A1 Architectural
- .1

SPECIFICATIONS

SPEC NOTE: indicate section number and title.

- 1 Section 01 00 10 - General Instructions

SPEC NOTE: list all changes (i.e. delete, add or change) by article or paragraph

- .1 Delete article (xx) entirely.
- .2 Refer to paragraph (xx.x) and change ...
- 2 Section 23 05 00 - Common Work Results - Mechanical
- .1 Add new article (x) as follows:

APPENDIX 'C' - Sample of Index

Last updated April 22, 2008

Project No: _____

Index
Page 1 of ____

DRAWINGS AND SPECIFICATIONS

DRAWINGS:

SPEC NOTE: List all Drawings by number and title.

- C-1 Civil
- L-1 Landscaping
- A-1 Architectural
- S-1 Structural
- M-1 Mechanical
- E-1 Electrical

SPECIFICATIONS:

SPEC NOTE: List all Divisions, Sections (by number and title) and number of pages.

<u>DIVISION</u>	<u>SECTION</u>	NO. OF PAGES
DIVISION 01	01 00 10 - General Instructions.....XX
	01 14 25 - Designated Substances Report.....XX
	01 35 30 - Health and Safety.....XX
DIVISION 23	23 xx xx	
DIVISION 26	26 xx xx	

APPENDIX 'D'

USER MANUAL ON DIRECTORY STRUCTURE AND NAMING CONVENTION STANDARDS FOR CONSTRUCTION TENDER DOCUMENTS ON CD ROM

Issued by:

Real Property Contracting Directorate

PWGSC

May 2005

Last Updated: June 3, 2008

Version 1.0

PREFACE

The Government of Canada (GoC) has committed to move towards an electronic environment for the majority of the services it offers. This covers the advertisement and distribution of contract opportunities, including construction solicitations. As a result, it is necessary to obtain a copy of construction drawings and specifications (in PDF format **without** password protection) on one or multiple CD-ROM to facilitate for the GoC the transfer of the construction drawings and specifications electronically to the Government Electronic Tendering System (GETS).

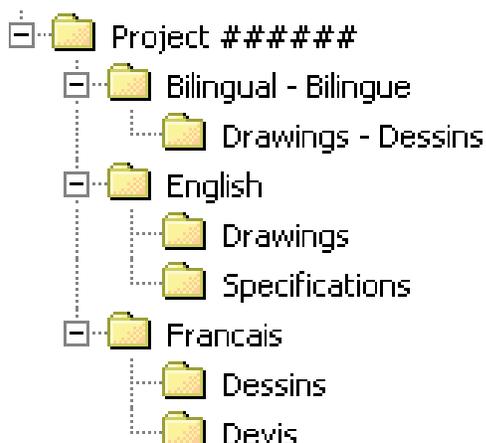
There is therefore a need to adopt a common directory structure and file-naming convention to ensure that the information made available to contractors electronically and in hard (printed) copy is in accordance with the sequence adopted in the real property industries, both for design and construction. This manual defines the standard to be followed by both consultants and print shops at time of formatting and organizing the information, whether drawings and specifications are created by scanning print documents or saved as PDF files from the native software (AutoCAD, NMS Edit, MS-Word, etc...) in which these were created.

It is important to note that the procedure described in this manual is not an indication that consultants are relieved from following the established standards for the production of drawings and specifications. The sole purpose of this manual is to provide a standard for the organization and naming of the electronic files that will be recorded on CD-ROM.

1. DIRECTORY STRUCTURE

1.1 1st, 2nd and 3rd Tier Sub-Folders

Each CD-ROM, whether it is for the original solicitation (tender call) or for an amendment (addendum), must have the applicable elements of the following high-level Directory Structure created:



The following important points are to be noted about the Directory Structure:

- f The “*Project #####*” folder is considered the 1st Tier of the Directory Structure where *#####* represents each digit of the Project Number. The Project Number must always be used to name the 1st Tier folder and it is always required. Free text can be added following the Project Number, to include such things as a brief description or the project title;
- f The “*Bilingual - Bilingue*”, “*English*” and “*Français*” folders are considered the 2nd Tier of the Directory Structure. The folders of the 2nd Tier **cannot** be given any other names since GETS uses these names for validation purposes. At least one of the “*Bilingual - Bilingue*”, “*English*” and “*Français*” folders is always required, and these must always have one of the applicable sub-folders of the 3rd Tier;
- f The “*Drawings - Dessins*”, “*Drawings*”, “*Specifications*”, “*Dessins*” and “*Devis*” folders are considered the 3rd Tier of the Directory Structure. The folders of the 3rd Tier **cannot** be given any other names since GETS also uses these names for validation purposes. There must be always at least one of the applicable 3rd Tier folder in each document.

IMPORTANT: The applicable elements of the Directory Structure (1 st , 2 nd and 3 rd Tier folders) are always required and cannot be modified.

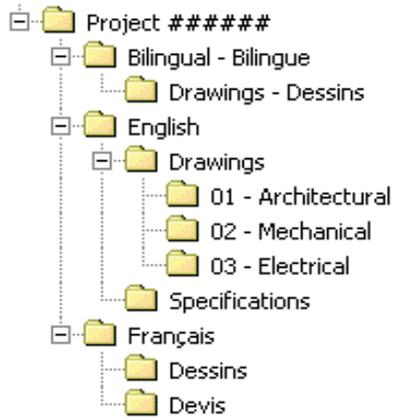
1.2 4th Tier Sub-Folders for Drawings

The “*Drawings – Dessins*”, “*Drawings*” and “*Dessins*” folders must have 4th Tier sub-folders created to reflect the various disciplines of the set of drawings.

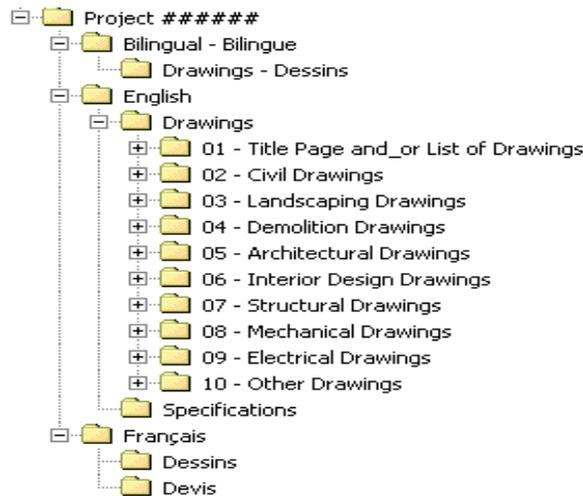
Because the order of appearance of the sub-folders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the sub-folders in the “Drawings – Dessins”, “Drawings” and “Dessins” folders.

Note: The first sub-folder must be always reserved for the Title Page and/or the List of Drawings unless the first drawing of the set is an actual numbered discipline drawing.

Examples of 4th Tier sub-folders for drawings:



or



1.2.1 Naming Convention

The 4th Tier sub-folders for drawings must adhere to the following standard naming convention.

For the “*Drawings*” and “*Dessins*” folders:

- Y

Where:

= A two digit number ranging from 01 to 99 (leading zeros must be included)

Y = The title of the folder

Example: 03 – Mechanical

For the “*Drawings - Dessins*” folder:

- Y - Z

Where:

= A two digit number ranging from 01 to 99 (leading zeros must be included)

Y = The English title of the folder

Z = The French title of the folder

Example: 04 - Electrical - Électricité

It should be noted that the numbering of the 4th Tier sub-folders is for sorting purposes only and is not tied to a specific discipline. For example, “*Architectura*” could be numbered 05 for a project where there is four other disciplines before “*Architectura*” in the set of drawings or 01 in another project where it’s the first discipline appearing in the set.

It is essential to ensure that the order of the drawings on the CD-ROM be exactly the same as in the hard copy set. GETS will sort each drawing for both screen display and printing as per the following rules:

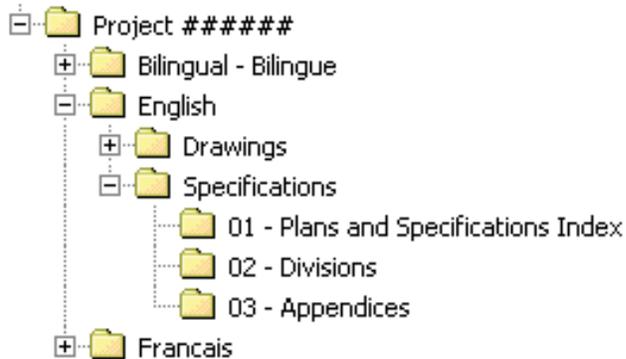
- f* The alphanumerical sorting is done on an ascending order;
- f* The alphanumerical order of the sub-folders determines the order of appearance on the screen as well as the order of printing (as an example: all the drawing PDF files in the 01 sub-folder will be printed in alphanumerical order before the drawings in the 02 sub- folder etc...);
- f* Each drawing PDF file within each sub-folder will also be sorted alphanumerically. This will determine the order of appearance on the screen as well as the order of printing (i.e. Drawing A001 will be printed before Drawing A002, Drawing M02 before Drawing M03, etc...).

1.3 4th Tier Sub-Folders for Specifications

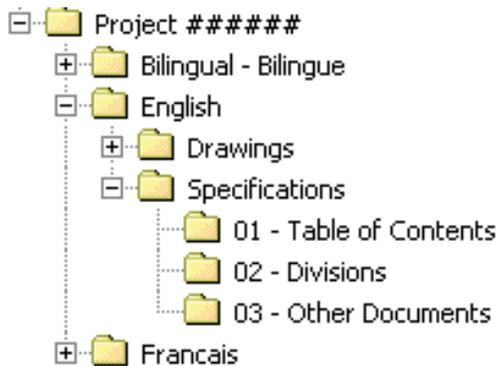
The “*Specifications*” and “*Devis*” folders must have 4th Tier sub-folders created to reflect the various elements of the specifications.

Because the order of appearance of the sub-folders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the sub-folders in the “Specifications” and “Devis” folders.

Examples of 4th Tier sub-folders for specifications:



or



1.3.1 Naming Convention

The 4th Tier sub-folders for specifications must adhere to the following standard naming convention.

For the “Specifications” and “Devis” folders:

- Y

Where:

= A two digit number ranging from 01 to 99 (leading zeros must be included)

Y = The title of the folder

Example: 02 – Divisions

It should be noted that the numbering of the 4th Tier sub-folders is for sorting purposes only and is not tied to an element of the specifications.

It is essential to ensure that the order of the elements of the specifications on the CD-ROM be exactly the same as in the hard copy. GETS will sort each element of the specifications for both

screen display and printing as per the following rules:

- f* The alphanumerical sorting is done on an ascending order;
- f* The alphanumerical order of the sub-folders determines the order of appearance on the screen as well as the order of printing (as an example: all the specifications PDF files in the 01 sub-folder will be printed, in alphanumerical order before the PDF files in the 02 sub-folder, etc...);
- f* Each specifications PDF file within each sub-folder will also be sorted alphanumerically. This will determine the order of appearance on the screen as well as the order of printing (i.e. Division 01 will be printed before Division 02, 01 - Appendix A before 02 - Appendix B, etc...).

2. NAMING CONVENTION FOR PDF FILES

Each drawing, specifications division or other document that are part of the tender documents must be converted in PDF format (without password protection) in accordance with the following standard naming convention and each PDF file must be located in the appropriate sub-folder of the Directory Structure.

2.1 Drawings

Each drawing must be a **separate single page** PDF file. The naming convention of each drawing must be:

X### - Y

Where:

- X = The letter or letters from the drawing title block (“A” for Architectural or “ID” for Interior Design for example) associated with the discipline
- ### = The drawing number from the drawing title block (one to three digits)
- Y = **The drawing name from the drawing title block (for bilingual drawings, the name in both English and French is to appear)**

Example: A001 - First Floor Details

Each drawing that will be located in the appropriate discipline 4th Tier sub-folders must be named with the same letter (“A” for Architectural Drawings for example) and be numbered. The drawing number used to name the PDF file must match as much as possible the drawing number of the actual drawing (the exception being when leading zeros are required).

The following important points about drawings are to be noted:

- f* The drawing PDF files within each sub-folder are sorted alphanumerically for both displaying and printing. If there are more than 9 drawings in a particular discipline the numbering must use at least two numerical digits (i.e. A01 instead of A1) in order to avoid displaying drawing A10 between A1 and A2. The same rule applies when there are more than 99 drawings per discipline i.e. three digits instead of two must be used for the numbering (for example M003 instead of M03);

- f If drawing PDF files are included in the “*Bilingual - Bilingue*” folder, these cannot be included as well in the “*English*” and/or “*Français*” folders;
- f If drawings not associated with a particular discipline are not numbered (Title Page or List of Drawings for example), these will be sorted alphabetically. While this does not represent a problem if there is only one drawing in the sub-folder, it could disrupt the order when there are two or more drawings. If the alphabetical order of the drawings name does not represent the order on the hard copy set, the drawings are to be named as per the following standard convention when converted in PDF format to ensure proper display and printing order.

- Y

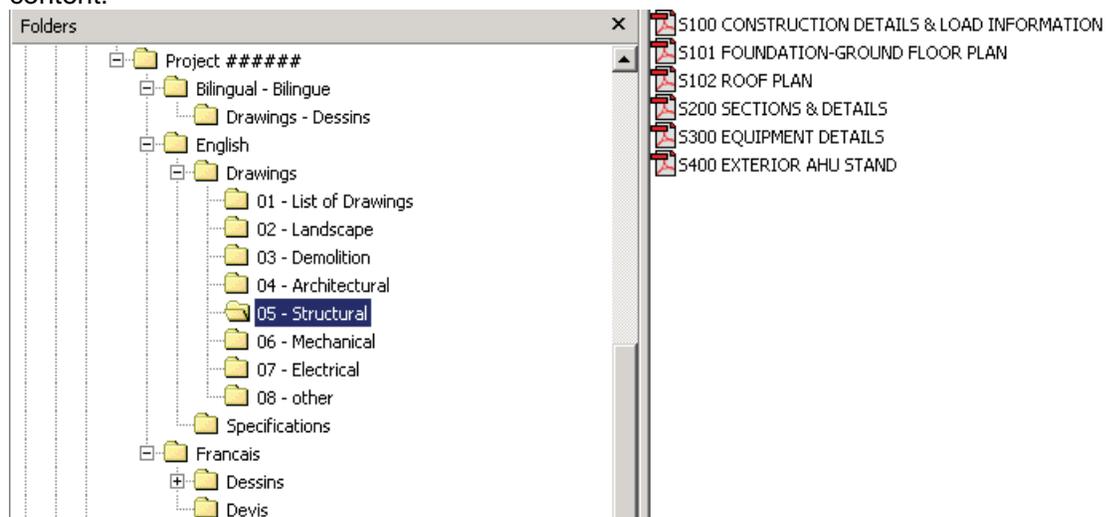
Where:

= A two digit number ranging from 01 to 99 (leading zeros must be included)
 Y = The name of the drawing

Example: 01 - Title Page
 02 - List of Drawings

If numbers are not used in the PDF files name, “*List of Drawings*” will be displayed before “*Title Page*” because “L” comes before “T” in the alphabet.

Example of a 4th Tier Drawings sub-folder’s content:



2.2. Specifications

Each Specifications Division must be a separate PDF file and all pages contained in each PDF file must have the same physical size (height, width). The Plans and Specifications Index must

also be a separate PDF file. If there are other documents that are part of the Specifications (e.g. Appendix or other) these are to be separate PDF files as well.

2.2.1 Documents other than Specifications Divisions

Because PDF files within the Specifications sub-folders are sorted alphanumerically (in ascending order) for both on screen display and printing order, all files that appear in folders other than the “*Divisions*” sub-folder must be named using a number:

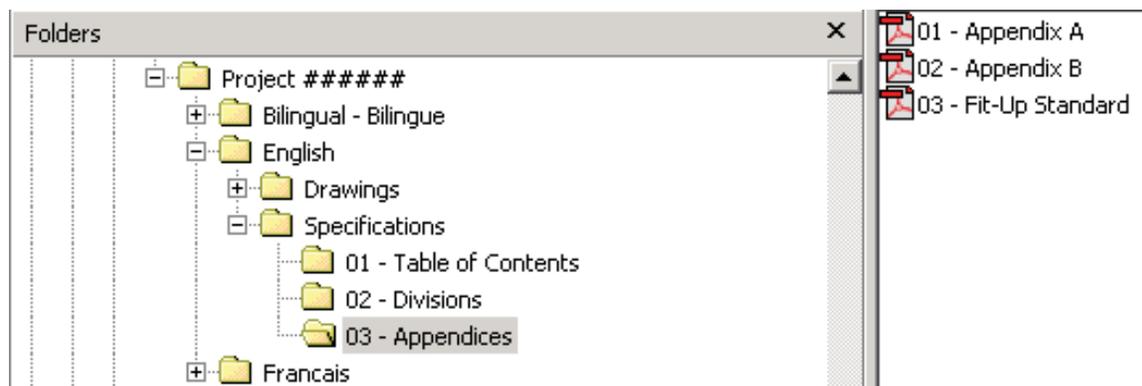
- Y

Where:

= Two digit number ranging from 01 to 99 with leading zeros required
Y = Name of the document

Example: 01 - Plans and Specifications Index

Example of a sub-folder content (sub-folder other than “*Divisions*”):



2.2.2 Specifications Divisions

The Specifications Divisions must be named as follows:

Division ## - Y

Where:

Division ## = The actual word “*Division*” followed by a space and a two digit number ranging from 01 to 99 (with leading zeros required)

Y = Name of the Specifications Division as per **CSC/CSI MasterFormat™**

Example: Division 05 – Metals

The following important point about specifications is to be noted:

- f The Numbering of the Divisions **cannot** be altered from **CSC/CSI MasterFormat™** even if some Divisions are not used in a given project. For example, Division 05 will always remain Division 05 even if Division 04 is not used for a given project.

Example of a “Divisions” sub-folder content:



3. CD-ROM LABEL

Each CD-ROM is to be labeled with the following information:

Project *Number* / *Numéro* de projet
Project *Title* / *Titre* du projet
Documents for Tender / Documents pour appel d'offres
CD *X* of/de *X*

Example:

Project 123456 / Projet 123456
Repair Alexandra Bridge / Réparation du pont Alexandra

Documents for Tender / Documents pour appel d'offres
CD 1 of/de 1

APPENDIX 'E'

BASIC REFERENCE GUIDE ON CONVERTING CONSTRUCTION DRAWINGS INTO PORTABLE DOCUMENT FORMAT (PDF)

Issued by:
Real Property Contracting Directorate
PWGSC

May 2005 Last Updated: May 3, 2005

Version 1.0

PREFACE

Portable Document Format (PDF) is the standard format for documents that are posted on the Government Electronic Tendering System (GETS). There is therefore a need to obtain from architectural and engineering consultants an electronic copy of drawings and specifications in PDF for tendering Government of Canada (GoC) construction projects.

In order to have the highest quality in term of resolution and printing, consultants should to the greatest extent possible have the PDF drawing and specification files derived from the native software in which they were created. Scanning is permissible but only in special circumstances, for example when there is no electronic version of a drawing being included in a construction tender package.

The purpose of this document is to provide basic information on the conversion of Computer Aided Design and Drafting (CADD) drawings in PDF. Creating a PDF file from a CADD drawing is a relatively simple process once all the necessary configurations and settings are in place. It actually should not take any longer than it would take to create a plot file or to send a drawing to a printer. The information in this guide is not intended to cover all technical aspects of the conversion, which can be done using various methods, but rather to highlight important points about the process and file settings. The conversion of specifications is not covered in this basic reference guide since it does not require any special configuration or setting.

The information provided in this basic reference guide is not an indication that consultants are relieved from following the established standards for the production of drawings and specifications. The sole purpose of this guide is to provide basic information on the PDF conversion process bearing in mind that additional detailed technical information is available from the various software manufacturers.

1. PRINTER DRIVERS

Adobe Acrobat provides two different printer drivers that are able to convert CADD drawing into PDF format, Acrobat PDF Writer and Acrobat Distiller. Before creating a PDF file from a CADD drawing, a choice must be made as to which one will be used.

Acrobat PDF Writer is a non-PostScript printer driver that works best with documents that don't contain complex graphics

Acrobat Distiller is a PostScript printer driver that works best with documents that contain PostScript fills, Encapsulated PostScript (EPS) graphics, or other complex elements.

It is recommended that Acrobat Distiller be used to create PDF file of architectural and engineering drawings due to their size and complex graphical nature.

2. PRINTER CONFIGURATION

Before converting a CADD drawing to PDF, an Acrobat printer configuration file for the PDF paper size needs to be created. This function can be done in the CADD software rather than using a custom paper size defined for the Acrobat distiller feature. The recommended method is to add a PostScript Adobe plotter in the CADD software and making the necessary setting in terms of media source and size, scale and orientation. The configuration can then be re-used to simplify the conversion process for future files that use the same page size.

As an alternative, although not recommended, a custom-defined size can be created in Acrobat Distiller in the *properties* menu.

3. CREATING PDF FILES

Once the printer configuration has been done in the CADD software, open up Acrobat Distiller and make the necessary settings in the *preferences* and *job options* sub-menu. Ensure that the page size match the sheet size selected in the CADD software to create the file. Particular settings can be saved under different names for future use.

With the Acrobat Distiller application open, ensure the required sheet size is displayed in the *job options* window. Then it is simply a matter of bringing the CADD file into the Acrobat Distiller creation box.

A progress bar will show during the conversion and the newly converted PDF file should open up and be displayed for verification.

4. PDF FILES SETTINGS

4.1 Security

Adobe Acrobat contains security features that can be used to secure the files by restricting any changes to the files. However, since the files will be posted on GETS and will be used for printing copies, the files **must not** be password protected and **must** allow printing.

4.2 Drawing Orientation

The final PDF drawing files must be displayed on the screen in the same direction that the users are intended to view them. This can be achieved by adjusting the setup of the plotter. If the drawing is not oriented properly after the conversion, it can be rotated manually within Adobe Acrobat.

4.3 Font Type

In order to avoid any problems during the conversion and to minimize the potential for font display errors, the fonts used for the production of construction drawings must be *PostScript or True Type fonts*.

4.4 Resolution

Since the PDF files will be used for printing, it is important that a proper resolution be selected. It is recommended to select 600 dots per inch (dpi).

4.5 Scale

When choosing the Plot scale in Adobe, it is important to choose the 1:1 scale to ensure the integrity of the scale from which the drawings were created in the CADD software.

5. SCANNING

Scanning is not recommended and should be done only when the drawing is not available electronically. When scanning a drawing, it is important that it be done in real size (scale 1:1) to ensure that the scale remains intact in subsequent printing. It is recommended that each scanned drawing be opened and verified to ensure that the resolution, scale and border are of an acceptable quality.

6. FINAL CHECKLIST

When the drawing file has gone through the PDF conversion, it is recommended to open it and verify the following:

- That the sheet size displayed is what was intended to be created (the size is viewable in the lower left corner of the drawing).
- That the orientation of the sheet is correct.
- That the line types, line weights and fonts match the CADD drawing.
- That the PDF file is in black and white.
- That each drawing is a single PDF file.
- That the PDF file is not password protected and printable.

If all the items are verified, the PDF file is useable

7. ADDITIONAL INFORMATION

For more information about the creation of PostScript and EPS files please refer to the User's Guide of the CADD software being used to produce the drawings. For more information about creating PDF file please refer to the Acrobat Distiller User's Guide and/or visit the Adobe Web site at www.adobe.com.

Solicitation No. - N° de l'invitation
ED001-151289/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur
pwb020

Client Ref. No. - N° de réf. du client
R.073771.008

File No. - N° du dossier
PWB-4-37098

CCC No./N° CCC - FMS No./N° VME

SUBMISSION REQUIREMENTS AND EVALUATION

- SRE 1 General Information
- SRE 2 Proposal Requirements
- SRE 3 Submission Requirements and Evaluation
- SRE 4 Price of Services
- SRE 5 Total Score
- SRE 6 Submission Requirements – Checklist

SUBMISSION REQUIREMENTS AND EVALUATION (SRE)

SRE 1 GENERAL INFORMATION

1.1 Reference to the Selection Procedure

An 'Overview of the Selection Procedure' can be found in R1410T General Instructions to Proponents (GI3).

1.2 Calculation of Total Score

For this project the Total Score will be established as follows:

Technical Rating x 90% = Technical Score (Points)

Price Rating x 10% = Price Score (Points)

Total Score = Max. 100 Points

SRE 2 PROPOSAL REQUIREMENTS

2.1 Requirement for Proposal Format

The following proposal format information should be implemented when preparing the proposal.

- Submit one (1) bound original plus [six (6)] bound copies of the proposal
- Paper size should be - 216mm x 279mm (8.5" x 11")
- Minimum font size - 11 point Times or equal
- Minimum margins - 12 mm left, right, top, and bottom
- Double-sided submissions are preferred
- One (1) 'page' means one side of a 216mm x 279mm (8.5" x 11") sheet of paper
- 279mm x 432 mm (11" x 17") fold-out sheets for spreadsheets, organization charts etc. will be counted as two pages.
- The order of the proposals should follow the order established in the Request for Proposal SRE section

2.2 Specific Requirements for Proposal Format

The maximum number of pages (including text and graphics) to be submitted for the Rated Requirements under SRE 3.2 is thirty-two (32) pages.

The following are not part of the page limitation mentioned above;

- Covering letter
- Consultant Team Identification (Appendix A)
- Declaration/Certifications Form (Appendix B)
- Code of Conduct Certifications
- Front page of the RFP
- Front page of revision(s) to the RFP
- Price Proposal Form (Appendix C)

Consequence of non-compliance: any pages which extend beyond the above page limitation and any other attachments will be extracted from the proposal and will not be forwarded to the PWGSC Evaluation Board members for evaluation

SRE 3 SUBMISSION REQUIREMENTS AND EVALUATION

3.1 Mandatory Requirements

Failure to meet the mandatory requirements will render the proposal as non-responsive and no further evaluation will be carried out.

Note: any pages which extend beyond the above page limitation and any other attachments will be extracted from the proposal and will not be forwarded to the PWGSC Evaluation Board members for evaluation.

3.1.1 Licensing, Certification or Authorization

The proponent shall be an architectural firm or joint-venture team authorized to provide the necessary professional services to the full extent that may be required by provincial law in the Province of Prince Edward Island.

3.1.2 Consultant Team Identification

Note: proponents are permitted to expand their Consultant Team to include additional disciplines.

Information required - name of firm, key personnel to be assigned to the project. For the Proponent and the Sub-Consultants, indicate current license, or how you intend to meet the Prince Edward Island provincial licensing requirements. In the case of a joint venture identify the existing or proposed legal form of the joint venture (refer to R1410T General Instructions to Proponents, GI9 Limitation of Submissions).

An example of an acceptable format (typical) for submission of the team identification information is provided in Appendix A.

The consultant team to be identified must include the following:

PROPONENT (Prime Consultant):

1. **Architect** or architectural firm with a minimum of 10 years demonstrated experience in Architectural Conservation and specific expertise in heritage mass masonry building envelope conservation.

SUB-CONSULTANTS:

1. **Conservation Structural Engineer** (or joint-venture team of Structural Engineers) with a minimum of ten (10) full years of experience in the analysis and remediation of mass masonry heritage buildings. Experience in conservation and repair of heavy timber will also be considered an asset.
2. **Mechanical Engineer** with a minimum of ten (10) years practice experience in the design of mechanical systems. Experience in the introduction of contemporary mechanical systems within heritage buildings will be considered an asset.
3. **Electrical Engineer** with a minimum of ten (10) years practice experience in the design of building electrical systems. Experience in the introduction of contemporary electrical systems within heritage buildings will be considered an asset.

SPECIALIST CONSULTANTS:

- 1. Masonry Conservator*** with a minimum of ten (10) years practicing experience. The Masonry Conservator's qualifying experience must include the following types of work:

- Work with masonry of the type at issue (e.g. sandstone ashlar masonry units with very fine tolerances, mass masonry with rubble core, etc.)
- Condition assessment, investigation and recording of masonry.
- Specification and analysis of testing of stone and mortar
- Performance of on-site mortar tests, such as Vicat cone penetration
- Sourcing of equivalent new stone and mortar to match existing materials
- Specification, performance and supervision of stone repairs, including Dutchman repair, plastic repair, stone consolidation, dressing back, DHL injection grouting, gravity and low-pressure grouting and crack repairs.
- Performing specialized masonry repairs: e.g. to sculptural elements.

***Definition of Masonry Conservator:**

Company or individual, who investigates, specifies and supervises architectural masonry conservation work. A masonry conservator has hands-on masonry repair expertise and is able to personally carry out, and train masons to carry out, specialized masonry repairs.

Note: Masonry Conservator services will be engaged at rates on an as-required basis based on the levels of effort indicated in the price proposal form Appendix C or as otherwise required as directed by the Departmental representative.

- 2. Cost Specialist** with a minimum of ten (10) years experience in estimating all aspects of masonry conservation work from design to construction completion; identifying and estimating cost risks, construction trades, escalation inflation and contingency costs and using cost control tools on masonry conservation projects. Must demonstrate experience in the identification of work break down packages, building and controlling project schedules for heritage masonry projects, and with experience in identification of schedule risks and mitigation strategies.

Note: Cost Specialist services (including the enhanced level of effort indicated in the Additional Services section below) are to be included in the percentage-based professional fees.

3.1.3 Declaration/Certifications Form

Proponents must complete, sign and submit the following:

- Appendix B, Declaration/Certifications Form as required.

3.1.4 Code of Conduct Certifications

Proponents who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Proponent. Proponents bidding as sole proprietorship, including those bidding as a joint venture, must provide the name of the owner with their bid or promptly thereafter. Proponents bidding as societies, firms, partnerships or associations of persons do not need to provide lists of names. If the required names have not been received by the time the evaluation of bids is completed, Canada will inform the Proponent of a time frame within which to provide the information. Failure to comply will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

3.2 Rated Requirements

3.2.1 Achievements of Proponent on Projects

Describe the Proponent's accomplishments, achievements and experience as prime consultant on projects.

Select a maximum of three [3] heritage stone masonry conservation projects undertaken within the last ten [10] years, demonstrating experience as Primary Consultant on projects of similar complexity to this project.

Joint venture submissions are not to exceed the maximum number of projects. Only the first three [3] projects listed in sequence will receive consideration and any others will receive none as though not included.

Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project (e.g. Complexity, requirements for investigation, and/or resolution of technical issues).
- brief project description and intent. Narratives should include a discussion of design philosophy / approach to meet the intent, design challenges and resolutions.

- budget control and management - i.e. contract price & final construction cost - explain variation
- project schedule control and management - i.e. initial schedule and revised schedule - explain variation
- client references - name, address, phone and fax of client contact at working level - references may be checked
- names of key personnel responsible for project delivery
- awards received

The Proponent (as defined in R1410T General Instructions to Proponents, GI2 Definitions) must possess the knowledge on the above projects. Past project experience from entities other than the Proponent will not be considered in the evaluation unless these entities form part of a joint venture Proponent.

Please indicate those projects which were carried out in joint venture and the responsibilities of each of the involved entities in each project.

Additionally, if applicable, indicate where project experience was in collaboration with sub-consultants and/or specialist consultants that are proposed for this project.

3.2.2 Achievements of Key Sub-consultants and Specialists on Projects

Describe the accomplishments, achievements and experience either as prime consultant or in a sub-consultant capacity on projects. If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

Select a maximum of three [3] projects undertaken within the last ten [10] years per key sub-consultant or specialist. Only the first three [3] projects listed in sequence (per key sub-consultant or specialist) will receive consideration and any others will receive none as though not included.

Each discipline of Engineer and the Cost/Scheduling specialist will use a maximum of one (1) page per project.

The Masonry Conservator will use a maximum of two (2) pages per project.

Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives should include challenges and resolutions.

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- client references - name, address, phone and fax of client contact at working level
- references may be checked
- names of key personnel responsible for project delivery (all stages)
- awards received

The Masonry Conservator's submission must refer to some or all of the seven (7) types of work listed in the Masonry Conservator's qualifying experience in Section 3.1.2 Masonry Conservator.

3.2.3 Achievements of Key Personnel on Projects

Describe the experience and performance of key personnel to be assigned to this project regardless of their past association with the current proponent firm. This is the opportunity to emphasize the strengths of the individuals on the team, to recognize their past responsibilities, commitments and achievements, and to clearly demonstrate that they meet the mandatory experience requirements noted in 3.1.2

Projects demonstrating the successful previous collaboration of the prime consultant and the conservation structural engineer will be considered an asset.

Use a maximum of one (1) page per person

Information that should be supplied for each key personnel:

- professional accreditation
- post-graduate level qualification in Heritage Conservation if applicable
- accomplishments/achievements/awards
- relevant experience, expertise, number of years experience of the required types
- role, responsibility and degree of involvement of individual in example projects

3.2.4 Understanding of the Project

The proponent shall demonstrate their understanding of the goals of the project, the functional/technical requirements, the constraints, major challenges and other issues that will shape the end product.

Information that should be supplied:

- Significant issues, challenges and constraints
- Review schedule and cost information and discuss risk management elements that may affect the project
- A description of the proponent's approach and rationale to conserving deteriorated heritage building assemblies;
- A description of the considerations which will influence decisions and materials selection and design
- Discuss means of delineating and addressing stabilization and repair of bulged and voided heavy masonry bearing walls and claddings, settled and otherwise misaligned/rotated major stone masonry elements etc.

3.2.5 Management of Services

The Proponent shall describe how he /she proposes to perform the services and meet the constraints; how the services will be managed to ensure continuing and consistent control as well as production and communication efficiency; how the team will be organized and how it will fit within the existing structure of the firms; to describe how the team will be managed. The proponent is also to identify the sub-consultant disciplines and specialists required to complete the consultant team and how their services will be managed and coordinated.

The proponent shall specifically address in their proposal their proposed means of controlling quality in the products of the consultant services. Reference PD5 for detail on PWGSC's quality assurance approach.

This project is seen as requiring a particularly close collaboration between the disciplines of Conservation Architecture and Conservation Structural Engineering. Particular care should be taken to indicate how this collaboration will be achieved and how conflicts will be resolved.

If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

Use a maximum of five (5) pages.

Information that should be supplied:

- Confirm the makeup of the full project team including the names of the consultant's sub-consultants' and specialists' personnel and their roles on the project.
- Organization chart with position titles and names (Consultant team); joint venture business plan, team structure and responsibilities, if applicable
- What back-up will be committed
- Work Plan - preliminary breakdown of work tasks and deliverables
- Indicate how the work plan and schedule will be managed
- Preliminary Communication strategies
- Response time: demonstrate how the response time requirements outlined in PA-1.6 will be met

3.3 EVALUATION AND RATING

In the first instance, price envelopes will remain sealed and only the technical components of the proposals which are responsive will be reviewed, evaluated and rated by a PWGSC Evaluation Board in accordance with the following to establish Technical Ratings:

To be considered further, proponents must achieve a minimum Technical Rating of seventy-five (75) points out of the hundred (100) points available as specified above.

No further consideration will be given to proponents not achieving the pass mark of seventy-five (75) points.

Criterion	Weight Factor	Rating	Weighted Rating
Achievements of Proponent on Projects	2.5	0 - 10	0 - 25
Achievements of Key Sub-consultants / Specialists on Projects	1.5	0 - 10	0 - 15
Achievements of Key Personnel on Projects	2.0	0 - 10	0 - 20
Understanding the Project	1.5	0 - 10	0 - 15
Management of Services	2.5	0 - 10	0 - 25
Technical Rating	10		0 - 100

Generic Evaluation Table

PWGSC Evaluation Board members will evaluate the strengths and weaknesses of the Proponent's response to the evaluation criteria and will rate each criterion with even numbers (0, 2, 4, 6, 8 or 10) using the generic evaluation table below:

	INADEQUATE	WEAK	ADEQUATE	FULLY SATISFACTORY	STRONG
0 point	2 points	4 points	6 points	8 points	10 points
Did not submit information which could be evaluated	Lacks complete or almost complete understanding of the requirements.	Has some understanding of the requirements but lacks adequate understanding in some areas of the requirements.	Demonstrates a good understanding of the requirements.	Demonstrates a very good understanding of the requirements.	Demonstrates an excellent understanding of the requirements.
	Weaknesses cannot be corrected	Generally doubtful that weaknesses can be corrected	Weaknesses can be corrected	No significant weaknesses	No apparent weaknesses
	Proponent do not possess qualifications and experience	Proponent lacks qualifications and experience	Proponent has an acceptable level of qualifications and experience	Proponent is qualified and experienced	Proponent is highly qualified and experienced
	Team proposed is not likely able to meet requirements	Team does not cover all components or overall experience is weak	Team covers most components and will likely meet requirements	Team covers all components - some members have worked successfully together	Strong team - has worked successfully together on comparable projects
	Sample projects not related to this requirement	Sample projects generally not related to this requirement	Sample projects generally related to this requirement	Sample projects directly related to this requirement	Leads in sample projects directly related to this requirement
	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results

SRE 4 PRICE OF SERVICES

All price proposal envelopes corresponding to responsive proposals which have achieved the minimum score of seventy-five (75) points will be opened upon completion of the technical evaluation.

An average price is determined by adding all the price proposals together and dividing the total by the number of price proposals being opened.

All price proposals which are greater than twenty-five percent (25%) above the average price will be set aside and receive no further consideration.

The remaining price proposals are rated as follows:

- A. The lowest price proposal receives a Price Rating of 100
- B. The second, third, fourth and fifth lowest prices receive Price Ratings of 80, 60, 40, and 20 respectively. All other compliant price proposals receive a Price Rating of 0.
- C. On the occasions where two (or more) price proposals are identical, the matching price proposals receive the same rating and the corresponding number of following ratings is reduced accordingly.

The Price is multiplied by the applicable Price Rating per SRE 5 above in order to establish the Price Score.

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SRE 5 TOTAL SCORE

Total Scores will be established in accordance with the following:

Rating	Possible Range	% of Total Score	Score (Points)
Technical Rating	0 - 100	90	0 - 90
Price Rating	0 - 100	10	0 - 10
Total Score		100	0 - 100

The Proponent receiving the highest Total Score is the first entity that the Evaluation Board will recommend for the provision of the required services. In the case of a tie, the proponent receiving the higher technical score for the services will be selected.

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SRE 6 SUBMISSION REQUIREMENTS - CHECKLIST

The following list of documents and forms is provided with the intention of assisting the Proponent in ensuring a complete submission. The Proponent is responsible for meeting all submission requirements.

Please follow detailed instructions in R1410T General Instructions to Proponents, GI16 Submission of Proposal. Proponents may choose to introduce their submissions with a cover letter.

Team Identification - See typical format in Appendix A

Declaration/Certifications Form- Completed and signed - form provided in Appendix B

Integrity Provisions – Associated Information - List of directors/owners

Proposal - One (1) original plus six (6) bound copies

Front page of RFP - Completed and signed

Front page(s) of any - Completed and signed solicitation amendments

In a separate envelope:

Price Proposal Form - One (1) completed and submitted in a separate envelope in a separate envelope in accordance with Appendix C

Clearly addressed:

PRICE PROPOSAL

Province House Conservation Project

Charlottetown, P.E.I.

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PROJECT BRIEF

Description of Project

- PD 1 Project Information
- PD 2 Project Identification
- PD 3 Project Background
- PD 4 Existing Documentation
- PD 5 Project Objectives
- PD 6 Consultant Services

Description of Services

- PA 1 Project Administration

Required Services

- RS 1 Analysis of Project Requirements
- RS 2 Design Concept⁷³
- RS 3 Design Development
- RS 4 Construction Documents
- RS 5 Tender Call, Bid Evaluation & Construction Contract Award
- RS 6 Construction and Contract Administration
- RS 7 Commissioning the Facility
- RS 8 Risk Management

Additional Services

- AS 1 Cost and Schedule Planning
- AS 2 Bilingual Construction Documents
- AS 3 Resident Site Services During Construction

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This Project Brief is divided into two sections:

- **Description of Project**
- **Description of Services**

Project Administration
Required Services
Additional Services

For standards relating to the service provisions herein please refer to the document "Doing Business with A&ES". The standards in "Doing Business with A&ES" must be adhered to in conjunction with this scope of services.

DESCRIPTION OF PROJECT

PD 1 PROJECT INFORMATION

Public Works and Government Services Canada (PWGSC) intends to retain a firm of architects with related sub-consultants and specialist consultants for the provision of the services required for this project.

1.1 PWGSC Project Title: Province House Conservation

1.2 Location of the Project: 165 Richmond St. Charlottetown, PEI

1.3 PWGSC Project Number: R.073771.008

1.4 Client / User: Parks Canada Agency

1.5 PWGSC Project Manager: Tim Chandler, P.Eng

PD 2 PROJECT IDENTIFICATION

2.1 Description

This project is being undertaken by Public Works and Government Services Canada (PWGSC), Atlantic Region on behalf of Parks Canada Agency (PCA), Prince Edward

Island Field Unit. Province House is a significant heritage building and a National Historic Site of Canada. It is owned by the Province of Prince Edward Island, and PCA is responsible for ongoing maintenance of the building under the terms on a long-term memorandum of understanding.

2.1.1 Project Vision

The current project is focused on the following priorities:

- safe building occupancy;
- structural stability of both the building envelope and the building's internal structural systems; and
- repair of the building envelope to eliminate water infiltration and hazardous conditions that may exist due to as yet undiscovered deterioration.

It is intended that the current project will contribute to the building's comprehensive conservation and stabilization, by addressing the root causes of problems and by undertaking long-term repairs that will not need to be repeated in later stages. It is also intended that the building will be returned to habitable condition by the end of the current project, whether or not later phases of the project are identified or undertaken.

The project is seen as requiring close collaboration between the disciplines of conservation architecture and conservation structural engineering.

2.1.2 Objectives

This project is an assessment, analysis, recommendation for and implementation of a comprehensive building envelope conservation and structural repair of Province House NHSC.

The building will be returned to use by the PEI Legislative Assembly following the project.

The limited available funding for the project is such as to demand efficiency in the application of conservation measures; the goal is to address the highest priority health and safety-related structural and building envelope conservation issues as the first priority and to extend as far as possible into a full scope of required/recommended conservation work within the available capital resources.

The construction services will be engaged through a single stipulated price construction contract.

The building will be vacated for the duration of the planning design and construction phases for a maximum period of up to five years commencing February 2015.

2.2 Cost

The available construction funding for the project is \$15,000,000.00 excluding HST.

2.3 Schedule

The following timeframes are suggested for the various phases of the work:

Award of Consultant Contract:	Start
Complete RS 1:	20 weeks after award
Complete RS 4:	52 weeks after award
Construction Tender Call:	60 weeks after award
Construction Completion:	190 weeks after award
Warranty Period:	242 weeks after award

PD 3 PROJECT BACKGROUND

3.1 Description of Building and Site

Province House is a three-storey Classical Revival style building located in central Charlottetown, Prince Edward Island. It is owned by the Province of Prince Edward Island and continues to serve as the seat of the Legislative Assembly of that province. It has been operated and maintained since 1974 under a long-term lease agreement with Parks Canada Agency.

The building, originally called the Colonial Building, was designed by Island architect and builder Isaac Smith between 1839 and 1842 to house the provincial legislature, Supreme Court and government offices, and was constructed between 1843 and 1847. It is a rectangular building approximately 44 metres long by 16.7 metres wide, with large full-height porticos on the north and south elevations that project approximately 3.7 metres from the main building. Short projecting wings on the east and west ends of the building were added in 1844, following the first year of building construction. Key

elements on the interior of the building are its symmetrical design with balanced wings and central staircase, its principal second-floor rooms and its architectural detailing.

3.1.1 Foundations/Basement

The exterior foundation walls are founded on a sandstone footing and two base courses of sandstone approximately 91 mm wide. Above this base, the foundations are constructed of coursed sandstone with a rubble core. At the basement level, red Prince Edward Island sandstone was used for both inner and outer wythes of the foundation walls, as well as for interior bearing walls. The foundation walls are approximately 69 mm. wide at grade, topped with a slate damp-proof course. Concrete tunnels have been added at the east and west ends of the basement, to bring heating and other services to Province House from nearby buildings. Many openings have been made in the masonry bearing walls in the basement over the years, for the distribution of services. A battered concrete wall has been poured against the exterior of the foundation in the northwest quadrant, and other areas have recently been parged on the exterior, and covered with a waterproof membrane.

3.1.2 Exterior Walls

The exterior walls are of mass masonry, with an outer wythe of sandstone from the Pictou area of Nova Scotia, an inner wythe of soft red Prince Edward Island sandstone, and a rubble and mortar core. There are alternating courses of through-stones at window jambs, and iron cramps were installed in the exterior wythe as additional ties. The interior wythe at the projecting wings and porticos is of clay brick at the attic level. The original building contracts called for the walls to vary in thickness from 36 inches at the foundation to 24 inches at the third floor. Masonry features of the symmetrical building facades include horizontally rusticated stonework and belt course at the first floor level, ashlar facades above topped by a moulded cornice, Ionic pilasters at the building corners and porticos, and triangular pediments above some second-floor windows. The porticos on the north and south elevations feature arched openings and pilasters at the ground floor, with two-storey Ionic columns above supporting a cornice, a pedimented gable and a roof that is level with the main roof.

3.1.3 Windows and Doors

The building's wood windows include many original or very early components, while repairs in the early 1980s introduced reproduction elements. They are generally fixed fan-shaped windows at the basement level, six over six double-hung windows at the first and second floors, and three over three double-hung windows at the third floor. Some of the original cylinder glass panes remain, and the majority of glass replacement has been with cylinder glass. The building's four exterior doors are wooden reproductions dating from the 1980s.

3.1.4 Roofs and Roofing

The roof structure, which is largely original, consists of heavy timber trusses and beams bearing on timber wall plates, supporting a system of purlins and rafters. The main roof of the building is a slated hipped roof sloped at approximately 5 in 12, topped with a central flat roof area above the slate that is covered in standing seam copper roofing. The projecting east and west wings, as well as the two porticos, have gabled roofs covered in slate, with sandstone copings at the gables. There are copper flashings at the open valleys and hips, and copper drip edge flashings at the eaves. Lead flashings are found at the stone copings of the gables and at the juncture between the flat copper roof and the slate roofing.

The original building contract for the slate roofing specified Countess slates (508 mm. / 20 inches in length), Welsh or Cornish, to be applied over a render of lime and hair mortar. The slate roofing had been replaced with asphalt shingles in the 1900s, but was reinstated in the early 1980s using Duchesses (610 x 305 mm. / 24" x 12") laid over asphalt-impregnated felt. Above the ground-floor entrances at the two porticos are flat roofs with built-up asphalt roofing. There are copper gutters and downspouts on the north and south elevations of the building, tied into catch basins. Six masonry chimneys penetrate the roof.

3.1.5 Interior Walls and Floors

Two masonry bearing walls run east-west through the building from basement to third floor levels, defining the central corridor. Bearing walls running north-south are generally alternating masonry and heavy timber-framed partitions. The extent and condition of bonding between the interior walls and the exterior masonry walls is unknown. Floors above grade are generally supported on a combination of heavy timber and floor joist construction. At the ground floor several spaces, including the corridors, have stone slab floors supported on brick vaults at the basement level, with a levelling bed of sand and mortar.

There is asbestos material present in the building the mitigation of which may be undertaken in the near future after the building has been vacated or which may be part of the present project.

3.1.6 Site

Province House is a prominent feature of Queen Square, a block that was reserved for administrative and church buildings in the original plan for Charlottetown. Queen Square is located at the north end of the Great George Street Historic District National Historic Site, a historic streetscape extending from the waterfront to Province House. The grounds of Province House show a mix of hard-surfaced and grassed areas and are fairly level. Grades slope towards the building in some areas, with localized depressions.

3.2 Heritage Significance

Province House has dual significance, as the focus of Prince Edward Island government and administration for the past 150 years, and as the birthplace of Canada. It was designated a National Historic Site in 1966 as a nationally significant building, and again in 1980 as a court house of national historic and architectural significance. The reasons for national significance are that:

- the building was the site of the Charlottetown Conference of 1864, which led to confederation in 1867;
- it is a fine example of the neo-classical architectural style; and
- it is representative of the judicial institution of Prince Edward Island.

Province House has also been designated for its historic value by the city of Charlottetown and the province of Prince Edward Island. The Statements of Significance for Province House by all three levels of government are available through the Canadian Register of Historic Places website. Since the Heritage Places Protection Act of PEI does not allow for protection of building interiors, the provincial and municipal Statements of Significance list character-defining elements of the building's exterior only.

As a provincially owned building, Province House is not eligible for evaluation by the Federal Heritage Buildings Review Office (FHBRO). In the past, Parks Canada has managed this building as if it were designated Classified by the FHBRO, due to its national historic and architectural significance.

As a National Historic Site operated by Parks Canada Agency (PCA), Province House has been evaluated and designated a Level 1 resource under PCA's Cultural Resource Management Policy. Significant elements of the building are defined in Parks Canada's Commemorative Integrity Statement (CIS) of 2001.

Since Province House is a National Historic Site of Canada, and has been designated as having historic significance by all three levels of government, it is important that the impact of any proposed project on the heritage character of the building be evaluated based on the Commemorative Integrity Statement for the building, on the various statements of significance that exist, and on the *Standards and Guidelines for the Conservation of Historic Places in Canada*. Also, consideration must be given to ensuring consistency with Parks Canada's renewed Cultural Resources Management Policy of 2013.

3.3 History of Interventions and Investigations

Province House has seen many repairs and modifications throughout its history. The building's early structural history is detailed in a Parks Canada historical report of 1977, and key points are summarized in PWGSC's Building Envelope Conservation Maintenance Plan of 2011.

In the 1970s the building was showing signs of deterioration, and was in need of a program of major repairs. A series of discussions led to a 1974 Memorandum of Agreement (or Lease Agreement) between the provincial and federal governments. Under the terms of this Agreement, Province House remained the property of the province, which would use the Legislative Assembly and some other parts of the building, while the federal government would restore and develop the building as a

historic site with Parks Canada occupying part of the building, under the terms of a 99-year lease.

Parks Canada undertook a program of research, followed by a restoration project from 1978 to 1983 that restored the building to the 1864 period. On the exterior, masonry was cleaned, patched and repointed; slate and copper roofing as well as chimneys were restored; windows were repaired and restored; and doors were replicated. On the interior, roof trusses were reinforced, an elevator and washrooms were installed, and room layouts on the first and second floors were restored to the 1864 era. The legislative council chamber (the "Confederation Chamber"), library, hallways and a series of administrative offices were restored and refurnished to the Confederation period. The Supreme Court chamber on the ground floor, which had been altered over the years to accommodate offices, was restored to its original size and renovated as a theatre for audio-visual presentations. Many of the present finishes on the interior of the building date from this restoration period, although some earlier finishes remain. It is known, for instance, that plaster finishes in the building include early plaster on wood lath, later plaster on expanded metal lath, and plaster on wood lath from the 1980s restoration.

Parks Canada has undertaken many maintenance repairs since 1984, on both the interior and exterior of the building; the main repairs are summarized in PWGSC's Building Envelope Conservation Maintenance Plan. There have been few repairs to the masonry portion of the building envelope, however, and maintenance of the building envelope has generally not kept pace with deterioration. Structural issues with the sandstone masonry were noted as early as 1878, but there is no record of their having been addressed at any period.

3.3.1 Recent investigations and reports

1996: The structural condition of both the north and south porticos was investigated by PWGSC, following a bombing incident at the north portico in 1995. Although no structural damage from the bombing was detected, recording and monitoring of cracks at both porticos was put in place by PWGSC and PCA. See PWGSC report, Province House Inspection & Monitoring Report, February 1996, by Ghassan Attar (to be made available to successful proponent).

2005: A Long-term Maintenance Plan was prepared by W. B. Hockey, PWGSC, following site investigations (to be made available to successful proponent).

2009: Severe leakage into the southwest wall adjacent to the south portico occurred in the winter of 2008-09. PWGSC provided a brief investigation of the slate roof and rainwater goods in this area, including an investigative opening, and found that, despite regular maintenance, problems included: poor detailing of slate roofing, underlayments and flashings; and routine blockage of downspouts. See PWGSC report, Preliminary Investigation of Slate Roof and Leakage, June 2009, by S. Myers.

2011: The Heritage Conservation Directorate of PWGSC provided a Building Envelope Conservation Maintenance Plan for Province House. This is a standard conservation report, provided to assist client departments with pre-project planning by identifying building envelope issues that need attention, and prioritizing them into immediate, short-term and long-term categories. The report was based on available records and a visual inspection of the building envelope, almost entirely from the exterior. No investigative openings were made, and the building interior was not included in the scope of the report. The report recommended further investigation for all elements of the building envelope. The following general condition ratings were given:

Exterior Masonry	fair to poor
Windows	fair to poor
Roofing and Rainwater Control	good to poor
Foundations	poor

See PWGSC report, Province House NHSC Building Envelope Conservation Maintenance Plan, August 2011 (to be made available to successful proponent).

2012: Because of long-term water infiltration and damp conditions in the basement, Parks Canada engaged consultants to investigate existing drainage and waterproofing systems, and the condition of the exterior face of the foundation walls. Two test pits were excavated at the exterior of the foundations in April of 2012, to footing level. Based on consultant recommendations, a construction project was carried out in 2012 that involved excavating the perimeter of the building, installing drainage tile and sump pumps, parging the exterior face of the foundations with concrete and installing a waterproof membrane, and backfilling with drainage material, as well as modest improvements to grades adjacent to the building to improve surface drainage. See report, Foundation Investigation, May 2012, by Coles Associates Architects & Engineers

and associated construction drawings (to be made available to the successful proponent).

2012-13: In August 2012, Parks Canada engaged architectural conservation and structural engineering consultants to provide a detailed investigation of the construction and condition of the exterior masonry walls, and develop a scope of work and construction documents for their repair and repointing. The budget for the project was limited, and construction work was required to be completed by the end of 2013, prior to celebrations of the 150th anniversary of the Charlottetown Conference.

The consultants' initial investigations in September 2012 revealed significantly deteriorated masonry and raised serious concerns about the structural stability of some elements. The scope of the project was increased to include investigative openings and an investigation report. Based on additional investigations carried out in October, 2012, emergency stabilization repairs were carried out on a number of elements, including but not limited to areas of the third floor walls, selected roof trusses and all cornice stones on the north and south elevations.

Since the project funding and schedule could not change, the scope of the planned exterior masonry repairs was reduced accordingly, to include only partial repair of the South and West elevations. A construction project began in June 2013, and was completed in 2013.

The work carried out in 2012-13 addressed only the most urgent repairs to the building. Investigations were limited by budget and schedule, and further investigation is required for a full understanding of existing conditions and optimal solutions. At the South wall, bulged masonry and known areas of voided core below roof valleys were not addressed, because of schedule and funding limitations. Additional structural and deterioration problems remain to be addressed. Safety barriers have been removed from the perimeter of the building, but vibrations in the vicinity of the building, e.g. from nearby construction activities, continue to be restricted.

For a brief overview of the 2012-13 work, see Presentation Notes, July 10, 2014, by Taylor Hazell Architects. For more detail, see report, Masonry and Building Envelope Improvements, May 2013, by Taylor Hazell Architects and associated letters by J.W. Cowie Engineering Ltd., and As-built Drawings, including survey of iron cramp locations (to be made available to successful proponent).

2014: A section of plaster ceiling in the north vestibule collapsed in January 2014. Although this particular ceiling was on the underside of the main stairs, and subject to vibration, the incident led to general concerns about safety of the plaster ceilings in the building. Plaster ceilings were investigated, and those on the undersides of stairs were replaced. See report, Ceiling Failure and Repairs, April 2014, by Coles Associates Architects & Engineers (to be made available to successful proponent).

2014: As part of its continuing due diligence regarding building safety, Parks Canada engaged a structural engineering consultant in March 2014 to conduct a cursory structural review and visual inspection of Province House for signs of potential structural and/or safety issues. As a result, temporary strengthening and stabilization was provided at some areas of timber floor framing and one brick masonry arch at basement level. See report, Draft Interim Report on Cursory Structural Review of Province House, May 2014, by J.W. Cowie Engineering Ltd. (to be made available to successful proponent).

2014-15: Parks Canada has asked PWGSC to complete some tasks ahead of consultant engagement for the current project, in order to move the project forward. Between November 2014 and February 2015, PWGSC will be providing some additional recording and investigation at Province House, including:

- survey and condition assessment of roof framing: all areas of roof framing that are accessible from within the attic will be investigated to confirm sizes, configuration and connection details as per 1979 as-found drawings. Also, a condition survey will be conducted, using a resistance drill, to determine the location, extent and severity of decay. Framing timbers at eaves are not accessible from the attic. Results will be provided to consultants as AutoCAD line drawings of the roof framing, as well as photographs and field notes;
- laser scanning of exterior elevations: the four exterior elevations will be photographed and laser scanned, to produce accurate elevation drawings and to measure the degree of deformation present in the masonry walls. AutoCAD drawings and data sets will be provided to consultants. Photographs can be compared with rectified photographs produced by PWGSC in 2008;
- monitoring: Demec stations installed by PWGSC at porticos in 2010 will be measured, and results provided to consultants;
- thermographic imaging: the building will be scanned in January/February, with particular attention to detecting voids within exterior walls. Scans will be provided to consultants with a brief explanation of process, but without a report that interprets the findings.

3.4 Existing Conditions

Water infiltration has been occurring at Province House for many years, at basement/foundation level, at exterior walls (particularly below roof valleys) and at roof level. Recent investigations by specialist consultants have shown that various elements of the building are in poor to very poor condition.

For a brief summary of the existing conditions revealed by consultant investigations in 2012, see Presentation Notes, July 10, 2014, by Taylor Hazell Architects. For a fuller summary, see report, Province House Masonry and Building Envelope Improvements, by Taylor Hazell Architects, May 2013 (to be made available to successful proponent).

Existing conditions have been only partially investigated to date. Many aspects of the building's condition are not yet fully known, such as the construction and condition of:

- timber floor framing, particularly where in contact with exterior walls;
- brick vaults at basement level, and the stone floors they support;
- masonry and wood-frame bearing partitions, and their connection to exterior walls;
- exterior masonry walls: depths of exterior and interior wythes and width of rubble core, at all floor levels; extent of keying of inner and outer wythes to rubble core; extent of cracking in stones of interior wythe; extent of voids and loss of mortar integrity in rubble core;
- timber roof framing;
- north and south porticos, including their foundations.

There is a restriction in place on the use of vibratory equipment and on heavy loading of the ground surface in close proximity to Province House.

3.5 Constraints and Challenges

The limited funding available for the current project demands cost-efficiency in the application of conservation measures.

The building will be vacated for the duration of the planning, design and construction phases of the project for three to five years, commencing in February 2015. The building will be returned to use by the Prince Edward Island Legislative Assembly following the project.

Timeliness is critical, to address the various health and safety and building conservation issues, and to take advantage of the period of vacancy.

The standard of accommodation required at the end of the project by the Province of Prince Edward Island and the level of code compliance required for re-occupancy of the building remain to be determined, and will be addressed at a later stage.

The original Nova Scotia sandstone of the exterior facades is no longer quarried in the Pictou area of Nova Scotia. Wallace sandstone, which has been used in past repairs, continues to be quarried in Nova Scotia. There may be a requirement for early selection and procurement of a suitable supply of replacement sandstone for the exterior wythe in support of the project schedule.

PD 4 EXISTING DOCUMENTATION

4.1 Existing Documentation – attached

1. Statements of Heritage Value
 - National Historic Site of Canada – federal Statement of Significance
 - Commemorative Integrity Statement (*Province House (Charlottetown) CIS - Feb 2001.pdf*)
 - Provincial Statement of Heritage Significance
 - Municipal Heritage Designation
 - PWGSC/Parks Canada (*Province House Conservation - Statement of Heritage Value PWGSC CLA*)
2. Parks Canada's Cultural Resource Management Policy (January 2013)
 - (<http://www.pc.gc.ca/eng/docs/pc/poli/grc-crm/index.aspx>) Link to English version
 - (<http://www.pc.gc.ca/fra/docs/pc/poli/grc-crm/index.aspx>) Link to French version
3. Standards and Guidelines for the Conservation of Historic Places in Canada 2nd Edition
 - (<http://www.historicplaces.ca/en/pages/standards-normes.aspx>) Link to English version
 - (<http://www.historicplaces.ca/fr/pages/standards-normes.aspx>) Link to French version

4. Province House Masonry and Building Envelope Improvements - May 2013 - Executive summary from consultant report (Taylor Hazell Architects)
5. Province House, Charlottetown PEI –Masonry and Building Envelope Report (2013) – 10 July 2014 - Consultant presentation deck (Taylor Hazell Architects)
6. Interim Report: Cursory Structural Review of Province House – JW Cowie May 2014
7. Correspondence regarding structural issues – JW Cowie
8. Schematic wall section drawing – JW Cowie February 2013
9. Province House As Found Heritage Record 1976 – sample of selected drawings
10. Province House Restoration Project 1979 – 1983 – sample of selected drawings
11. Heritage Record drawings PWGSC 2011 (Heritage Conservation Directorate rectified photo elevations)
12. Site Plan, building plans & general overall elevation photos

4.2 Existing Documentation - to be made available for successful Proponent

1. Excerpts from WA Parks Report re: Pictou, Wallace, Dorchester & PEI sandstones
2. Report: Province House Masonry and Building Envelope Improvements - May 2013 (Taylor Hazell Architects)
3. Taylor Hazell Architects construction photos
4. Taylor Hazell Architects report of test results on stones, mortars
5. Taylor Hazell Architects final as-built documentation
6. Commemorative Integrity Evaluation 2005-06
7. PWGSC Heritage Record drawings (Heritage Conservation Directorate rectified photo elevations) – data set used to produce elevation drawings (rectified photos, survey)
8. PWGSC Investigations and Recording, 2014-15:
 - Roof Framing Plan & condition Survey
 - Laser Scanning Elevations & Data Set
 - Thermographic Imaging Scans
 - Monitoring Update (limited to exterior cracks)
9. Final Report : Preliminary Investigation of Slate Roof and Leakage – Province House NHSC – PWGSC June 2009
10. Final Report : Province House NHSC Building Envelope Conservation Maintenance Plan - PWGSC August 2011

11. Foundations work:

- Investigation report by Coles Assoc.
- Tender documents for work carried out
- Photos during construction

12. Environmental Assessment Screening Report Province House NHSC – Parks Canada 15 March 2012

13. Historical Report - "A History of the Structure and Use of Province House, Prince Edward Island 1837-1977" National Historic Parks and Sites Branch, Parks Canada. 1977 (by Mary K. Cullen)

14. 1976 As Found Heritage Record – all drawings

15. 1970-80s Restoration project - all drawings

16. 1970-80s Restoration project – photos during construction

17. Asbestos Materials Report Province House National Historic Site, Pinchin Leblanc Environmental Ltd., August 1996

PD 5 PROJECT OBJECTIVES

5.1 Quality Management

In order to establish mutually acceptable quality standards, the consultant agrees that PWGSC will administer a quality assurance program to assess all deliverables and other products of service under this contract.

These reviews are intended to determine the effectiveness of the consultant's quality control system to identify, eliminate and ideally to avoid defects. Accordingly, consultant submissions will be subjected to a review of a random sample of documents in order to determine the extent of defects present in the sample. The sample size will be ten (10) percent plus or minus. It will be assumed that the rate of defects in any one submission is similar to the rate in the sample. The consultant agrees that the submission of deliverables containing more defects than acceptable constitutes a failure of their quality control system. In order to provide the best opportunity for the consultant to correct their quality control system, defects found will not be identified.

Should the rate of incidence of defects found in the samples exceed the acceptable rate, all documents forming the submission shall be returned to the consultant for correction. For the purpose of this review, defects will be defined as observed variances from service standards of the contract as set out in the CADD Standard, the Canadian

Style Guide, Oxford English Dictionary – Canadian Edition, NBCC 2010 and other constituent codes, standards and guidelines.

At each review of deliverables, the defect rate of less than one percent (1%) will be the standard below which the submission must fall before PWGSC acceptance and direction to proceed will be provided.

The review of defect rates referred to herein is not intended to relieve in any way the duty of professional care with respect to negligence within the jurisdiction of this contract.

The consultant is therefore asked to submit, as part of the proposal of services management, a description of the quality control method that will be used in document preparation.

5.2 Design Excellence

This project involves the investment of significant public funding in the conservation of one of Canada's most historically significant public buildings.

It is therefore incumbent on the consultant to bring forward only well-reasoned and resourceful solutions that promise a long service-life and reflect thoughtful consideration and a contemporary heritage conservation approach.

5.3 Code Compliance

Codes, regulations, by laws and decisions of "authorities having jurisdiction" will be observed. In cases of overlap, the most stringent will apply. The Consultant shall identify other jurisdictions appropriate to the project.

5.4 Risk Management

A risk management strategy is crucial for PWGSC Project Management and integrates project planning into procurement planning. All the stakeholders of a project will be an integral part of the risk management strategy, culminating in an integrated project team. Specific services required for project delivery are outlined in Required Services.

5.5 Health and Safety

Public Works and Government Services Canada (PWGSC), recognizes the responsibility to ensure the health and safety of all persons on Crown construction projects and the entitlement of both federal employees and private sector workers to the full protection afforded them by occupational health and safety regulations.

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File No. - N° du dossier
PWB-4-37098

Buyer ID - Id de l'acheteur
pwb020
CCC No./N° CCC - FMS No./N° VME

In keeping with the responsibility and in order to enhance health and safety protection for all individuals on federal construction sites, PWGSC will voluntarily comply with the applicable provincial/territorial construction health and safety acts and regulations, in addition to the related Canada Occupational Safety and Health Regulations.

PD 6 CONSULTANT SERVICES

The consultant team for this project must be capable of providing the following services:

- conservation architecture
- conservation structural engineering
- mechanical engineering,
- electrical engineering
- cost control services
- masonry conservator services
- consultant services management

DESCRIPTION OF SERVICES

PA 1 PROJECT ADMINISTRATION

The following administrative requirements apply during all phases of project delivery.

1.1 PWGSC Project Management

The Project Manager assigned to the project is the Departmental Representative.

The Project Manager is the Departmental officer directly concerned with the project and responsible for its progress. The Project Manager is the liaison between the Consultant, Public Works and Government Services Canada and the Client Department.

Public Works and Government Services Canada administers the project and exercises continuing control over the Consultant's work during all phases of development. Unless directed otherwise by the Project Manager, the Consultant obtains all Federal requirements and approvals necessary for the work.

1.2 General Project Deliverables

Where deliverables and submissions include summaries, reports, drawings, plans or schedules, six (6) hard copies shall be provided plus one (1) copy shall be provided in electronic format unless otherwise specified.

1.3 Lines of Communication

Unless otherwise arranged with Project Manager, the Consultant shall communicate with the Project Manager only. There shall be no direct official contact between client departments and the Consultant.

During construction tender call, Public Works and Government Services Canada conducts all correspondence with bidders and makes the contract award.

1.4 Media

The consultant shall not respond to requests for project related information or questions from the media. Such inquires are to be directed to the Project Manager.

1.5 Meetings

The Project Manager shall arrange meetings monthly throughout the entire project development period, for all members of project team, including representatives from:

- Client Department(s)
- Public Works and Government Services Canada
- Consultants
- Authorities Having Jurisdiction

The Consultant shall attend the meetings, record the issues and decisions and prepare and distribute minutes within [1 week] of the meeting.

1.6 Project Response Time

It is necessary that key personnel, or their designated substitutes, of the successful proponent, sub-consultants or specialist firms be available to attend meetings or teleconferences and respond to inquiries within a reasonable length of time. For example, during construction, the qualifiers listed below will require the associated response time:

Urgent - warrants a response within two (2) hours because to leave it outstanding any longer would, for example, adversely affect the continuance of work on site if not resolved immediately or potentially create a safety hazard

High Priority - requires a response within one (1) day to avoid delays

All other items - to be addressed within three (3) days

1.7 Submissions, Reviews and Approvals

Work in progress is to be reviewed by the Project Manager as well as the following:

PWGSC in-house services

Submission Format: report(s), drawings and specifications

Submission Schedule: Submissions are reviewed when completed work has been forwarded to the Project Manager

Expected Turnaround Time: 2 weeks

Number of Submissions: until approval has been received

Design review Committee - PWGSC

Submission Format: report(s), drawings and specifications, oral presentation(s)

Submission Schedule: Submissions are reviewed when completed work has been forwarded to the Project Manager, plus two weeks to arrange committee meetings.

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pwb020
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Expected Turnaround Time: 1 month

Number of Submissions: until approval has been received.

Municipal authorities

Submission Format: drawings and specifications

Submission Schedule: Submissions are reviewed when completed work has been forwarded to the Project Manager;

Expected Turnaround Time: 2 weeks

Number of Submissions: until approval has been received.

Chart of Reviews and Approvals	PWGS C		PCA		City		Prov (owner)	
	R	A	R	A	R	A	R	A
RS1 Analysis of Project Brief								
Investigative Work Plan		X		X			X	
Investigation Tender Documents		X		X		X	X	
Pre-Design Scoping/Investigation Report		X		X			X	
Class 'D' Estimate		X		X				
RS2 Design Concept								
Design Options	X		X				X	
Recommended Design Option		X		X	X		X	
Class 'C' Estimate(s)		X		X				
Design Review Presentation		X	X				X	
RS3 Design Development								
Design Development Documents		X	X		X		X	
Class 'B' Estimate(s)		X		X				
RS4 Construction Documents / Tender Call								
33% Construction Drawings		X	X				X	
66% Construction Drawings and Specs		X	X				X	
99% Construction Drawings and Specs		X	X				X	
Class 'A' Estimate(s)		X		X				
Final Tender Documents		X				X	X	

R = Review
A = Approval

PA 1.8 Official Languages

This project requires services in both official languages. Refer to the Supplementary Condition section of this Request for Proposal document entitled "Language Requirements".

REQUIRED SERVICES

RSG Required Services General

Required Services General apply to all phases of the project from RS1 to RS6.

RSG.1 APPROVAL TO PROCEED

At the beginning of each phase of the project, the Consultant shall obtain written approval from the Departmental Representative before proceeding with the work.

RSG.2 AUTHORITIES HAVING JURISDICTION

Formal presentations are required to PWGSC for the investigation and design. Refer to the Required Services sections for details. It is the consultant's responsibility to make formal presentations to authorities having jurisdiction if required. Ad hoc presentations may be required to PWGSC committees and management.

Work in progress will be reviewed by the PWGSC Departmental Representative, as well as various authorities, in-house project team members and stakeholders. Contract documents will be reviewed by PWGSC at stages found in RS-4.

Although the Government of Canada does not formally recognize jurisdiction at other levels of government, voluntary compliance with the requirement(s) of these other authorities is a requirement unless otherwise directed by the Departmental Representative.

The Consultant shall identify jurisdictions appropriate to the project. In cases of overlap, the most stringent will apply.

It is the Consultant's responsibility to obtain the required approvals from the authorities having jurisdiction.

Some typical authorities and their jurisdiction are listed below. This is not a comprehensive list.

- **Environment Canada:** *Environmental considerations;*
- **PEI Department of Environment Labour and Justice:** *Waste Management, Designated Substances, Labour Standards, Construction Safety, Heritage Considerations, Environmental Compliance, Fire Protection Services;*
- **City of Charlottetown:** *Building Permits, Heritage Planning review;*
- **Workers Compensation Board:** *Workers Compensation Program.*

RSG.3 HERITAGE CONSERVATION APPROACH

In undertaking this project, the Consultant will identify a conservation approach based on the "Standards and Guidelines for the Conservation of Heritage Places in Canada, Second Edition".

The conservation approach applies to all project phases and deliverables, including:

- Documenting and assessing the condition of the building;
- Developing options and analyzing the impact on heritage values;
- Carrying recommendations through design and construction phases.

The Consultant shall provide the highest standard of architectural design, based upon recognized design principles for historic structures.

RSG.4 COST MANAGEMENT

RSG.4.1 Cost Specialist

Delivering the project on budget is a high priority. A fully qualified cost planning, cost estimating and cost control resource referred to herein as the Cost Specialist, with a demonstrated record of successful cost management on heritage conservation projects is required.

The Cost Specialist will be conversant with all aspects of construction cost estimating during the design stages. The Cost Specialist(s) shall be thoroughly experienced in costing masonry and heavy timber conservation work.

The Cost Specialist must be proficient in all disciplines/sub-disciplines of the project and therefore, may be an individual or group. These specialists shall be expected to work in a team environment along with the Consultant, Departmental Representative & PWGSC Senior Cost Planner where co-ordination and understanding of all cost information is considered paramount.

The Cost Specialist shall provide an interactive and continuous cost consulting service from the commencement of the project design through the construction completion and subsequent evaluation, including the preparation of complete estimates for all risks, construction trades, escalation, inflation and contingency cost. Major cost issues are to be identified in conjunction with Consultant's Risk Analysis.

RSG.4.2 Reporting

Milestone Reporting: At each of the Milestones (for and within each RS Sector) specified in this document, provide a complete submission supported by all backup work sheets clearly detailing the process used in preparing the estimate. The detailed work sheets will be the prime basis on which estimates will be reviewed by PWGSC. Cost comparisons and cost reports identifying and explaining the differences between each succeeding cost estimate and their cost effect are also required.

In addition, the Cost Specialist shall fully co-ordinate all estimates with schedules provided by others.

A typical Milestone Report will contain:

Project Estimate Summary;

Estimate Back-up detail;

List of Assumptions;

Detailed measurement and pricing;

Description of information obtained and used in the estimate including the date received;

Listings of notable exclusions;

Listings of items/issues carrying significant risk;

Estimate Reconciliation:

- With last submission,
- With Construction Plan,
- Any other relevant information.

RSG.4.3 Submission Standards

The class "C", class "B" and class "A" cost estimates shall be submitted in the format indicated at each stage below.

Class 'C' (Indicative) Estimate: to be in elemental cost analysis format latest edition issued by the Canadian Institute of Quantity Surveyors and based on a full description of the preferred schematic design option, construction/design experience, and market conditions.

Class 'B' (Substantive) Estimate: to be in elemental cost analysis format latest edition issued by the Canadian Institute of Quantity Surveyors and based on design development drawings and outline specifications, which include the designs of all major systems and subsystems, as well as the results of all site/installation investigations.

Class 'A' (Substantive) Estimate: to be in both elemental cost analysis format as well as trade divisional format latest edition issued by the Canadian Institute of Quantity Surveyors and based on completed construction drawings and specifications prepared prior to calling competitive tenders.

The Class 'A' Estimate is generally expected to be within 5% to 10% of the actual contract award price. Tendering risks should be included in the project risk plan and costed accordingly. The accuracy of Class 'A' estimates can be influenced by many factors, including complexity of project, volatile market, remote locations, tight schedules, and unclear contract documents.

Recognizing that estimates must follow the design decisions they represent, it is the Consultant's responsibility to ensure there is no lag. (i.e. Estimates are due with the balance of the submission they represent on the specified date).

The Cost Specialist is responsible for providing a complete cost estimate even though the information provided during the concept and design development phases are not firmly defined. The Cost Specialist shall make assumptions, confirm them with various disciplines and either list them as assumptions, or have them incorporated in an outline specification modified by the Consultant.

RSG.4.4 Techniques

The Cost Specialist is required to be familiar with and make use of a broad range of cost techniques, especially the following:

1. Risk Analysis - All construction estimates (except the final pretender estimate) shall include and identify design, estimating, inflation escalation, currency exchange allowances and limited availability of skilled trades as are deemed necessary in the light of the current information available.
2. The Cost Specialist shall provide a satisfactory explanation of the level and or amount of all such sums included within any estimate.
3. Project Research - The Cost Specialist shall visit the proposed construction site to become familiar with site conditions, site access, etc., analyse local labour and

material supply conditions, local bidding practices and competition to establish pricing levels.

RSG.4.5 Responsibilities to PWGSC

PWGSC will review all respects of the Cost Specialist's work on a continuing basis to determine the validity and completeness of the information provided. In the event PWGSC may identify areas of concern including errors and omissions as well as areas of inadequate detail or areas that require further explanation, the Cost Specialist shall re-examine the estimates provided and make such revisions as are subsequently agreed to be necessary and/or provide ample acceptable evidence that such corrections or amendments are not necessary.

No Action Abrogates Consultant's Responsibilities.

No acceptance or approval by PWGSC, whether expressed or implied, shall be deemed to relieve the Cost Specialist, or the Consultant, of professional or technical responsibility for the estimates and cost reports.

Neither does acceptance of an estimate by PWGSC in any way abrogate the Consultant's responsibility to maintain the specified Construction Cost Limit throughout the life of the project, or the requirement to redesign should the lowest acceptable bid differ significantly from the agreed Construction Cost Plan, unless and until the Departmental representative indicates otherwise in writing.

RSG.5 SCHEDULING SERVICES

The Consultant shall be responsible for preparing and monitoring the project schedule. Schedule control shall generally be provided using detailed Gant chart and critical path methods and will use the latest version of MS Project .

Schedule milestone updates will be required at the conclusion of all Required Services sections from RS-2 to RS-7.

RSG.6 RISK MANAGEMENT

On a monthly basis during construction, and at other times throughout the project as required, the Consultant shall be responsible for providing risk management services as follows:

Identify risk events based on past experiences and using proposed checklist or other available lists.

Qualify/quantify probability of risk event (Low, Medium, High) and their impact (Low, Medium, High)

Prioritize risk events (i.e. concentrate efforts on risk events with High probability and Medium to High impact)

Develop risk response (i.e. evaluate alternatives for mitigation.)

RSG.7 INVESTIGATIONS AND TESTING DISBURSEMENTS

A maximum upset amount has been established in the Price Proposal Form to pay for the following items;

1. Construction labour and materials required to carry out investigative work on the exterior and interior, including reinstatement of disturbed areas (i.e. masons, painters, materials, cranes, boom trucks, etc.);
2. Testing during the investigation, design and construction periods of this project in order to assist in the assessment of existing conditions, design options and conformance to construction contract documents.

The consultant is to obtain approval from the Departmental Representative prior to entering into contract for these items and is to tender these items where the contract amounts are deemed significant by the Departmental Representative.

RSG.8 SUBMISSIONS

Consultant to provide one electronic and six paper copies of all deliverables unless noted otherwise.

RSG.9 DEFECT TRACKING

The Consultant shall include a Defect Tracking Form as part of their Quality Control system documentation. The Defect Tracking Form shall record all defects, of whatever nature and extent, found in the Consultant's work processes or products of service, regardless of source. Defects found in processes and products of service originating from sub-consultants and other out-of-office sources shall be consolidated onto a single medium (i.e., paper, spreadsheet, database, etc.). Defects, once recorded will never be deleted regardless of their mitigation and resolution.

The up-to-date Defect Tracking Form will be conveyed digitally and in print with each submission to PWGSC as required by the contract. Any digital submission will be in a format acceptable to PWGSC. A sample of an effective Defect Tracking Form is attached for information only (q.v., Appendix XX) The Consultant's Defect Tracking Form will include, but not necessarily be limited to the following information:

- Line Number
- Item Serial Number

-
- Location / Source Document (i.e., dwg # / detail #
 - Date Found / Inspected
 - Found / Inspected By
 - Description of Defective Work
 - Source of Defective Work
 - Discipline / Trade
 - Value Defective Work
 - Dates of Verification of Defect Mitigation / Resolution
 - Comments / Action Taken

An example of a spreadsheet of this type is available upon request.

RS G.10 BI-WEEKLY REPORT

The consultant will be required to prepare and submit to the Departmental Representative on a bi-weekly basis for the duration of the project a Progress Report detailing but not necessarily limited to the following headings/subjects:

- Executive summary
- Work activities
- Issues
- Risks
- Opportunities
- Progress images

This report will be a maximum of two A4 pages (Ariel 12 point font) in length plus images, and is to be submitted every second Monday and to be increased to weekly during construction.

This report will not replace or relieve any other reporting required under the terms of the contract.

RS 1 PRE-DESIGN SERVICES

Note: No professional fees associated with the work of RS-1 are to be included in the proposed percentage fee rate(s).

1.1 INTENT

The objective of this stage is for the Consultant to review existing documentation; carry out a detailed on site investigation and report on investigation findings. The Consultant

will prepare contract documents based on their Investigation Work Plan which will be used to tender for and engage a General Contractor to carry out the investigative work under the direction of the Consultant, working with PWGSC. The results of the investigation will be summarized in a Pre-Design/Scoping Investigation (PDSI) Report for presentation to PWGSC in Charlottetown.

The intent and purpose of the PDSI Report is to establish, based on appropriate levels of effort in physical investigation and professional consideration, a prioritized total scope of required heritage conservation and structural stabilization/conservation for Province House NHSC.

The PDSI Report is to include Class D Construction Cost Estimates and a proposed Sequence of Work. This undertaking is to consider a *comprehensive conservation and stabilization project* that may exceed the current Construction Cost Limit.

Professional fees related to all aspects of RS-1 including the PDSI Report will be negotiated and agreed with the successful proponent from within the allowance indicated in the price proposal form.

1.2 Scope and Activities

The Consultant scope and activities shall include, but are not limited to the following:

- Attend project start up meeting/site visit;
- Review available existing information and reports;
- Prepare Work Plan for building site investigation for review by Departmental Representative;
- Prepare Investigation Work Plan for building site investigations necessary for Pre-Design report for review by Departmental Representative. Work Plan to include estimates of construction labour, materials and machinery required; material testing, masons, materials, cranes, boom trucks, etc., and an estimate of construction investigation costs and other disbursements required;
- Prepare all construction contract documents for Investigation work and engage the construction services as directed by the Departmental Representative;
- Prepare all safety related design features - hoarding, street and sidewalk overhead protection etc. Review construction investigation Contractor's scaffolding plan and safety plan;
- Review and analyse regulatory and statutory requirements;

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- Working closely with PWGSC & the construction investigation Contractor, participate in the building & site Investigation;
 - Carry out detailed site investigation of full building structure including but not limited to:
 - Foundations
 - Exterior walls,
 - Interior bearing walls,
 - Floor structures,
 - Roof structure and water management systems,
 - parapets and associated flashings and coverings.
 - Document all brick, stone and timber damage in sufficient detail to be able to recommend remedial action both on the overall building system level and on a stone by stone basis. This information shall be superimposed on the supplied AutoCad drawings;
 - Investigate any potential damage to the (stone and clay brick) back-up walls and the balance of bearing structures, floors etc.;
 - Arrange and pay for material testing on existing materials as required;
 - Undertake preliminary mechanical and electrical systems assessment;
 - Prepare PDSI report.

Deliverables

1. Investigative Work Plan for building/site investigation with cost estimate;
2. Site specific safety plan for the site investigation work. Submit for review by the Departmental Representative prior to commencing site investigation;
3. Pre-Design Scoping and Investigation Report for review and approval by the Departmental Representative, which shall include but not be limited to the following:
 - Identify and verify all authorities having jurisdiction over the project;
 - Identify applicable codes, regulations and standards;
 - Document findings of on-site investigation work including probable causes of deterioration;

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- Provide a prioritized total scope of required heritage conservation and structural stabilization/conservation including related mechanical and electrical alterations for Province House NHSC;
 - Include Class D Construction Cost Estimates;
 - Provide a proposed Sequence of Work and project schedule that extends to the end of the Required Services;
 - Begin monthly Defect Tracking and Mitigation Record*;
 - Begin bi-weekly Project Report**.

* See section RSG 9

** See RSG 10

RS-2 CONCEPT DESIGN

Note: The percentage fee services commence at RS-2.

2.1 INTENT

To explore technical solutions to building envelope and structural problems and analyze them against priorities and project objectives previously identified. Out of this process, present technical recommendations and alternatives where they exist, for consideration. Upon approval, prepare one option and proceed to Design Development.

2.2 Scope and Activities:

Obtain written approval from Departmental Representative for development of technical recommendations based on the analysis of the Project Requirements.

- Prepare alternate approaches exploring possible technical strategies which are viable and have potential for development.
- Recommend material testing as required.
- Analyze each solution with regard to the project objectives including cost, schedule, risks and opportunities.
- Recommend one conservation/mitigation option for each different problematic condition, for further development with all supporting background, comparisons with alternative methods if applicable and technical justifications.

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- Determine what additional testing/surveys will be required during the subsequent design development and final design stages.
 - Include recommendations on any mock-ups or trial repairs required to guide the project.
 - Analyse each option with regard to maintenance.

2.3 Deliverables

Prepare and submit a Concept Design report to include the following:

- Description of the technical recommendations for conservation/stabilization, including options where they exist
- Class 'C' construction cost estimate in elemental cost breakdown format for each option
- Project milestone schedule with estimated construction timeline
- Risk/Opportunity implications and mitigation strategies
- Recommendation of preferred solutions
- List of testing/surveys required during subsequent stages.

Technical recommendations can be presented in sketch format (single line, drawn freehand to scale), fully integrated and supported by conservation solutions for the various types of deterioration and deficiencies. Provide sufficient analytical data, calculations and narrative to allow for comparison and analysis of options against project requirements of PWGSC.

2.4 Presentation

- Present, with key members of the design team, the various technical recommendations and options to the Departmental Representative and the PWGSC review committee; presentation to take place in Halifax, NS.
- The result of this presentation will be the selection of the preferred option/s by PWGSC.

RS-3 DESIGN DEVELOPMENT

3.1 INTENT

To further develop the preferred technical solutions chosen from those presented at the Concept Design stage.

3.2 SCOPE AND ACTIVITIES:

3.2.1 General

- Obtain written approval from Departmental Representative for development of the proposed Concept Design .
- Develop generic design details to address required repairs based on approved approaches.
- Develop preliminary version of specifications based on the latest version of the National Master Specification format.
- Develop site design.
- Analyze the constructability of the project and advise on the construction process and duration.
- Review all applicable statutes, regulations, codes and by-laws in relation to the design of the project. Submit to authorities having jurisdiction for their review and comments.
- Note that submission of the Concept Design to the Parks Canada Agency will be undertaken by PWGSC.
- Update budget, schedule and risk analysis.
- Present design to Departmental Representative and PCA design review committee in Charlottetown, PEI.

3.2.2 Details - Site Design

Refine, develop, and prepare site design that includes:

- Site features and restrictions

- Protection of sidewalks and building entrances; traffic restrictions; compliance with authorities having jurisdiction; areas required for contractor's use; proposed use of scaffolding at all elevations with associated site layout;
- Construction yard

3.2.3 Details - Construction cost estimate, Schedule, and Risk Analysis

- Prepare class 'B' construction cost estimate;
- Prepare cost summary report and cost exception report;
- Update milestone project schedule, complete with summary of revisions and mitigation strategies (if significant change occurs);
- Update risk implications and mitigation strategies.

3.3 DELIVERABLES

Prepare and submit an integrated Design Development Report to include the following:

- Drawings - details, elevations, site features/restrictions, site design
- Specifications
- Technical data sheets of recommended products
- Construction cost estimate
- Narrative on heritage conservation approach
- Construction schedule including phasing if required
- Risk Analysis
- Review comments from authorities having jurisdiction
- Updated milestone schedule

RS-4 CONSTRUCTION DOCUMENTS

4.1 INTENT

To translate the design development documents into construction drawings and specifications and refine the construction cost estimate.

To provide bilingual construction contract documents for tendering purposes.

4.2 SCOPE AND ACTIVITIES

4.2.1 General

Obtain written authorization from the Departmental Representative before proceeding with the Construction Documents stage.

The Construction Contract documents will be in English. Translation from English to French will take place after acceptance by PWGSC of the each contract document submission. The Consultant may have to revisit some parts of the translation as the work progresses.

After acceptance by PWGSC of the 100% construction contract documents, the consultant will wait for PWGSC to procure funding to proceed to tender and construction.

Submit drawings, specifications, cost estimates, construction schedule and risk analysis at the 33, 66, 99 and 100% completion stages.

33% complete indicates substantial technical development of the project.

At the 66% completion stage, submit drawings and specifications to the Departmental Representative and to the authorities having jurisdiction for their review and comments. Submit the latest Cost Estimate for review.

99% complete is the submission of complete construction documents, ready for tender call and submission to local authorities for permit purposes. The Class 'A' estimate is required at this stage.

100% complete is the final submission incorporating all revisions required in the 99% version and is intended to provide PWGSC with complete construction documents for tender call. The Class A estimate is updated at this stage.

Participate in technical review meetings after each submission.

Provide written response to all review comments and incorporate them into Construction Documents where required.

Obtain written authorization from the Departmental Representative before proceeding with the subsequent construction document completion stage submission.

Non-compliance with the approved "B" level estimate will require revisions to the contract documents at the Consultant's expense.

Prepare scope and specification for required testing services during construction.

4.2.2 Details - Construction cost estimate, Schedule, and Risk Analysis

- Prepare milestone cost summary report and cost exception report
- Update work breakdown structure, complete with summary of revisions and mitigation strategies (if significant change occurs)
- Update milestone project schedule, complete with summary of revisions and mitigation strategies (if significant change occurs)
- Update risk implications and mitigation strategies
- Class 'A' estimate deliverable at 99% completion of the contract documents
- Final pre tender class 'A' estimate upon completion of the contract documents using 100% measured quantities

4.2.3 Details - Technical review meetings

- Production of construction documents will be reviewed by PWGSC.
- PWGSC support staff will be present as arranged by the Departmental Representative.
- Consultant shall ensure that his staff and the sub-consultant representatives attend the technical review meetings as required.
- Consultant shall arrange for all necessary data, progress prints, etc.
- Consultant shall prepare minutes of the meetings and distribute copies to all participants.

DELIVERABLES

33%, 66%, 99% and 100% submissions as described above. The drawings and specifications are to conform to the following documents which form part of this Request for Proposal:

- Copies of comments from authorities having jurisdiction
- 100% completion stage submission drawings to conform to the following documents which form part of this Request for Proposals:
- Appendix 'E' Doing Business with AES

- Electronic Version of Drawings and Specifications:
- Electronic true copy of the final submission drawings and specifications on one or multiple CD-ROM in Portable Document Format (PDF) in accordance with the attached Appendix 'E.
- The PDF files should, to the greatest extent possible, be derived from the native software in which they were created and must not have password protection and printing restrictions. A reference guide providing basic information on the conversion of construction drawings in PDF is available at Appendix 'E' - Basic Reference Guide on Converting Construction Drawings in Portable Document Format (PDF). The electronic true copy of drawings and specifications is for tendering purposes only and does not require signing and sealing. The original signed and sealed hard copy of drawings and specifications submitted under Paragraph 4.2.1 will be the version used by the successful contractor for construction and all permit purposes, It is recommended that the hard copy submission be printed from the PDF version to eliminate the possibility of conflicts between the hard copy and electronic versions.

Electronic Version of Addenda:

Addenda, where needed, will be in electronic format (PDF) without password protection and printing restrictions.

RS-5 TENDER CALL, BID EVALUATION & CONSTRUCTION CONTRACT AWARD

5.1 INTENT

Support PWGSC's efforts to obtain and evaluate bids from qualified contractors to construct the project as per the Tender Documents.

Support the award of the construction contract according to government regulations.

5.2 SCOPE AND ACTIVITIES

- Attend and prepare minutes of the bidders' briefing meeting(s) to be held in Charlottetown;
- Provide information required by bidders to fully interpret the tender documents;
- Evaluate requests for product substitution during tender period;

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- Prepare addenda for issuance by PWGSC;
 - Examine and report on any cost and schedule impact created by issue of tender addenda;
 - Review low tender cost in comparison to the pre-tender Class "A" estimate;
 - Report on and explain variances between the low tender cost and the pre-tender estimate;
 - If the tender result is higher than the Consultant's Class 'B' estimate prepared in RS 3, the Consultant may be required, at the Consultant's cost and at the Departmental Representative's discretion, to revise the contract tender documents to bring the cost of the work within the limits of the Class 'B' estimate.

5.3 DELIVERABLES

- Addenda where needed
- Sketches for clarification of design intent and construction details where necessary
- Changes to the documents, if re-tendering is necessary
- Updated cost estimate and schedule

RS-6 CONSTRUCTION AND CONTRACT ADMINISTRATION

Note:

At the conclusion of the tender in RS-5 a decision will be taken whether to proceed to construction or not. The Consultant will receive written notice from the Departmental Representative if the project proceeds to the Construction and Contract Administration stage.

Note:

Work Suspension due to Environmental Conditions:

The Consultant will monitor and report on the construction contractor's efforts to maintain specified environmental conditions (appropriate to the proper implementation of masonry conservation activities) within work areas on site and advise the Departmental Representative when the specified conditions are not being met.

The consultant accepts that prolonged adverse weather conditions - extended extreme cold, excessive heat or dryness etc. may be such as to be uncontrollable by the contractor's normal means of environmental control.

The Departmental Representative may suspend the work for several months until the proper environment can be achieved. Without an additional increase to their fee, the Consultant will assist in the temporary work suspension, suspend their on-site work and start-up again when consistent stable conditions are achievable.

6.1 INTENT

To implement the project in compliance with the Contract Documents and to direct and monitor all necessary or requested changes to the scope of work during construction and close-out.

6.2 SCOPE AND ACTIVITIES

6.2.1 General

- The Consultant shall obtain written authorization from the Departmental Representative before proceeding with the Construction and Contract Administration stage.
- During the implementation of the project, the Consultant is to undertake the prime role in dealing with the construction contractor, solving problems on site and acting on PWGSC's behalf to the extent provided in this document.
- Review contractor safety plan.
- Review contractor's scaffolding plan.
- Carry out the review of the work at intervals appropriate to determine if the work is in conformity with the Contract Documents.
- Arrange for material testing as required in accordance as required.
- Keep PWGSC informed of the progress and quality of the work and report any defects or deficiencies in the work observed during the course of the site review.
- Determine the amounts owing to the Contractor based on the progress of the work and certify payments to the contractor.

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- Act as interpreter of the requirements of the Contract Documents.
 - Provide cost advice during construction.
 - Advise the Departmental Representative of all potential changes to scope for the duration of the implementation.
 - Provide technical advice to resolve site or construction conditions, client requests and construction errors.
 - Review the Contractor's submittals of samples, shop drawings, substitution requests and design changes.
 - Prepare, negotiate, recommend and justify change orders for issue by the Department Representative.
 - Indicate any changes or material/equipment substitutions on Record Documents.

Note: The term "ensure" in this contract means "to take reasonable and appropriate action with the authority delegated" to the consultant.

6.2.2 Details - Construction Meetings

- Immediately after contract award arrange a start-up meeting with the Contractor and the Departmental Representative. Prepare minutes of the meeting and distribute copies to all participants and to other persons agreed upon with the Departmental Representative.
- Attend bi-weekly job meetings. The meetings should include affected sub-consultants.

6.2.3 Details - Project Schedule

- Obtain Project Schedule as soon as possible after contract award and ensure proper distribution.
- Monitor the approved construction schedule, take necessary steps to ensure that the schedule is maintained and submit a detailed report to the Departmental Representative concerning any delays or changes to the schedule.
- Keep accurate records of causes of delays.
- Make every effort to assist the Contractor to avoid delays.

6.2.4 Details - Time Extensions

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- Only the Departmental Representative may approve any request for Time Extensions. Approval will be issued in writing by the Departmental Representative. Review any request for Time Extension and make recommendation to the Departmental Representative to approve or disapprove.

6.2.4 Details - Cost Breakdown

Obtain and review Contractor's detail cost breakdown. Approved cost breakdown will form the basis of all future progress claims.

6.2.5 Details - Sub-contractor Changes

The Contractor is required to use the sub-contractors listed on the tender form unless a change is authorized by the Departmental Representative. Changes are only considered when they involve no increase in cost. Review all requests for changes of sub-contractors, and submit recommendations to the Departmental Representative.

When sub-contractors have not been listed on the Tender Form, obtain the list from Contractors not later than 10 working days after date of award.

6.2.6 Details - Labour Requirements

The Contractor is bound by the Contract to maintain competent and suitable workers on the project and to comply with the Canada Department of Labour - Labour Conditions. Inform the Department of any labour situations that appear to require corrective action by the Department.

The Consultant shall ensure that a copy of the Labour Conditions for the Contract is posted in a conspicuous place on site.

6.2.7 Details - Bylaw Compliance

Ensure that construction complies with applicable bylaws and regulations.

Matters pertaining to the Department of Labour shall be referred to the Departmental Representative.

6.2.8 Details - Construction Safety

All construction projects that are occupied by federal employees during construction are subject to the Canada Occupational Safety Act and Regulations as administered by Health Canada, as well as the provisions of the Canada Labour Code.

Fire safety provisions during construction must comply with FCC Standards 301 and 302, administered by the Fire Commissioner Canada.

In addition to the above, the Contractor must comply with the provincial and municipal safety laws and regulations, and with any instructions issued by the officers of these authorities having jurisdictions relating to construction safety.

Ensure the Contractor is mandated to provide all required coordination, isolation, protection and reinstatement of the fire protection and suppression systems through out construction. Notify the Construction Safety Coordinator each time the fire protection and suppression system is bypassed and advise estimated reinstatement time. Ensure the Contractor is mandated to provide Watchman Service as defined in FC 301 and by the Fire Commissioner.

6.2.9 Details - Site Inspections

To be carried out bi-weekly by consultant's design team specialists, supplemented by part time resident site inspector, as described in section RS-7.

Ensure compliance with contract documents.

Establish a written understanding with contractors as to what stages or aspects of the work are to be inspected prior to being covered up.

Assess quality of work and identify in writing to the Contractor and to the Department all defects and deficiencies observed at time of such inspections.

Any directions, clarifications or deficiency list shall be issued in writing to PWGSC.

6.2.10 Details - Clarifications

Provide clarifications on Plans and Specifications or site conditions, as required in order that project not be delayed.

6.2.11 Details - Progress Reports

Report to the Departmental Representative regularly on the progress of the work. Submit weekly reports.

6.2.12 Details - Work Measurement

Assess and record construction progress in order to verify monthly progress claims and the Substantial completion and Final certificate of completion.

6.2.13 Details - Detail Drawings

Provide for the Department's information any additional detail drawings as and when required to properly clarify or interpret the contract documents.

6.2.14 Details - Shop Drawings

At beginning of the construction contract, provide, monitor and maintain a log of shop drawings required by the construction contract.

Review all shop drawings, keep records of shop drawing receipt, return, approval status.

On completion of project forward three copies of reviewed shop drawings to the Department. Ensure that shop drawings include the project number and are recorded in sequence.

Verify the number of copies of shop drawings required.

Approved Shop drawings shall be stamped: "Checked and Certified Correct for Construction" by the Contractor and stamped: "reviewed for general conformance with design" by the Consultant before return to the Contractor. Send one copy of reviewed shop drawings to Departmental Representative.

Consultant will return reviewed shop drawings to contractor within five working days.

Prepare list of surplus materials required in the construction contact, monitor contractor's submission of surplus materials to ensure all maintenance materials have been turned over to Departmental Representative.

Make available to the Contractor electronic copies of the contract drawings for the purpose of performing shop drawings.

6.2.15 Details - Material Testing

Prior to tender, provide Departmental Representative with recommended list of tests to be undertaken, including on site and factory testing.

Arrange for testing services and brief testing firm on required services, distribution of reports, communication lines, etc.

Review all test reports and take necessary action with Contractor when work fails to comply with contract.

Immediately notify Project Manager when tests fail to meet project requirements and when corrective work will affect schedule.

6.2.16 Details - Construction Changes

The Consultant does not have authority to change the work or the price of the Contract.

Changes which affect cost or design concept must be approved by the Departmental Representative.

Upon becoming aware of the need for a change to the contract documents, prepare a Contemplated Change Order Notice and submit to Departmental Representative for approval to obtain a quotation from the Contractor. Obtain quotation from contractor, review, negotiate the change order amount to acceptable value and make recommendation for approval to Department Representative.

Review any claims for additional payment from contractor, determine if claim is a valid extra in consideration of the contract documents and make recommendations to Departmental Representative for payment.

The Department will issue Consultant-prepared Change Orders to the Contractor, with copy to Consultant.

All changes, including those not affecting the cost of the project, will be covered by Change Orders.

The practice of "trade offs" is not allowed.

6.2.17 Details - Contractor's Progress Claims

Each month the Contractor submits a progress claim for work and materials as required in the Construction Contract.

The claims are made by completing the following forms where applicable:

- Request for Progress Payment
- Statutory Declaration Progress Claim
- Letter of Good Standing with the provincial workers compensation legislation

Review and sign designated forms and promptly forward claims to the Department for processing.

Submit with each progress claim:

- Updated schedule of the progress of the work.
- Photographs of the progress of the work.

6.2.18 Details - Materials On Site

- The Contractor may claim for payment of material on site but not incorporated in work.
- Material must be stored in a secure place designated by the Department.
- List of materials with price must accompany claim; Consultant shall check and verify the list.
- Items shall be listed separately on the Detail Sheet after the break-down list and total.
- As material is incorporated in the work the cost must be added to the appropriate Detail item and removed from the material list.

6.2.19 Details - Acceptance Board

Inform the Department when satisfied that the project is substantially completed. The Consultant shall ensure that his representative, his sub-consultant representatives, Departmental Representative shall form part of the Project Acceptance Board and attend mutually organized meetings as organized by the Department. Arrange for Inspection authorities such as Fire Commissioner, Electrical Inspection, etc.

The Acceptance Board shall inspect the work and list all unacceptable and incomplete work on a designated form. The Client shall accept the project from the Contractor subject to the deficiencies and uncompleted work listed and priced. Perform additional inspections as required until all deficiencies have been corrected. Advise Departmental Representative on status of deficiency correction.

6.2.20 Details - Substantial Performance

Payment requires completion and signing, by the parties concerned, of the following documents:

- Certificate of Substantial Performance
- Statutory Declaration Interim Certificate of Completion
- Letter of Good Standing with the provincial workers compensation legislation

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- List of deficiencies with a schedule for completion of deficiencies.

Verify that all items are correctly stated and ensure that completed documents and any supporting documents are furnished to the Department for processing.

6.2.21 Details - Field Review Certificate

Satisfy municipal and provincial regulations with respect to performing Field review inspections to satisfy conditions regarding issuance of building permits.

Perform required inspections and professionally stamp applicable commitment certificates.

6.2.22 Details - Final Inspection

Inform the Departmental Representative when satisfied that all work under the contract has been completed, including the deficiency items noted at the Interim Inspection. The Departmental Representative reconvenes the Acceptance Board which makes a final inspection of the project. If everything is satisfactory the Board makes final acceptance of the project from the Contractor.

6.2.23 Details - Final Certificate

- The final payment requires completion and signing, by the parties concerned, of the following documents:
- Certificate of Completion
- Statutory Declaration Final Certificate of Completion
- Workers Compensation Clearance Certificate
- Other items as required by authorities having jurisdiction and as required in the contractors' construction contract.

Verify that all items are correctly stated and ensure that completed documents and any supporting documents are furnished to the Department for processing.

6.2.24 Details - Take-over and Warranty

The official take-over of the project or parts of the project, from the Contractor is established by the Departmental Representative. The date of Certificate of Substantial Performance signifies commencement of the warranty period for work completed on the date of each certificate in accordance with the General Conditions of the Contract.

Provide Departmental Representative with original copy of Contractor's warranties for all materials and work covered by an extended warranty or guarantee, according to the conditions of the specifications. Verify their completeness and extent of coverage.

Two months prior to the expiration of the warranty, carry out a warranty inspection and produce a report. This inspection is to be performed by Consultant, the architect, the masonry conservator and the structural engineer involved in the design. Consultant is to discuss with the building manager to become aware of their concerns and observations about the performance of the building envelope. The inspection will include random sampling of the work including areas that cannot be reached from the ground or adjacent roofs.

The report is to identify the following:

- all items covered under the warranty which require corrective measures
- adjustments, if required, to the maintenance plan
- any concerns with the design which could be used as lessons learned
- Arrange and pay for elevating devices for inspection purposes.

6.2.25 Details - As-Built and Record Drawings and Specifications

Following the take-over, obtain copy of marked-up as-built records from the Contractor.

Check and verify all as-built records for completeness and accuracy. Update CAD files to include as-built information.

Provide marked-up as built records from contractor and updated CAD files to Departmental Representative within (8) weeks of final acceptance.

6.3 DELIVERABLES

- Minutes of construction start up meeting
- Written reports from site visits including persons involved
- Written reports on the progress of the work and the cost of the project at the end of each month
- Minutes of biweekly progress meetings

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- Additional detail drawings when required to clarify, interpret or supplement the Construction Documents
 - Copies of Contemplated Change Notices and Change Orders.
 - Results of material testing
 - Copies of approved shop drawings
 - Interim or Final certificates
 - As built records
 - Maintenance Manuals
 - Recommended Maintenance Plan

RS-7 COMMISSIONING

7.1 INTENT

To define the operational and performance requirements that PWGSC/PCA expect from this project.

To ensure that responsibility for meeting these requirements and demonstrating compliance is defined in the design and contract documents.

To document the operations, maintenance and management requirements, and transferring the completed works to PWGSC. To minimize the life-cycle operating and maintenance costs.

For this project, Commissioning is not intended to provide a detailed specification for inspection of work or materials incorporated in the work as this work is covered under

As commissioning occurs in all stages of the project, an appropriate portion of the fees for commissioning is to be included in RS1 to RS7.

7.2 SCOPE AND ACTIVITIES

The Consultant will be responsible for the delivery of all Commissioning activities as noted herein. The scope and activities described are required to ensure the effective transfer of responsibility from Project Deliverables to the ongoing maintenance of the building envelope and cladding system. Although Commissioning activities occur in all stages of the project, most of the specific deliverables are described in the RS 7 section of the RFP.

Commissioning shall include, but not necessarily be limited to, the following:

- Preparation of the Project Manual;
- Development and preparation of the Building Envelope Maintenance Plan;
- Development and delivery of training program for PWGSC Property management staff;
- Training support for PWGSC.

7.3 COMMISSIONING DETAILS

7.3.1 Project Manual

The Consultant may choose to specify that some of the deliverables related to this manual be provided by the Contractor, however, the Consultant remains responsible for its completeness and conformance to the specification.

The consultant shall prepare a comprehensive Project Manual including:

- Heritage recording of work through record documents, record CAD drawings, detailed written and graphic description of repairs and conservation treatments, materials, mortar mixes, material field test results;
- Contractor as-built drawings, specifications, shop drawings, submittals and samples, reviewed, packaged and indexed;
- Manufacturer's maintenance information for building envelope components;
- Interim and final certificates of completion including respective reviews and acceptances;
- Final updated originals (hard copy and electronic) Consultant record drawings;
- Warranty deficiency list;
- Final warranty review and report including extended warranty documentation;
- Post-construction evaluation.

In addition, the manual is to include a photographic chronicle of the project illustrating:

- Cladding systems failures and how they were addressed;
- Examples of stone failures and repair techniques used;

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- Examples of mortar failure and repair techniques used;
 - Examples of caulking failure and repair techniques used;
 - Detailed Mortar mix design and specification;
 - Caulking material specification;
 - Any material/product warranties which fall outside of the specified warranty period;
 - Application considerations for mortar and caulking repairs;
 - Back-up wall considerations for the cladding system;
 - Any considerations for the building structure that need to be part of the Manual;
 - If wall sensors have been included in the design, describe their use and any ongoing maintenance;
 - Consideration of the building windows in relation to the cladding system and specific maintenance required to support the ongoing maintenance of the windows;
 - Additional material as appropriate to support the successful long term maintenance of the building cladding system.

7.3.2 Building Envelope Maintenance Plan

The consultant will acquire specific detailed knowledge concerning the building envelope components of Province House during the course of the project.

PWGSC requires a project-specific 30-year Masonry/Envelope Maintenance Plan, reflecting that knowledge, to be provided by the consultant.

The purpose of the plan will be to guide annual and periodic maintenance work to all components of the envelope system from the roof ridge to the footing line.

The Consultant is responsible for the preparation of the detailed Building Envelope Maintenance Plan that will identify anticipated categories and timings for ongoing building envelope system maintenance projects over a thirty (30) year period.

The Plan must address the following subjects:

- Cursory non-specialist cladding inspection techniques;

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- Categories and periodic timings of specialist investigation;
 - Any further conservation projects identified but not included within the scope of the current project.

The plan will be in spreadsheet form acceptable to PWGSC and facilitate updating and customization by facility management to include building components not within the scope of this project.

7.3.4 Submission requirements

Two draft copies of the Project Manual, (at Substantial Completion), and Maintenance Plan must be submitted to the PWGSC Project Manager for review. After they have been reviewed and accepted by the PWGSC project team, the Consultant will be responsible for preparation and distribution as noted below.

Once reviewed and accepted by PWGSC, the Consultant will prepare seven (7) final sets, and one (1) digital copy, of the Project Manual.

- One copy will be supplied to the contractor for use during the warranty period only;
- One copy will be retained by the Consultant for ongoing future reference;
- Five copies will be delivered to the PWGSC Project Manager.

Once reviewed and accepted by PWGSC, the Consultant will prepare six (6) final sets, and one (1) digital copy, of the Building Envelope Maintenance Plan.

- One copy will be retained by the Consultant for ongoing future reference;
- Five copies will be delivered to the PWGSC Project Manager.

Once reviewed and accepted by PWGSC, the Consultant will prepare six (6) final sets, and one (1) digital copy, of the Training Package.

- One copy will be retained by the Consultant for ongoing future reference;
- Five copies will be delivered to the PWGSC Project Manager.

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RS 8 RISK MANAGEMENT

The consultant is to provide support to the Departmental Representative in identifying risks throughout the project life cycle.

See “Doing Business with A&ES” for Risk Management “Definitions” and “Checklist”.

Risk Management Process:

- Identify risk events based on past experience and using proposed checklist or other available lists;
- Qualify/quantify probability of risk event (Low, Medium, High) and their impact (Low, Medium, High);
- Prioritize risk events (i.e. concentrate efforts on risk events with High probability and Medium to High impact);
- Develop risk response (i.e. evaluate alternatives for mitigation. This is the real added-value of risk management); and,
- Implement risk mitigation.

ADDITIONAL SERVICES

Note: the AS 1 Estimating and Cost Planning and AS 2 Bilingual Construction Documents services are to be included in the percentage-based professional fee rate.

AS 1 ESTIMATING AND COST PLANNING

1.1 Cost Specialist

Delivering this project on time and within budget is a high priority. A fully qualified cost estimating, cost planning and cost control team, referred to herein as the Cost Specialist, with a demonstrated record of successful cost management on large construction projects is required. This Cost Specialist will be conversant with all aspects of construction cost estimating during the design stages including the use of Elemental Cost Analysis, Risk Analysis, Life Cycle Costing and Value Engineering/Management techniques.

The purpose of cost planning and cost control is to assist in the accomplishment of project cost objectives. It is a continuous and interactive process involving planning, action, measurement, evaluation and revision.

1.2 Scope of Services

The Cost Specialist shall provide an interactive and continuous cost consulting service from the commencement of project design through to construction completion, including the preparation of complete estimates for all construction trades, escalation, inflation and contingency costs.

The Cost Specialist shall provide to PWGSC and the Consultant, a cost advising, and cost monitoring/reporting service.

The Cost Specialist shall attend all project meetings throughout the design phases and be prepared to present and defend the estimates directly to the Departmental Representative.

The fee proposal should be based on one lump sum fixed price construction contract. Should the Departmental Representative decide to deliver the project by project management, construction management, phased construction or other means, the Cost Specialist will negotiate any fee adjustment with the Consultant that is acceptable to PWGSC, prior to commencing adjustment of estimates and reporting systems.

Other services may be provided at additional cost, if requested.

1.3 Services - Basic Activities

The Cost Specialist shall work with and advise the Consultant team and PWGSC of the costs of individual building components and costs of various design systems. Estimates should be prepared in detail and summarized using an Elemental Analysis format. Acceptable formats are noted under the **Submission Standards** section following.

1.3.1 Reporting

Milestone Reporting At each of the Milestones specified in this document, provide a complete submission including the required Elemental Summaries, supported by all backup work sheets clearly detailing the process used in preparing the estimate. The detailed work sheets will be the prime basis on which estimates will be reviewed by PWGSC. Cost comparisons and cost reports identifying and explaining the differences between each succeeding cost estimate and their cost effect are also required.

In addition, the Cost Specialist shall fully coordinate all estimates with schedules.

A typical Milestone Report will contain:

1. Project Estimate Summary;
2. Elemental Estimate Summary;
3. Estimate Back-Up Detail:
 - Basis for escalation, inflation and contingency calculations;
 - Detailed measurement and pricing;
4. Narrative:
 - Outline description of estimate basis;
 - Description of information obtained and used in the estimate including the date received;
 - Listing of notable inclusions;
 - Listing of notable exclusions; listing of items/issues carrying significant risk;
 - Notes on past and forecast Cost Specialist activity;
5. Estimate Reconciliation:
 - With last submission;
 - With Construction Cost Plan.
 - Any other relevant information

Monthly Report In addition to the Milestone Reports, submit a Monthly Report outlining activities during the previous month, identifying areas of concern and new information received etc., along with forecast and proposed revisions to the current estimate. This report shall also contain a full up-to-date Elemental Cost Summary:

1. Project Estimate Summary;
2. Elemental Cost Summary;
3. Narrative:

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- Description of the basis for estimate revision;
 - Description of new information used in the estimate including the date received;
 - Listing of notable inclusions;
 - Listing of notable exclusions;
 - Listing of items/issues carrying significant risk;
 - Notes on past and forecast Cost Specialist activity

Exception Report The Cost Specialist is to provide continuous cost monitoring, timely identification and early warning of all changes that affect or potentially affect the estimated construction costs of the project.

If the estimate falls short of or exceeds the Construction Cost Plan due to such changes, the Cost Specialist with the Consultant team shall fully advise the Departmental Representative. The Cost Specialist with the Consultant team shall submit to PWGSC proposed alternative design solutions and revise the most recent monthly estimate.

An Exception Report will include sufficient description and cost detail to clearly identify:

1. Scope Change: Identifying the nature, reason and total cost impact of all identified and potential project scope changes affecting Construction Cost Estimate.
2. Cost Overruns and Underruns: Identifying the nature, the reason and the total cost impact of all identified and potential cost variations.
3. Options Enabling a Return to Construction Cost Estimate: Identifying the nature and potential cost effects of all identified options proposed to return the project within Construction Cost Estimate.

1.3.2 Submission Standards

Summary Format

1. Elemental Analysis: All estimates shall be summarized in an agreed and consistent Elemental format. Several variations in format may be acceptable to PWGSC (by discussion) but those following the ASTM (USA), CIQS (CDN), CSI Unifomat II (USA) or BCIS (UK) formats are preferred.
2. Trade Summary: Where a trade summary is required, those following the Masterformat are preferred, except where local practice provides a more suitable alternative.
3. Project Cost Subdivision: The estimate shall isolate the costs of each phase of construction. All estimates within these phases shall further isolate and show separately the cost of individual building blocks and/or the accommodation sections listed here:
 - New Construction;
 - Renovation;
 - Sitework.

Media

1. Provide three (3) hard copies of all reports including estimate summaries only and one (1) additional hard copy of the full report including the additional estimate support information to PWGSC.
2. One electronic copy of the total estimate, summary and support detail, shall be provided in an agreed format.

Timelag

Recognizing that estimates must follow the design decisions they represent, such estimates may lag. The cost portion of the Milestone Reports may follow, but by no more than two weeks unless otherwise determined by the Departmental Representative.

Use of all available information

The Cost Specialist is responsible for providing a complete cost estimate even though the information provided during the concept, design development and early working drawing stages is incomplete. Where requirements are not firmly defined, the Cost Specialist shall make assumptions, confirm them with the Consultant and either list them as assumptions, or have them incorporated in an outline specification modified by the Consultant.

2.3.3 Techniques

The Cost Specialist is required to be familiar with and make use of a broad range of cost techniques, especially the following:

1. Risk Analysis All construction estimates (except the final pre-tender estimate) shall include and identify design, estimating, inflation escalation and currency exchange allowances as are deemed necessary in light of the current information available. The Cost Specialist shall provide a satisfactory explanation of the level and/or amount of all such sums included within any estimate.

2. Scheduling The Cost Specialist shall assist the Time Specialist by providing building quantities, building systems information, and other quantifiable parameters deemed appropriate to the calculation of a reasoned project time schedule. The Time Specialist shall assist the Cost Specialist by maintaining an up-to-date schedule of all design activities along with an agreed bidding and Construction Schedule that will be incorporated by the Cost Specialist within the estimates on a timely basis.

3. Life Cycle Costing In advising the Consultant of the cost information for alternative materials, methods and systems, it is necessary that the Cost Specialist uses all available information to ensure that a complete cost picture is made available, upon which design and construction decisions will be made.

4. Continuing Estimate Process A process of continual adjustment of previous estimates may be used in place of total re-measurement at each milestone reporting point. This is acceptable, provided that at each monthly reporting point a full and up-to-date Elemental Cost Summary is provided and that at each milestone reporting point this Elemental Cost Summary is supported by complete, detailed, stand alone back-up/support documentation, as previously described.

5. Project Research The Cost Specialist shall visit the proposed or alternative construction sites to become familiar with site conditions, site access, etc., analyze local labour and material supply conditions, local bidding practices and competition to establish pricing levels. A written report detailing this reconnaissance activity is expected.

2.4 Services - Specific Activities

Project Analysis Stage

Review, report on, and propose revisions to the existing class "D" estimate. Do not proceed until the Cost Specialist, the Consultant and PWGSC have accepted the revised class "D" estimate.

The revised Class "D" estimate shall become the Construction Cost Plan.

Concept Design

A Class "C" estimate will be prepared at the highest level of detail commensurate with the available information using elemental and additional detailed costs.

Design Development

Upon completion of design development prepare a Class "B" estimate representing the increased level of design detail available. The report shall be prepared using detailed (elemental) costs i.e. measured quantities with minimal allowances or lump sums.

Upon final acceptance, the Class "B" estimate shall become the Construction Cost Plan.

Contract Documents

During the production of the contract documents a process of continuing cost control progressively more detailed is required. At each review of contract documents, an up-to-date estimate shall demonstrate compliance with the Construction Cost Plan. Non-compliance with the Construction Cost Plan will require revisions to the contract documents.

Pre-Tender

Upon completion of the contract documents a pre-tender Class "A" cost estimate will be prepared using 100% measured quantities.

Provide a trade breakdown of the pre-tender estimate for use in reviewing the submitted bids and the successful Contractor's estimate breakdown.

The tender call marks the end of the percentage fee-based services in cost management.

Tender Stage

If required, this work will be paid for on an agreed, negotiated basis.

1. Tender Award During the tender period, examine and report on any cost impact created by the issue of tender/contract addenda. Incorporate the results of such addenda review into the final pre-tender estimate (both elemental and trade versions) prior to receipt of bids.

2. Bid Review and Analysis Assist the Departmental Representative, as required, by analyzing and reconciling any differences between the pre-tender estimate and the submitted bids.

3. Negotiation Should it be necessary to negotiate with any bidder prior to awarding the Contract, the Cost Specialist shall provide cost information as needed and enter into the negotiations if requested.

4. Reconciliation Upon the signing of a contract with the successful Contractor, the Cost Specialist if necessary will reconcile both the elemental and trade estimates, in detail, with the agreed contract sum. These reconciled estimates will be used by the Construction Team during the construction phase of the project.

Cost Specialist Services through Construction

If required, this work will be paid for on an agreed, negotiated basis.

During construction, the Cost Specialist shall assist the Construction Team with cost advice if requested.

Such activity may well encompass the following activities:

- Evaluation of change orders;
- Evaluation of claims;
- Evaluation of work completed;
- Evaluation of cash flow.

Post Contract

If required, this work will be paid for on an agreed, negotiated basis.

The Cost Specialist may be required to assist with the provision of details needed for an evaluation of the project, regarding the Project's cost performance.

2.5 Responsibilities to PWGSC

- PWGSC will review all aspects of the Cost Specialist's work on a continuing basis to determine the validity and completeness of the information provided. In the event PWGSC may identify areas of concern including errors and omissions as well as areas of inadequate detail or areas that require further explanation, the Cost Specialist shall re-examine the estimates provided and make such revisions as are subsequently agreed to be necessary and/or provide ample acceptable evidence that such corrections or amendments are unnecessary.

AS 2 BILINGUAL CONSTRUCTION DOCUMENTS

Construction Documents in both official languages as required.

Bilingual Requirements:

- The Consultant shall prepare all construction documents in Canada's two official languages.
- The languages are considered equal in status; neither is considered to be a translation of the other.
- The Consultant shall be responsible for the accuracy and completeness of translations and the consistency of documents.
- It is standard practice to produce a single set of drawings (originals) on which written information is shown in both languages and separate written documents for each language for tendering, record drawings and operating and maintenance documentation.

AS 3 RESIDENT SITE SERVICES DURING CONSTRUCTION

3.4.1 Educational Requirements

Resident Construction Services representative shall:

- have a minimum of ten (10) years experience on site inspection in the heritage building rehabilitation field;

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- have valid Safety Training i.e. fall protection, confined space, etc.

3.4.2 Description of Services

The purpose of Resident Construction Services representative is to ensure the presence of the Consultant on site for the project. The representative is to inspect, coordinate and monitor all aspects of the work during key periods of the construction of the Project, and liaise with the contractor, Departmental Representative and other agencies as appropriate to the work.

The Resident Construction Services representative is responsible for providing part time (including overtime) resident inspection during key periods of construction work and maintaining records of all construction work.

In conjunction with the Construction Safety Coordinator, the Resident Construction Services representative plays a key role in maintaining work place safety.

The Resident Construction Services representative shall:

- be directly responsible to the Consultant.
- be thoroughly familiar with the Contract documents, the National Building code and all Fire Commissioner of Canada Standards for Construction operations.
- He/she shall be aware of all Federal, Provincial and Municipal standards for the health and safety of construction workers.

3.4.3 Specific Duties and Responsibilities

Provide Resident Construction Services including inspection, coordination, monitoring and reporting during the construction work and be responsible to the Consultant.

In case of emergencies, the Consultant's Resident Construction Services representative is empowered to stop the work, or give orders to protect the safety of the workers or Crown property.

The Consultant shall ensure that the Resident Construction Services representative maintains records and submits time sheets. The Consultant shall forward time sheets of the Resident Construction Services representative's to Departmental Representative after verifying accuracy and approving. The Consultant shall submit reviewed and approved time sheets to the Departmental Representative, within two weeks after completion of 40 hours of service by the Resident Construction Services representative, for Departmental Representative review.

3.4.4 Inspection and Reporting

The Resident Construction Services representative shall inspect all phases of the work in progress, for the purpose of bringing to the attention of the Contractor, after checking with the Consultant, and Departmental Representative any discrepancies between the work, the contract documents and accepted construction procedures. Keep a log of such inspections and issue a weekly written report to the Consultant in the form directed. The Consultant shall review and approve weekly reports prior to distribution to the Departmental Representative. Reports shall be distributed within five (5) working days of the reports week ending date. The Resident Construction Services representative shall make any other reports or surveys as may be requested by the Departmental Representative through the Consultant.

3.4.5 Interpretation of the Contract Documents

Interpretation of the contract documents shall be the responsibility of the Consultant. The Consultant may, however, have the Resident Construction Services representative provide him with information regarding job conditions and may require him to relay day-to-day instructions to the Contractor.

It shall be the duty of the Resident Construction Services representative to assist the Consultant and further inform the Consultant of any anticipated problems which may delay the progress of the work. The method of relaying such information shall be determined by the Consultant.

3.4.6 Changes in the Work

The Resident Construction Services representative shall not authorize or order any change in the work which will constitute a change in design or in the value of the contract except as delegated by the Departmental Representative.

The Consultant may call upon the Resident Construction Services representative to assist in the evaluation of changes in the work, where knowledge of job conditions is required.

3.4.7 Communication & Liaison

The Resident Construction Services representative shall:

- Convey the Consultant's instructions regarding the required standards of workmanship to the Contractor(s);

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- Check specifications, confer and obtain guidance on these findings with the Consultant. The matter is then to be brought to the attention of the Contractor's Superintendent. Informal discussions with Sub-trade Superintendents are usually permissible, (but only with the agreement of the Contractor), but the Resident Construction Services representative should not deal directly with foreman or tradesmen, or interfere with the progress of the work.
 - Communicate formally with the contractor via memorandum form only. When this form is issued the Resident Construction Services representative must immediately file copies with PWGSC and the Consultant.
 - Contact the Consultant immediately when it is apparent that information or action is required of the Consultant, e.g. general instructions, clarifications, sample of shop drawing approvals, requisitions, contemplated change orders, site instructions, details, drawings, etc.
 - Accompany PWGSC representatives on inspections and report to the Consultant requirements, comments or instructions of PWGSC's forces. Note that the Resident Construction Services representative should encourage such requirements, comments or instructions to be provided to him in writing.
 - Consider and evaluate any suggestions or modifications to the documents advanced by the Contractor and immediately report these to the Consultant with comments.
 - Ensure that PWGSC and the Consultant are notified promptly when key pieces and/or components of materials and equipment are delivered, so that these parties can arrange for the appropriate personnel to have an opportunity to inspect same prior to installation.

3.4.8 Site Visit Log

The Resident Construction Services representative shall keep a log while on site recording:

- Time and date of visit
- Weather conditions, particularly unusual weather relative to construction activities in progress;
- Major material and equipment deliveries;

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- Activities and major work done;
 - Start, stop or completion of activities;
 - Progress relative to schedule;
 - Difficulties which may cause delays in completion;
 - Outstanding information or action required by Consultant or PWGSC;
 - Presence of inspection and testing firms, tests taken, results, etc;
 - Unusual site conditions experienced;
 - Significant developments, remarks, etc;
 - Accidents on site;
 - Authorities given contractor to undertake certain or hazardous works
 - Environmental incidents
 - Number of Contractor's staff and equipment on site

Note: The log is the personal property of the Resident Construction Services representative. Copies of the log book, certified as copies, are to be provided to the Departmental Representative and consultant at the end of the project.

3.4.9 Weekly Records

The Resident Construction Services Representative shall prepare weekly reports for the Consultant, which summarizes the site visit logs. Reports will include digital photographs illustrating the work.

3.4.10 Site Records

The Resident Construction Services representative shall maintain orderly and updated files at the site for the use of the Departmental Representative, Consultant and himself as follows:

- Contract and Tender Documents
- Approved Shop Drawings
- Approved Samples
- Digital sequential photographic record of the work

- Samples
- Site Instructions
- Contemplated Change Orders
- Change Orders
- Memoranda
- Test and Deficiency Reports
- Correspondence and Minutes of Meeting
- Names, addresses, telephone numbers of Client representatives, Consultant and all Contractors, sub-trades key personnel associated with the contract; including home telephone numbers in case of emergencies.

In addition, the Resident Construction Services representative shall maintain an updated progress schedule.

A reproduction of the original contract drawings shall be carefully preserved and shall be kept marked up to date with all addenda, change orders, site instructions, details, as-built conditions, etc., issued subsequent to the award of the contract.

3.4.11 Inspection of the Work

The Resident Construction Services representative shall make on site observations and spot checks of the work to determine whether the work, materials and equipment conform with the contract documents and supplementary conditions. The Resident Construction Services representative shall advise the Contractor of any deficiencies or unapproved deviations via memorandum and report immediately to the Consultant and Departmental Representative any of these on which the Contractor is tardy or refuses to correct.

The Resident Construction Services representative shall arrange for the Consultant's architectural, structural, mechanical, electrical and other consultants to make the periodic inspections required by the Consultant's contract, and for these inspections to be made timely with respect to the progress of the work.

The Resident Construction Services representative shall also report if materials and equipment are being incorporated into the project prior to approval of related shop drawings or samples.

The Resident Construction Services representative shall assist in the preparation of all deficiency reports, interim, preliminary, and final, in collaboration with the PWGSC and Consultant's representatives.

The Resident Construction Services representative shall be responsible for the measurement of all work to be done by the Contractor on a unit-cost basis.

3.4.12 Site Meetings

The Resident Construction Services representative shall attend and participate in all job-site meetings.

3.4.13 Inspection and Testing

The Resident Construction Services representative must see that the site tests, including daily mortar mixes, and inspections required by the contract documents are conducted, and should observe these tests and report the results in the daily log.

The Consultant should be notified if the test results do not meet the specified requirements, or if the Contractor does not have tests undertaken as required.

3.4.14 Emergencies

In the case of emergency where safety of persons or property is concerned, or work is endangered to safeguard the interests of PWGSC, the Resident Construction Services representative shall give immediate written notice to the Contractor of the possible hazard. She/he shall further, if necessary, stop the work or give orders for remedial work, and contact the Consultant immediately for further instruction.

3.4.15 Limitations

The Resident Construction Services representative shall not:

- Authorize deviations from the contract documents.
- Conduct tests.
- Approve shop drawings or samples. Accept any work or portions of the building.
- Enter into the area of responsibility of the Contractor's Field Superintendent.
- Stop the work unless concerned that an emergency exists as noted above.

3.4.16 Hazardous Construction Operations

The Resident Construction Services Representative is to communicate regularly with the Construction Safety Coordinator regarding any issues of site safety. All safety related issues must be forwarded immediately to the Safety Professional, as well as the Departmental Representative.

3.4.17 Equipment Required and Provided by Consultant

Costs of all equipment required shall be covered in the quoted fee. Equipment required shall include but, not necessarily be limited to:

- Digital Camera
- Personal Protective Equipment
- Office Supplies required to perform services
- Machines & devices necessary to record and measure the work
- Cell Phone with data connectivity
- Laptop

3.4.18 Building Security

Special precautions must be taken at all times to prevent unauthorized entry into the Facility. The Resident Construction Services representative is to ensure that all contractor-made openings and means of access, are firmly secured when the contractor leaves the site.

The Resident Construction Services representative will liaise closely with the Consultant and Departmental Representative on all security and/or safety problems that may arise due to the contractor's operations.