



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

**Bid Receiving - PWGSC / Réception des
soumissions - TPSGC**
11 Laurier St. / 11 rue Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

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

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

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

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

Comments - Commentaires

Vendor/Firm Name and Address

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

Issuing Office - Bureau de distribution

Consultant Services Division/Division des services
d'experts-conseils
L'Esplanade Laurier
4th floor, East Tower
140 O'Connor Street
Ottawa
Ontario
K1A 0S5

Title - Sujet Operations Centre Project	
Solicitation No. - N° de l'invitation EJ078-190917/A	Date 2019-01-10
Client Reference No. - N° de référence du client 20190917	
GETS Reference No. - N° de référence de SEAG PW-\$\$FE-180-76181	
File No. - N° de dossier fe180.EJ078-190917	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-02-20	Time Zone Fuseau horaire Eastern Standard Time EST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Naufal, Matthew	Buyer Id - Id de l'acheteur fe180
Telephone No. - N° de téléphone (613) 296-9346 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA PORTAGE III 11 LAURIER ST Gatineau Quebec K1A0S5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

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

REQUEST FOR PROPOSAL

IMPORTANT NOTICE TO PROPONENTS

THIS DOCUMENT CONTAINS A SECURITY REQUIREMENT

For further instructions please consult "Supplementary Instructions to Proponents", SI6 - Security Requirement and "Supplementary Conditions" SC1 - Security Related Requirements.

MANDATORY DOCUMENT VIEWING

This Request for Proposal contains a mandatory requirement. For further instructions, please consult "Supplementary Instructions to Proponents", SI8 - Existing Documents – Mandatory Secure Viewing. Failure to comply with the mandatory requirement will render your proposal non-responsive.

**THIS PROCUREMENT CONTAINS A SECURITY REQUIREMENT
REQUEST FOR PROPOSAL (RFP)**

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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 services required and strict time frames to implement this project do not allow sufficient time to conduct the usual two phase selection process
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.
4. The Proponent's proposal and rated requirements should not refer to classified or client specific items found in the documents available during secure viewing or name the end user, the facility purpose and location.

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 (2017-08-17), General instructions (GI) – Architectural and/or Engineering services – Request for Proposal;
Submission Requirements and Evaluation (SRE);

Subsection 2.b. of section GI16, Submission of proposal of R1410T, incorporated by reference above, is deleted in its entirety and replaced with the following:

- b. send its proposal only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit specified on page 1 of the RFP;

- (b) the general terms, conditions and clauses, as amended, identified in the Agreement clause;
 - (c) Project Brief;
 - (d) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
 - (e) the Security Requirements Check List (SRCL);
 - (f) any amendment to the solicitation document issued prior to the date set for receipt of proposals; and
 - (g) 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 at e-mail address matthew.naufal@pwgsc.gc.ca 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), the World Trade Organization - Agreement on Government Procurement (WTO-AGP), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

SI5 CERTIFICATIONS

1. Integrity Provisions – Declaration of Convicted Offences

In accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Proponent must **provide with its bid, as applicable**, to be given further consideration in the procurement process, the required documentation as per R1410T (2017-08-17), General instructions 1 (G1), Integrity Provisions – Proposal, **section 3b**.

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

available at the bottom of the page of the Employment and Social Development Canada (ESDC) - Labour's website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html>).

Canada will have the right to declare a 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 SECURITY REQUIREMENT

1. At the date of bid closing, the following conditions must be met:
 - (a) the Proponent must hold a valid organization security clearance as indicated in Supplementary Conditions SC1;
 - (b) the Proponent's proposed individuals requiring access to classified or protected information, assets or sensitive work site(s) must meet the security requirement as indicated in Supplementary Conditions SC1;
 - (c) the Proponent must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites.;
 - (d) the Proponent's proposed location of service performance or document safeguarding must meet the security requirement as indicated in Supplementary Conditions SC1.
 - (e) the Proponent must provide the address(es) of proposed location(s) of service performance or document safeguarding as indicated in the Declaration/Certifications Form.
2. For additional information on security requirements, proponents should refer to the Contract Security Program of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

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)

<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html>

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>

Ineligibility and Suspension Policy

<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>

Code of Conduct for Procurement

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

Lobbying Act

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

Buy and Sell

<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>

SI8 EXISTING DOCUMENTS – MANDATORY SECURE VIEWING

1. A portion of the requirement involves key documents that can only be made available to Proponents with applicable security clearances.

The documents will include:

- RS1A Feasibility Report, 26 April 2017

- RS1 Feasibility Report, 26 June 2017
 - Seismic Report (Final Submission-Amendment to High Level Seismic Review, , July 5, 2016)
 - Existing Building Layouts and Floor Plans
 - Building Condition Report (BCR) March 27, 2015
 - FHBRO Heritage Character Statement for the Building
2. The secure viewing of these documents is **MANDATORY**. Failure to attend a secure viewing of the documents will render the proposal non-responsive.
 3. Viewing of these documents will only be carried out by personnel who have been granted a **SECRET** security clearance by PWGSC Canadian Industrial Security Directorate (CISD).
 4. To schedule an appointment and allow sufficient time for security clearances to be verified by Canada, the Proponent must provide the company name, representative name(s), date(s) of birth (and if possible, the certificate number of the granted clearance) as well as the completed Non-Disclosure Agreement (NDA) in Appendix G in writing to the Contracting Authority at matthew.naufal@tpsgc-pwgsc.gc.ca at a minimum of three (3) business days prior to document viewing.
 5. Cameras or photographic equipment, unprocessed films, processed films including movie films, video or other recording equipment, transmitter, one-way radios, two-way radios, cellular telephones, portable electronic storage equipment like USB storage, Smart-Phones, Tablets, Laptops, iPods, BlackBerries, pagers and any other such devices, are considered restricted equipment, and are not to be brought into secured viewing room. Any of the aforementioned restricted equipment must be surrendered to the Commissionaire at the entrance to the secure area.
 6. Viewing Procedures and Processes:
 - (a) Viewing time availability will be scheduled during the solicitation period, up to **five (5)** working days prior to the closing date identified on the front page of the Request for Proposal. Viewings will be conducted Monday to Friday (inclusive) between the hours of 9:00am to 5:00pm. **A minimum of three (3) business days' notice (72 hours excluding weekends and holidays) is required prior to scheduling document viewing.**
 - (b) These documents will have to be read in a secure reading room, location to be specified at a later date by the Contracting Authority once security clearance is validated, and will not be allowed to leave the premises.

- (c) Once the appointment is confirmed, the Proponent must report to the main entrance/desk with a government issued (passport, driver's license etc.) photo identification. All individuals will be provided with an escort to and from the viewing location.
- (d) Upon arrival at the site, Security will verify the names of the Proponents which they will use to verify against scheduled appointments and advise the designated escort. The Proponent will be escorted to the designated office to review the bid documents.

SI9 OPTIONAL SITE VISIT

All interested Proponents and their Key Personnel are invited to attend an optional site visit on **Wednesday, January 30, 2019 at 10:00 a.m.** Interested parties who do not participate in the site visit will not be precluded from submitting a proposal.

Security Pre-Screening: Personnel security screening by Canadian Industrial Security Directorate (CISD) at the level of SECRET is required prior to gaining authorized access to the site. The signed NDA, the names of each individual attending the site visit, their date of birth, along with the name of the firm they represent (and if possible, the certificate number of the granted clearance), should be provided to the Contracting Authority by *January 7, 2019* in order to be guaranteed access to the site. Failure to comply with the security requirements will result in the representative(s) being denied access to the site.

The location of the site will be specified in writing by the Contracting Authority once the above information has been confirmed.

Any clarifications or changes to the bid solicitation resulting from the site visit will be included as an amendment to the bid solicitation.

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 (2018-06-21), General Condition (GC) 1 - General Provisions – Architectural and/or Engineering Services
 - R1215D (2016-01-28), General Condition (GC) 2 - Administration of the Contract – Architectural and/or Engineering Services
 - R1220D (2015-02-25), General Condition (GC) 3 - Consultant Services
 - R1225D (2015-04-01), General Condition (GC) 4 - Intellectual Property
 - R1230D (2018-06-21), General Condition (GC) 5 - Terms of Payment – Architectural and/or Engineering Services
 - R1235D (2011-05-16), General Condition (GC) 6 - Changes
 - R1240D (2018-06-21), General Condition (GC) 7 - Taking the Services Out of the Consultant's Hands, Suspension or Termination
 - R1245D (2016-01-28), General Condition (GC) 8 - Dispute Resolution – Architectural and/or Engineering Services
 - R1250D (2017-11-28), General Condition (GC) 9 - Indemnification and Insurance
 - (c) Project Brief;
 - (d) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
 - (e) the Security Requirements Check List (SRCL);
 - (f) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
 - (g) 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 wording 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;
- (h) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
- (i) the document entitled "Security Requirement Check List";
- (j) the proposal.

SUPPLEMENTARY CONDITIONS (SC)

SC1 SECURITY REQUIREMENT

1. The following security requirement (SRCL and related clauses) applies and form part of the Agreement.

SECURITY REQUIREMENT FOR CANADIAN SUPPLIER: PWGSC FILE # EJ078-190917

The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid Facility Security Clearance at the level of SECRET with approved Document Safeguarding and Production Capabilities at the level of SECRET, issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).

The Contractor/Offeror personnel requiring access to CLASSIFIED information, assets or sensitive work site(s) must EACH hold a valid personnel security screening at the level of SECRET, granted or approved by the CISD/PWGSC.

The Contractor MUST NOT utilize its Information Technology systems to electronically process, produce or store any sensitive CLASSIFIED information until CISD/PWGSC has issued written approval. After approval has been granted, these tasks may be performed at the level of SECRET.

Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.

The Contractor/Offeror must comply with the provisions of the:

- (a) Security Requirements Check List and security guide (if applicable), attached at Appendix E;
- (b) *Industrial Security Manual* (Latest Edition).

2. Consultant's Site or Premises Requiring Safeguard Measures

The Consultant must diligently maintain up-to-date, the information related to the Consultant's site or premises, where safeguard measures are required in the performance of the Services, for the following addresses:

Address:

Street Number / Street Name, Unit / Suite / Apartment Number

City, Province, Territory

Postal Code

SC2 SECURE WORK LOCATION

ONSITE OFFICE

1. PWGSC shall provide approximately 100m² of space within the grounds of the project site suitable to accommodate the Consultant's personnel to work on the documents and drawings for this project, construction administration, and meeting space for the Client Security Cleared contractors, and for any Project personnel dedicated to this project. The space will be made available to the Consultant immediately following contract award and will be available for a period of twelve (12) months following substantial completion of the project to allow the Consultant to complete post construction activities and deliverables. It will be constructed to meet the client requirements. PWGSC will provide the office desks, chairs and filing cabinets at no cost to the consultant. The consultant remains responsible to pay for and acquire all office equipment and supplies required to provide their services, including but not limited to, i.e. computers, high security cross cut type 2 shredder, fax & photocopying machines, and all other costs. Parking is available on site. There will be no external internet services allowed in this space. No materials or equipment brought into the secure office can be removed from the space, and all such material and equipment become the property of PWGSC upon entry. They are to be maintained by the Consultant throughout the duration of the contract, but remain the property of PWGSC at the termination of the contract period.
2. Power outlets will be provided by PWGSC. All required data wiring to be provided and installed by the Consultant. All electronic devices' hard-drives or memory devices must be returned to the Client after the Project completion. The Consultant will be responsible to provide the Client with a detailed list of all computer equipment, servers, plotters, etc. for the duration of their work on this Project, for all electronic hardware to perform the required work on this project, and must follow all approved Security procedures and protocols required by the Client policies, as conveyed by PWGSC to Consultant. Secure filing cabinets and briefcases will be provided by the Client through PWGSC and shall be returned when the Consultant's Contract is terminated, unless otherwise advised in writing by Departmental Representative.

3. All items carried into and out of the Onsite Office and Site must follow the Project Security Protocol (prepared by PWGSC and the Client), and may be subject to physical inspection by Client Internal Security personnel.
4. Cameras or photographic equipment, unprocessed films, processed films including movie films, video or other recording equipment, two-way radios, cellular telephones, portable electronic storage equipment like USB storage, Smart-Phones, Tablets, Laptops, iPods, Blackberries, pagers and any other such devices, are considered restricted equipment, and are not to be brought into the Client secured premises. Any of the aforementioned restricted equipment must be surrendered by the Consultant at the main entrance. To facilitate local communication within the secure site during the Project, special cell phones may be issued to Consultants and key Trades on an as available basis, which must not leave the site.

SC3 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, including translation of bidder's questions) 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.

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

For details on this format, please see SRE in the Request for Proposal.

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 or territorial law.

I. Prime Consultant (Proponent - Architect):

Firm or Joint Venture Name:
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.....

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

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II. Key Sub Consultants:

Mechanical Engineer

Firm Name:
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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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Structural Engineer

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

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Civil/Municipal Engineer

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

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.....
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APPENDIX B - DECLARATION/CERTIFICATIONS FORM

Project Title:

Name of Proponent:

Street Address:

Mailing Address:

Proponent's Proposed Site or premises Requiring Safeguard Measures (refer to SI6 Security Requirement):

Address:

Street Number / Street Name, Unit / Suite / Apartment Number

City, Province, Territory

Postal Code

Telephone Number: ()

Fax Number: ()

E-Mail:

Procurement Business Number:

Type of Organization: _____ Sole Proprietorship _____ Partnership _____ Corporation _____ Joint Venture	Size of Organization: Number of Employees _____ Graduate Architects / Professional Engineers _____ Other Professionals _____ Technical Support _____ Other _____
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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 permanent full-time and/or permanent part-time employees.
- 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 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.

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

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.

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.

PROPOSERS SHALL NOT ALTER THIS FORM.

Project Title: **Operations Center Project**

Name of Proponent: _____

The following will form part of the evaluation process:

1 REQUIRED SERVICES – FIXED FEE

REQUIRED SERVICES - The “Required Services” as specified in the Project Brief and in the RFP documents, being all services and deliverables to complete RS1 Pre-Design Services, RS2 Concept (Schematic) Design, RS3 Design Development, RS4 Construction Documents, RS5 Tender Call, Bid Evaluation & Construction Contract Award, RS6 Construction and Contract Administration and Post Construction Warranty Review.

FIXED FEE (R1230D (2016-01-28), GC 5 - Terms of Payment – Architectural and/or Engineering Services), for the Required Services is as follows:

Required Services for Tender Package 1 and Tender Package 2	Fixed Fee
RS1 Pre-Design Services	\$..... (a)
RS2 Concept (Schematic) Design	\$..... (b)
RS3 Design Development	\$..... (c)
RS4 Construction Documents	\$..... (d)
RS5 Tender Call, Bid Evaluation & Construction Contract Award	\$..... (e)
RS6 Construction and Contract Administration, and Post-Construction Warranty Review	\$..... (f)
<u>TOTAL FIXED FEE FOR REQUIRED SERVICES</u> (sum of (a)-(f) above	\$..... (1)

For clarity, the forgoing FIXED FEE for the Required Services includes, without limitation, all related cost.

2 ADDITIONAL SERVICES

ADDITIONAL SERVICES – as and when required

FIRM HOURLY RATES (R1230D (2016-01-28), GC 5 - Terms of Payment– Architectural and/or Engineering Services) for the Additional Services shall be, based on the Proponent's following hourly rate for the Proponent's Personnel (inclusive of payroll costs, overhead and profit):

For each of the disciplines listed (Partner, Senior, Intermediate and Junior) below, to ensure that fair and competitive hourly rates are received for each of the positions listed, the following requirement must be strictly adhered to: proponents must provide an hourly rate for each listed position. In the event that the firm consists of fewer personnel than listed, provide an hourly rate that corresponds with each position listed. The hourly rate provided must be equal to or greater than the hourly rate provided for the position listed below it. For example, if the firm does not have an Intermediate Personnel, the hourly rate provided must be equal to or greater than the hourly rate provided for the Junior Personnel. The hourly rate for any given category of personnel cannot be \$0 or nil value. Failure to insert an hourly rate for each position listed will render your proposal non-responsive.

PROPONENT'S PERSONNEL		HOURS* (Column A)	HOURLY RATES** (Column B)	Total (Columns A x B)
Architect				
	Partner	120	\$.....	\$.....(a)
	Senior	1200	\$.....	\$.....(b)
	Intermediate	820	\$.....	\$.....(c)
	Junior	450	\$.....	\$.....(d)
Mechanical				
	Partner	75	\$.....	\$.....(e)
	Senior	1000	\$.....	\$.....(f)
	Intermediate	500	\$.....	\$.....(g)
	Junior	50	\$.....	\$.....(h)

Electrical				
	Partner	75	\$.....	\$.....(i)
	Senior	1000	\$.....	\$.....(j)
	Intermediate	500	\$.....	\$.....(k)
	Junior	50	\$.....	\$.....(l)
Structural				
	Partner	35	\$.....	\$.....(m)
	Senior	175	\$.....	\$.....(n)
	Intermediate	225	\$.....	\$.....(o)
	Junior	60	\$.....	\$.....(p)
Civil/Municipal				
	Partner	35	\$.....	\$.....(q)
	Senior	225	\$.....	\$.....(r)
	Intermediate	175	\$.....	\$.....(s)
	Junior	50	\$.....	\$.....(t)
<u>TOTAL FEE FOR ADDITIONAL SERVICES (sum of (a) to (t))</u>				\$.....(2)

* The Hours in Column A are for bid evaluation purposes only and do not represent any hours or estimate of hours associated with the project. The quantities and categories of personnel identified in the chart above are for evaluation purposes only and shall not be interpreted to be a commitment by Canada to request the additional services of any of the personnel for any quantity of hours whatsoever. For clarity, payment will be based on the hourly rates in Column B and paid on the basis of actual hours worked, if any.

** This all-inclusive hourly rate is applicable to both normal working hours and any other shift work as required. For clarity, travel time and/or expenses will not be reimbursed separately (Refer to R1230D (2016-01-28), GC 5.12 – Disbursements).

3 TOTAL COST OF SERVICES FOR PROPOSAL EVALUATION PURPOSES

Any errors in the addition or multiplication of the amounts in the Price Proposal Form Sections (1) and (2) above will be corrected by Canada to obtain the Total Fee Amount. In the case of error in the extension or addition of unit prices, the unit price as so calculated by Canada will govern.

TOTAL COST OF SERVICES FOR PROPOSAL EVALUATION PURPOSES

Total Fixed Fee for Required Services	\$..... (1)
Total Fee for Additional Services	<u>\$.....</u> (2)
Total Evaluated Fee (sum of (1) and (2))	\$.....

END OF PRICE PROPOSAL FORM



Doing Business with PWGSC

Documentation and Deliverables Manual



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Revisions

Version	Date	Description
0.1	August 14, 2017	Draft version for consultation.
1.0	January 12, 2018	Original Issuance

1 General

1.1 Effective Date

January 12, 2018

1.2 Authority

This manual is issued by the authority of the Director General, Technical Services, Real Property Branch (RPB), Public Works and Government Services Canada (PWGSC).

1.3 Purpose

This document provides architectural and engineering (A&E) consultants with the requirements for producing deliverables for PWGSC projects in order to ensure a well-documented design process, and facilitate review by PWGSC staff.

1.4 Scope

This document shall apply to design-bid-build projects undertaken by PWGSC on its own behalf as well as for other government departments (OGDs). It is applicable to all regions of PWGSC and can be supplemented with regional addendum.

1.5 Harmonization with Terms of Reference

This document shall be used in conjunction with the project's Project Brief / Terms of Reference (TOR). In case of a conflict between documents, the requirements of the TOR prevail over those of this document.

1.6 Departmental Name Change

In the fall of 2015, Public Works and Government Services Canada (PWGSC) was renamed Public Services and Procurement Canada (PSPC).

This name change is occurring in a phased approach, and for most documents PSPC should be used. However, all contract documents shall use the legal name Public Works and Government Services Canada (PWGSC) until the name has been changed in legislation.

1.7 Terminology

This document utilizes the following terminology:

- “shall” is used to express a requirement, a provision the Consultant is obligated to meet;
- “should” is used to express a recommendation; and
- “may” is used to express an option or that which is permissible within the limits of this document.

1.8 Definitions

Addenda: Changes to the construction documents or tendering procedures, issued during the tendering process.

Construction Documents: The drawings and specifications (including addenda).

Drawings: The graphic means of showing work to be done, as they depict shape, dimension, location, quantity of materials and relationship between building components.

Reports: Written account given of a particular matter after thorough investigation or consideration prepared by the Consultant.

Specifications: Written descriptions of materials and construction processes in relation to quality, colour, pattern, performance and characteristics of materials, installation and quality of work requirements.

2 Construction Documents

2.1 General

This section provides direction to Consultant firms on the preparation of construction documents (namely specifications and drawings) to be submitted to PWGSC for real property projects across Canada.

Specifications, drawings, and addenda shall be complete and clear so that contractors can prepare bids without guesswork.

2.1.1 Principles of PWGSC Contract Documents

Contact documents shall be prepared based on common public procurement principles. PWGSC does not use Canadian Construction Documents Committee (CCDC) documents.

PWGSC is responsible for preparing and issuing the construction contract and the terms and conditions as well as all other related bidding and contractual documents. For detailed information, the standard acquisition clauses and conditions commonly used by PWGSC in the contracting process are available on the buyandsell.gc.ca website.

2.1.2 Translation

When bilingual documents are required in the Terms of Reference, all documentation including drawings, specifications, reports as well as all bidder questions shall be in both official languages.

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

2.1.3 Construction Documents Definitions

Unless otherwise indicated in the Project Brief / Terms of Reference, construction document submissions (33%, 50 or 66%, 99%, and 100% / final) shall meet the definitions outlined below. Further discipline based requirements may be included in the TOR.

- 33%: shall demonstrate general intent of design and compliance and alignment with relevant standards. Summary specification required, but not a full specification.
- 50% or 66%: shall show full system, all components, requirements, and lack only minor details on drawings. Specifications shall be well advanced and contain major work and material requirements and lack only minor details.
- 99%: shall be for final review by PWGSC, lacking no detail and complete with a project specific specification.
- 100% (or final): shall address comments by PWGSC as required, signed and sealed by the responsible design professional in compliance with various provincial jurisdiction requirements, ready for tender.

2.1.4 Quality Assurance

It is the sole responsibility of the Consultant firms to undertake their own quality control process and to review, correct, and coordinate their documents (between disciplines). The Consultant shall also ensure the constructability of their design.

2.1.5 Quality Assurance Deliverables

For every construction document submission (33 %, 50 % or 66 %, 99 % and 100 %), the Consultant shall provide:

- a completed and signed Checklist for the Submission of Construction Documents (see Appendix A); and
- an index as per Appendix B.

2.1.6 Terminology & Quantities

The Consultant shall 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,” “equivalent to,” and “to be determined on site by Departmental Representative” shall not be indicated in specifications nor in drawings, as such wording promotes inaccurate and inflated bids.

Construction documents shall permit bidders to bid accurately. If a precise quantity is impossible to identify (e.g. cracks to be repaired), then provide an estimated quantity for bidding purposes (to be used in conjunction with unit prices). Ensure that the terminology used throughout construction documents is consistent and does not contradict applicable codes and standards.

2.1.7 Units of Measure

All units of measure within drawings and specifications shall be based on the International System of Units (SI).

2.2 Drawings

2.2.1 General

Drawings shall be prepared in accordance with the [*PWGSC National CADD Standard*](#) and the Canadian Standards Association CSA B78.5-93: *Computer-Aided Design Drafting (Buildings)*. Drawing shall also meet the following criteria:

- dimensions shall be in metric only (no dual dimensioning);
- no trade names present on any drawings; and
- no specification-type notes are on any drawing.

2.2.2 Information to be Included

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

2.2.3 Title Blocks and Revision Notes

PWGSC title block shall be used for drawings and sketches (including addenda).

The percent of drawing completion should be included in the revision notes. Revision notes shall be inputted during design development, but cleared for 100% complete drawing (ready for tender).

2.2.4 Drawing Numbers

Drawings should be numbered in sets according to the type of drawing and the discipline involved as indicated in the following table. The requirements of the *PWGSC National CADD Standard* supersede these requirements, where warranted.

Discipline	Drawing
Demolition	D01, D02, etc.
Architecture	A01, A02, etc.
Civil	C01, C02, etc.
Landscaping	L01, L02, etc.
Mechanical	M01, M02, etc.
Electrical	E01, E02, etc.
Structural	S01, S02, etc.
Interior Design	ID01, ID02, etc.

2.2.5 Presentation Requirements

Present the drawings in sets, providing the applicable demolition, site plan, civil, landscaping, architecture, structural, mechanical, and electrical drawings in that order. All drawings should be of uniform standard size.

2.2.6 Legends

Provide a legend of symbols, abbreviations, references, etc., on the front sheet of each set of drawings, or in the case of large sets of drawings, provided the legend immediately after the title sheet and index sheets.

2.2.7 Schedules and Tables

Where schedules or tables occupy entire sheets, locate them at the back of each set of drawings for convenient reference.

2.2.8 North Arrow

Include a north arrow on all plans. 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.

2.2.9 Drawing Symbols

Follow generally accepted drawing conventions, understandable by the construction trades and in accordance with PWGSC publications.

2.2.10 As-Built Drawings

As-built drawings are official record drawings and shall represent as constructed conditions including location and size of equipment, devices, plumbing lines, mechanical and electrical equipment, structural elements etc. As-built drawings shall be updated in CAD, handwritten notes are not acceptable.

2.2.11 Submission Format

Unless otherwise stated in the Terms of Reference, drawing submissions shall be in electronic and hard copy format.

2.2.11.1 Drawing Hard Copy Deliverable Format

Drawing submitted in hard copy shall be:

- printed to scale with black lines on white paper;
- bound with staple or other means into sets, where presentations exceed 50 sheets, the drawings for each discipline may be bound separately for convenience and ease of handling; and
- of a paper size as agreed to with the Departmental Representative.

2.2.11.2 Drawing Electronic Copy Deliverable Format

Drawing submitted electronically shall be provided:

- without password protection or printing restrictions;
- in two formats:
 - PDF/E-1 (in compliance with ISO 24517-1);
 - .dwg format; and
- in accordance with Appendix D.

2.3 Building Information Modelling (BIM)

PWGSC is committed to using non-proprietary or “OpenBIM” standards. As such, the Consultant is not required to use any specific proprietary software format. For the sake of legacy information quality, the Consultant shall use the international standards of interoperability for BIM (IFC) in all cases where models are submitted. Consultants shall work with software that is compliant to this standard.

Where used, BIM shall not replace the submission requirements outlined by this document. Rather, consultants shall submit models in addition requirements outlined herein.

Where BIM is used, models and modelled information shall be submitted in the following two formats:

- .native (whichever format is native to the Modelling software used by the Consultant);
- .ifc (Industry Foundation Classification – IFC4 – [ISO 16739:2013](#)); and

All Modelled Information, and Model Information Exchanges shall conform to:

- Project-specific requirements, such as they are laid out in the Project Execution Plan, Project Documentation and Model Element Table; and
- The project-identified BIM Standards & Guidelines.

Models for electronic submissions shall be organized as per Appendix D.

2.4 Specifications

2.4.1 National Master Specification

Specifications prepared for PWGSC shall follow the most current version of the [National Master Specification \(NMS\)](#) format offered by the National Research Council.

The Consultant has overriding responsibility for the content of construction project specifications. For each specification, he or she shall edit, amend, and supplement the NMS template as deemed necessary to produce an appropriate project specification free of conflict and ambiguity. The Consultant should refer to the latest *NMS User's Guide* and *NMS Development Guide* issued by the National Research Council for further guidance on using the NMS.

2.4.2 Index

Specifications shall include an index which list all specification sections, including numbers of pages, as well as the division and section names in the format shown in Appendix B.

2.4.3 Specification Organization

Narrow scope sections describing single units of work should be used for complex work. Broad scope sections may be used for less complex work. The Consultant shall use consistently for the entire specification either the NMS 1/3 page format, the NMS 2/3-page format or the Construction Specifications Canada (CSC) full-page format.

Start each section on a new right hand page and show the PWGSC project number, NMS section title, NMS section number, page number, and specification date on each page. The project title, and Consultant's name are not to be indicated.

2.4.4 Standards

Code and standard references in the NMS may not be up to date, the Consultant shall ensure that the project specification use the current applicable edition of all references quoted.

2.4.5 Specifying Materials

Specifications should make use of generic names in referencing construction materials. The Consultant should refer to the latest version of the *NMS Development Guide* issued by the National Research Council for further details. The term "Acceptable Manufacturers" shall not be used, as this restricts competition and does not ensure the actual material or product will be acceptable.

2.4.5.1 Alternate Products and Materials

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.

2.4.5.2 Sole Sourcing

Sole sourcing of materials and/or work is only allowed in exceptional and justifiable circumstances. Prior to including sole source materials and/or work, the Consultant shall contact the Departmental Representative to obtain approval for the sole sourcing. Consultants shall provide proper justification for all individual sole source requirements.

Sole sourcing for materials and work may be required when performing work on existing proprietary systems, such as fire alarm systems, building automation systems (BAS) etc.

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

Designated Contractor

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

Wording for the sole source of building automation system should be in Part 1 as follows:

Designated Contractor

- .1 Retain the services of [_____] or its authorized representative to complete the work of all building automation system sections.

Wording for the sole source of building automation system should be in Part 2 as follows:

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 (i.e. fire alarm systems) should be in Part 2 as follows:

Acceptable Materials

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

2.4.6 Measurement for Payment

The measurement for payment shall be provided in lump sum or unit prices.

2.4.6.1 Unit Prices

Unit prices should only be used in instances where the quantity can only be roughly estimated (e.g. earth work). The approval of the Departmental Representative shall be sought in advance of their use. In each applicable NMS section where unit prices are used, add new or replace paragraph title “Measurement for Payment” with “Unit Prices.” and 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.

Provide a unit price table, sample shown below, to designate the work to which a unit price arrangement applies. The table shall include:

- the price per unit and the estimated total price for each item listed;
- a complete description of each type of work covered; and
- items 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						

2.4.7 Cash Allowances

Construction documents shall be complete and contain all of the requirements for the contractual work. Cash allowances are to be used only under exceptional circumstances (i.e. utility companies, municipalities), where no other method of specifying pricing is appropriate.

To include cash allowances, obtain approval from the Departmental Representative in advance, and use Section 01 21 00 – Allowances of the NMS to specify the criteria.

2.4.8 Warranties

The 12-month warranty period specified in PWGSC’s standard acquisition clauses and conditions with regard to the contract should typically be retained as is. Extended warranties should only be used where experience has shown that serious defects are likely to appear after expiry of the standard one-year warranty period. When necessary to extend beyond the 12 month warranty period,

use the following wording in Part 1 of the applicable technical sections, under the heading “Extended Warranty”:

For the work of this Section [____], the 12 month warranty period is extended to [____] months.

Where the extended warranty is intended to apply to a particular part of a specification section, modify the previous text as follows:

For [____], the 12 month warranty period is extended to [____] months.

2.4.9 Miscellaneous Requirements

Paragraphs noted as “Scope of Work” shall not be included. Within Part 1 – General of specifications, the paragraphs “Summary” and “Section Includes” shall not be utilized.

2.4.10 Specification Coordination

All sections of the specifications shall be coordinated, including the “Related Sections” portion of specifications and appendices. References to non-existent sections shall not be present within the specifications.

2.4.11 Regional Guide

The Consultant should contact the Departmental Representative to obtain the region’s requirements for Division 01 (General Requirements) or other short-form specifications as appropriate.

2.4.12 Health and Safety

All project specifications are required to include Section 01 35 29 – Health and Safety Requirements. Confirm with the Departmental Representative to determine if there are any instructions to meet regional requirements.

2.4.13 Subsurface Investigation Reports

If required, subsurface investigation report(s) shall be included after Section 31, and the following paragraph added to Section 31:

Subsurface Investigation Report(s)

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

If the Departmental Representative 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 providing the subsurface investigation report(s), the foundation information required by the current *National Building Code of Canada* (Division C, Part 2, 2.2.4.6) shall be included on foundation drawings.

2.4.14 Prequalification and Pre-Award Submissions

Do not include in the specifications 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 Departmental Representative.

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

2.4.15 Contracting Issues

Specifications describe the workmanship and quality of the work and shall not contain any contracting issues. Division 00 of the NMS is not used by PWGSC, except for the Seals page 00 01 07 and the Table of Contents 00 01 10. In specifications, remove all references to the following:

- general instructions to bidders;
- general conditions;
- Canadian Construction Documents Committee (CCDC) documents;
- priority of documents;
- security clauses and clearances;
- terms of payment or holdback;
- the tendering process;
- bonding requirements;
- insurance requirements;
- alternative and separate pricing;
- site visits (mandatory or optional); and
- the release of lien and deficiency holdbacks.

2.4.16 Specification Submission Format

Unless otherwise stated in the Terms of Reference, specification submissions shall be in electronic and hard copy format.

2.4.16.1 Specification Hard Copy Deliverable Format

Specifications submitted in hard copy shall be printed on both sides of 216 mm x 280 mm white bond paper.

2.4.16.2 Specification Electronic Copy Deliverable Format

Specifications submitted electronically shall be:

- provided in PDF/A (in compliance with ISO 19005) format, without password protection and printing restrictions; and
- in accordance with Appendix D.

2.5 Addenda

2.5.1 Format

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

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

No Consultant information (name, address, phone #, Consultant project #, etc.) should appear in addenda or their attachments (except on sketches).

2.5.2 Content

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

Where there are many or major changes to a section or drawing, consider deleting the entire section or drawing and replacing it with a new version.

3 Cost Estimates

3.1 Cost Estimates Submission Formats

3.1.1 Format

Construction cost estimates for projects shall be prepared in the elemental analysis format, which is in accordance with the latest edition issued by the Canadian Institute of Quantity Surveyors (CIQS) for all PWGSC regions excluding Quebec. Within Quebec region the cost estimates shall be prepared in the Unifomat II format.

3.1.2 Contents

All cost estimates shall contain the following:

- introduction narrative complete with an outline description of the cost estimate basis;
- description of information obtained and used in the cost estimate including the date received;
- listing of notable inclusions;
- listing of notable exclusions;
- listing of items/issues carrying significant risk;
- summary of the itemized cost estimate;
- itemized breakdown of cost estimate by elemental analysis for Class B, C, and D; and
- itemized breakdown of costs estimate in both elemental analysis and National Master Specification division format for Class A, including measured quantities, unit rate pricings and amounts for each item of work.

Allowances, if deemed necessary by Consultant, shall contain the following:

- design allowance to cover unforeseen items during design phase;
- escalation allowance for changes in market conditions between the date of the cost estimate and the date tender is called;
- construction allowance to cover unforeseen items during construction; and
- the basis of calculations of the above allowances.

3.2 Classes of Cost Estimates for Construction Projects

PWGSC applies a detailed, four-level classification using the terms Class A, B, C and D. Apply these estimate classifications at the project stages as defined in the TOR. For projects required to be submitted to Treasury Board (TB) for approval: an indicative estimate shall be at least a Class D and a Substantive Estimate shall be at least a Class B.

3.2.1 Class D (Indicative) Estimate

Based upon a comprehensive statement of requirements, an outline of potential solutions and/or functional program, this estimate is to provide an indication of the final project cost that will enable ranking to be made for all the options being considered. This cost estimate shall be prepared in elemental analysis format. The level of accuracy of a Class D cost estimate shall be such that no more than a 20% design allowance is required.

3.2.2 Class C Estimate

Based on schematic/conceptual design and/or comprehensive list of project requirements, this estimate shall be adequately detailed and shall be sufficient for making the correct investment decision. This cost estimate shall be based on measured quantities of all items of work and prepared

in elemental analysis format. The level of accuracy of a Class C cost estimate shall be such that no more than a 15% design allowance is required.

3.2.3 Class B (Substantive) Estimate

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

This cost estimate shall be based on measured quantities of all items of work and prepared in elemental analysis format. The level of accuracy of a Class B cost estimate shall be such that no more than a 10% design allowance is required.

3.2.4 Class A (Pre-Tender) Estimate

Based on completed construction drawings and specifications prepared prior to calling competitive tenders, this estimate shall be sufficient to allow a detailed reconciliation and/or negotiation with any contractor's tender submission. This cost estimate shall be based on fully measured quantities of all items of work and prepared in both elemental analysis and Trade division format as per MasterFormat™. The level of accuracy of a Class A cost estimate shall be such that no more than a 5% design allowance is required.

4 Project Schedules

4.1 Schedule Format

Project schedules shall be submitted in the .mpp file extension (compatible with MS Project). The schedule shall include:

- major and minor milestones;
- activities representing discrete elements of work assigned to one person which:
 - are named using verb-noun combination (i.e. Review Design Development Report);
 - contain realistic durations in days;
- project logic linking activities with appropriate relationships finish-start (FS), finish-finish (FF), start-start (SS); and
- Identification of the critical path activities.

4.2 Progress Report

The progress report shall detail the progress of each activity up to the date of the report. It shall also include any logic changes made, both historic and planned; projections of progress and completion; as well as the actual start and finish dates of all activities being monitored.

The contents of each progress report will vary depending on the requirements at each project phase. A progress report should include:

- an executive summary;
- a narrative report;
- a variance report;
- a criticality report;
- an exception report (as required);
- the master schedule with cash flow projections; and
- the detailed project schedule (network diagram or bar charts).

4.2.1 Executive Summary

The executive summary should provide a synopsis of narrative, variance, criticality and exception report, and is not to exceed one page.

4.2.2 Narrative Report

The project narrative shall detail 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 Detailed Schedule, and Critical Paths.

4.2.3 Variance Report

The variance report, with supporting schedule documentation, should detail the work performed to date and compare work progress to work planned. It should summarize the progress to date and explain all causes of deviations and delays and the required actions to resolve delays and problems with respect to the detailed schedule and critical paths. The variance report shall be presented in the following format:

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

4.2.4 Criticality Report

The criticality report identifies all activities and milestones with negative, zero, and up to five days' Total Float. It is used as a first sort for ready identification of the critical paths, or near-critical paths, through the entire project. The criticality report shall be presented in the following format:

Paper size: Letter
Orientation: Portrait
Title format: Project Title, Report Type, Print Date, Data Date, Revision Block
Body text: Narratives for each report to match other reports
Columns: Activity ID, Activity Name, Duration, Start, Finish, Activity % Complete, Total Float

4.2.5 Exception Report

The exception report shall be provided when unforeseen or critical issues arise. The Consultant shall advise the Departmental Representative and submit the details and proposed solutions in the form of an exception report. The report shall include sufficient description and detail to clearly identify:

- scope changes, including identifying the nature, reason, and total impact of all identified and potential project scope changes affecting the project;
- delays and accelerations, including identifying the nature, reason, and total impact of all identified and potential duration variations; and
- options enabling a return to the project baseline, including Identifying the nature and potential effects of all proposed options for returning the project within the baselined duration.

The exception report shall be provided in the following format:

Paper size: Letter
Orientation: Portrait
Title format: Project Title, Report Type, Print Date, Data Date, Revision
Body text: Narrative to match other reports

Paper size: Letter
Orientation: Landscape
Title format: Project Title, Report Type, Print Date, Data Date, Revision
Columns: Activity ID, Activity Name, Duration, Remaining Duration, Start, Finish, Total Float

4.2.6 Master Schedule

A master schedule including cash projection shall be provided in the following format:

Paper size: 11X17
Orientation: Landscape
Columns: Activity ID, Activity Name, Duration, Activity % Complete, Start, Finish, Total Float
Footer format: Project Title, Report Type, Print Date, Data Date, Revision Block
Sorting: Early Start, then Early Finish, then Activity ID based on the WBS.

4.2.7 Detailed Project Schedule

A detailed project schedule shall be provided along with a network diagram or bar charts in the following format:

Paper size: 11X17
Orientation: Landscape
Columns: Activity ID, Activity Name, Duration, Activity % Complete, Start, Finish, Total Float
Footer format: Project Title, Report Type, Print Date, Data Date, Revision Block
Sorting: Early Start, then Early Finish, then Activity ID based on the WBS.

Appendix A Checklist for the Submission of Construction Documents

Date:	
Project Title:	Project Location:
Project Number:	Contract Number:
Consultant's Name:	PWGSC Departmental Representative
Review Stage (stages may vary at discretion of project team): 33% <input type="checkbox"/> 50% or 66% <input type="checkbox"/> 99% <input type="checkbox"/> 100% <input type="checkbox"/>	

Drawings\Design			
Item	Verified by	Explanations	Action By
1 Index			
1a The index shows a complete listing of drawing titles and numbers.			
2 Title Blocks			
2a The title block is as per the <i>PWGSC National CADD Standard</i> .			
3 Units			
3a All units of measure are metric.			
4 Trade Names			
4a Trade names are not used.			
5 Specification Notes			
5a There are no specification-type notes.			
6 Terminology			
6a The term "Departmental Representative" is used instead of "Engineer," "PWGSC," "Owner," "Consultant," or "Architect."			
6b 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.			
7 Information to be included			
7a The project quantities, configurations, dimensions, and construction details are included.			
7b References to future work and elements not in the tender documents do not appear or are kept to an absolute minimum and clearly marked.			

Drawings\Design			
Item	Verified by	Explanations	Action By
8 Quality Assurance			
8a Coordination review of the design between various disciplines has been completed by the Consultant.			
8b Constructability review of design has been performed.			
9 Signing and Sealing			
9a Every final drawing bears the seal and signature of the responsible design professional in compliance with various provincial jurisdiction requirements.			

Specifications			
Item	Verified by	Explanations	Action by
1 National Master Specification			
1a The current edition of the National Master Specification (NMS) has been used.			
1b Sections have been included for all work identified on drawings and sections have been edited.			
2 Index			
2a The index shows a complete list of specifications sections with the correct number of pages.			
3 Organization			
3a Either the NMS 1/3- or 2/3-page format or the Construction Specifications Canada full-page format is used consistently for the entire specifications.			
3b Each section starts on a new page and the project number, section title, section number, page number and date is shown on each page.			
3c The Consultant's name is not indicated.			
4 Terminology			
4a The term "Departmental Representative" is used instead of "Engineer," "PWGSC," "Owner," "Consultant," or "Architect."			
4b 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.			
5 Dimensions			
5a Dimensions are provided in metric only.			
6 Standards			
6a The current edition of all references quoted is used.			
7 Specifications Materials			
7a The method of specifying materials uses recognized standards. Actual brand names and model numbers are not specified.			
7b Materials are specified using standards and performance criteria.			

Specifications			
Item	Verified by	Explanations	Action by
7c Non-restrictive, non-trade name “prescription” or “performance” specifications are used throughout.			
7d The term “Acceptable Manufacturers” is not used.			
7e No sole sourcing has been used.			
7f If sole sourcing has been used, the correct wording has been used and a justification, estimate, and specification have been provided to the Departmental Representative for the sole-sourced products.			
8 Measurement for Payment			
8a Unit prices are used only for work that is difficult to estimate.			
9 Cash Allowances			
9a No cash allowances have been used or if they have, approval from the Departmental Representative has been received.			
10 Miscellaneous Requirements			
10a No paragraphs noted as “Scope of Work” are included.			
10b In Part 1 - General of any section, the paragraphs “Summary” and “Section Includes” are not used.			
11 Specification Coordination			
11a The list of related sections and appendices are coordinated.			
12 Health and Safety			
12a Section 01 35 29.06 – Health and Safety Requirements is included.			
13 Subsurface Investigation Reports			
13a Subsurface investigation reports are included after Section 31.			
14 Prequalifications			
14a There are no mandatory contractor and/or subcontractor prequalification requirements or references to certificates, transcripts, licence numbers of a trade or subcontractor, or other such documentation or item included in the bid.			

Specifications			
Item	Verified by	Explanations	Action by
15 Contracting Issues			
15a Contracting issues do not appear in the specifications.			
15b Division 00 of the NMS is not used except 00 01 07 (Seals Page) and 00 01 10 (Table of Contents).			
16 Quality Assurance			
16a There are no specification clauses with square brackets “[]” or lines “___” indicating that the document is incomplete or missing information.			
17 Signing and Sealing			
17a Every final specification bears the seal and signature of the responsible design professional as required. Seals and signatures shall be shown in NMS section 00 01 07.			

I confirm that the drawings 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 Drawings and Specifications Table of Contents Template

B.1 General

List all drawings by number and title.

For specifications, list all divisions, sections (by number and title), and the number of pages in each section.

B.2 Sample Table of Contents

Project No: _____ **Table of Contents** **Index**
Page 1 of ____

DRAWINGS:

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

SPECIFICATIONS:

DIVISION	SECTION	NO. OF PAGES
01	01 00 10 – General InstructionsXX
	01 14 25 – Designated Substances ReportXX
	01 35 30 – Health and SafetyXX
23	23 xx xx	
26	26 xx xx	

Appendix C Addenda Formatting Template

C.1 Instructions

To re-issue a drawing with an addendum:

- indicate the drawing number and title; and
- list the changes or indicate the revision number and date.

To re-issue a specification with an addendum:

- indicate the section number and title; and
- list all changes (i.e. deletions, additions, and replacements) by article or paragraph.

The addendum, drawings and specifications should be sent as separate files.

C.2 Sample Addendum

Date: _____

Addendum Number: _____

Project Number: _____

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

DRAWINGS:

- 1 A1 Architecture
.1

SPECIFICATIONS:

- 1 Section 01 00 10 – General Instructions
 - .1 Delete article (xx) entirely.
 - .2 Refer to paragraph (xx.x),
delete the following: ...
and replace with the following: ...
- 2 Section 23 05 00 – Common Work Results - Mechanical
 - .1 Add new article (x) as follows:

Appendix D Directory Structure and Naming Convention Standards for Construction Tender Documents

D.1 Electronic Submissions

Electronic submittals of drawings, specification and models shall be in the following format unless otherwise specified in the Terms of Reference or instructed by the Departmental Representative:

- On media burned to read only memory (ROM) on either CD-ROM or DVD+R where:
 - CD-ROMs comply with ISO 9660:1988 standards;
 - DVD+Rs are 4.7 GB, single-sided, single-layer and comply with ISO/IEC 17344:2006 standards;
 - media is “closed” upon completion of burning; and
 - media is usable in such a way that files may be accessed and copied from it.

If BIM model size is greater than storage capacity of a DVD, refer to Terms of Reference or contact the Departmental Representative for transmission instructions.

Some projects may require the Consultant to upload files to an electronic system outlined in the Terms of Reference or as instructed by the Departmental Representative.

D.2 Directory Structure

D.2.1 1st Tier Subfolder

The 1st tier of the directory structure shall be “Project #####” 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.

D.2.2 2nd Tier Subfolder

The 2nd tier of the directory structure shall consist of: “Bilingual - Bilingue”, “English” and “Français” folders. The folders of the 2nd tier cannot be given any other names since the Government Electronic Tendering System (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 subfolders of the 3rd tier.

D.2.3 3rd Tier Subfolder

The 3rd tier of the directory structure shall consist of: “Drawings - Dessins”, “Drawings”, “Models”, “Specifications”, “Reports”, “Dessins”, “Modèles”, “Devis” and “Rapports”. 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.

D.2.4 4th Tier Subfolder - Drawings

The 4th-tier subfolders for Drawings should reflect the various disciplines of the set of drawings. Because the order of appearance of the subfolders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the subfolders in the “Drawings – Dessins”, “Drawings” and “Dessins” folders. The first subfolder 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.

The 4th tier “Drawings” and “Dessins” folder shall follow the naming convention:

- 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 – Électrique

The numbering of the 4th tier subfolders is for sorting purposes only and is not tied to a specific discipline. For example, “Architecture” could be numbered 05 for a project where there is four other disciplines before “Architecture” in the set of drawings or 01 in another project where it’s the first discipline appearing in the set.

The order of the drawings shall be the same as in the hard copy set. GETS will sort each drawing for both screen display and printing as per the following rules:

- The alphanumerical sorting is done on an ascending order;
- The alphanumerical order of the subfolders 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-older will be printed in alphanumerical order before the drawings in the 02 sub- folder etc.);

Each drawing PDF file within each subfolder 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.).

D.2.5 4th-Tier Subfolders for Specifications

The “Specifications” and “Devis” folders must have 4th tier subfolders created to reflect the various elements of the specifications. Because the order of appearance of the subfolders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the subfolders in the “Specifications” and “Devis” folders.

The 4th tier subfolders 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

Numbering of the 4th tier subfolders 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:

- The alphanumerical sorting is done on an ascending order.
- The alphanumerical order of the subfolders 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 subfolder will be printed, in alphanumerical order before the PDF files in the 02 subfolder, etc.).
- Each specifications PDF file within each subfolder 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.).

D.2.6 Directory Structure Example

The following is an example of the directory structure for the tender document, refer to previous sections for requirements, and use only sections applicable to the given project:

```
Project #####
  Bilingual – Bilingue
    Drawings – Dessins
      01 - Drawing List – Liste des dessins
      02 – Demolition – Démolition
      03 – Architecture – Architectural
      04 – Civil – Civil
      05 – Landscaping - Aménagement paysager
      06 – Mechanical – Mécanique
      07 – Electrical – Électricité
      08 – Structural - Structural
      09 – Interior Design – Aménagement intérieur
  English
    Drawings
      01 - Drawing List
      02 – Demolition
      03 – Architecture
      04 – Civil
      05 – Landscaping
      06 – Mechanical
      07 – Electrical
      08 – Structural
      09 – Interior Design
    ...
    Models
    Specifications
      01 – Index
      02 – Divisions
      03 – Appendices
    Reports
  Français
    Dessins
    Modèles
    Devis
    Rapports
```

D.3 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 subfolder of the directory structure.

D.3.1 Drawing File Names

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

X### - Y

Where:

X = the letter or letters from the drawing title block (“A” for Architecture 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 subfolders must be named with the same letter (“A” for Architecture 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:

- The drawing PDF files within each subfolder 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);
- If drawing PDF files are included in the “Bilingual - Bilingue” folder, these cannot be included as well in the “English” and/or “Français” folders;
- 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 subfolder, 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.

D.3.2 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 drawings 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.

D.3.3 Documents Other Than Specifications Divisions

Because PDF files within the Specifications subfolders are sorted alphanumerically (in ascending order) for both on screen display and printing order, all files that appear in folders other than the “Divisions” subfolder 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 – Drawings and Specifications Index

D.3.4 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 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.

D.4 Media Label

The CD-ROM or DVD+R shall be labeled with the following information:

Project Number / Numéro de projet

Project Title / Titre du projet

Documents for Tender / Documents pour appel d’offres

Disk X of/de X

Example:

Project 123456 / Projet 123456

Repair Alexandra Bridge / Réparation du pont Alexandra

Documents for Tender / Documents pour appel d’offres

Disk 1 of/de 1



SECURITY REQUIREMENTS CHECK LIST (SRCL)

LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE			
1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine		Public Works and Government Services Canada	2. Branch or Directorate / Direction générale ou Direction Real Property Branch
3. a) Subcontract Number / Numéro du contrat de sous-traitance		3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant	
4. Brief Description of Work / Brève description du travail Consultant design services			
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
6. Indicate the type of access required / Indiquer le type d'accès requis			
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)		<input type="checkbox"/> No Non	<input checked="" type="checkbox"/> Yes Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
6. c) Is this a commercial courier or delivery requirement with no overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès			
Canada <input checked="" type="checkbox"/>		NATO / OTAN <input type="checkbox"/>	Foreign / Étranger <input type="checkbox"/>
7. b) Release restrictions / Restrictions relatives à la diffusion			
No release restrictions Aucune restriction relative à la diffusion <input checked="" type="checkbox"/>		All NATO countries Tous les pays de l'OTAN <input type="checkbox"/>	No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>
Not releasable À ne pas diffuser <input type="checkbox"/>			
Restricted to: / Limité à: <input type="checkbox"/>		Restricted to: / Limité à: <input type="checkbox"/>	Restricted to: / Limité à: <input type="checkbox"/>
Specify country(ies): / Préciser le(s) pays:		Specify country(ies): / Préciser le(s) pays:	Specify country(ies): / Préciser le(s) pays:
7. c) Level of information / Niveau d'information			
PROTECTED A PROTÉGÉ A <input type="checkbox"/>		NATO UNCLASSIFIED NATO NON CLASSIFIÉ <input type="checkbox"/>	PROTECTED A PROTÉGÉ A <input type="checkbox"/>
PROTECTED B PROTÉGÉ B <input type="checkbox"/>		NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/>	PROTECTED B PROTÉGÉ B <input type="checkbox"/>
PROTECTED C PROTÉGÉ C <input type="checkbox"/>		NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/>	PROTECTED C PROTÉGÉ C <input type="checkbox"/>
CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>		NATO SECRET NATO SECRET <input type="checkbox"/>	CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>
SECRET SECRET <input checked="" type="checkbox"/>		COSMIC TOP SECRET COSMIC TRÈS SECRET <input type="checkbox"/>	SECRET SECRET <input type="checkbox"/>
TOP SECRET TRÈS SECRET <input type="checkbox"/>			TOP SECRET TRÈS SECRET <input type="checkbox"/>
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>			TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>



PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes
Non Oui

If Yes, indicate the level of sensitivity:

Dans l'affirmative, indiquer le niveau de sensibilité :

9. Will the supplier require access to extremely sensitive INFOSEC information or assets?
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? ☒ No ☐ Yes
Non Oui

Short Title(s) of material / Titre(s) abrégé(s) du matériel :

Document Number / Numéro du document :

PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> RELIABILITY STATUS
COTE DE FIABILITÉ | <input type="checkbox"/> CONFIDENTIAL
CONFIDENTIEL | <input checked="" type="checkbox"/> SECRET
SECRET | <input type="checkbox"/> TOP SECRET
TRÈS SECRET |
| <input type="checkbox"/> TOP SECRET- SIGINT
TRÈS SECRET - SIGINT | <input type="checkbox"/> NATO CONFIDENTIAL
NATO CONFIDENTIEL | <input type="checkbox"/> NATO SECRET
NATO SECRET | <input type="checkbox"/> COSMIC TOP SECRET
COSMIC TRÈS SECRET |
| <input type="checkbox"/> SITE ACCESS
ACCÈS AUX EMPLACEMENTS | | | |

Special comments:

Commentaires spéciaux :

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.

REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? ☒ No ☐ Yes
Non Oui

If Yes, will unscreened personnel be escorted?

Dans l'affirmative, le personnel en question sera-t-il escorté?

☒ No ☐ Yes
Non Oui

PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? ☐ No ☒ Yes
Non Oui

11. b) Will the supplier be required to safeguard COMSEC information or assets?
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? ☒ No ☐ Yes
Non Oui

PRODUCTION

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? ☐ No ☒ Yes
Non Oui

INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? ☐ No ☒ Yes
Non Oui

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? ☒ No ☐ Yes
Non Oui



PART C - (continued) / PARTIE C - (suite)

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.

Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

Category Catégorie	PROTECTED PROTÉGÉ			CLASSIFIED CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
				CONFIDENTIEL		TRÈS SECRET	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL		COSMIC TRÈS SECRET	A	B	C	CONFIDENTIEL		TRÈS SECRET
Information / Assets Renseignements / Biens					✓											
Production					✓											
IT Media / Support TI					✓											
IT Link / Lien électronique																

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?

La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?

☒ No
Non ☐ Yes
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".

Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?

La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?

☒ No
Non ☐ Yes
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).

Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquez qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).

**APPENDIX F – INFORMATION RELATED TO SECURITY REQUIREMENT
(APPENDIX E SRCL)**

PROPONENT (Architect)	
Legal Name of Individual:	
Legal Name of Firm:	
Complete Address:	
Telephone Number:	
CISD File Number:	
Organization Security Clearance:	

The Proponent's Key Personnel identified in SRE 3.1.2 must meet the security requirements as indicated in Supplementary Conditions SC1

SRE 3.1.2 KEY PERSONNEL – Mechanical	
Legal Name of Individual:	
Name of Firm:	
Level of Security Clearance:	
Validity period of Security Clearance:	
Security Screening Certificate and Briefing Form File Number or CISD File Number:	

SRE 3.1.2 KEY PERSONNEL – Electrical

Legal Name of Individual:	
Name of Firm:	
Level of Security Clearance:	
Validity period of Security Clearance:	
Security Screening Certificate and Briefing Form File Number or CISC File Number:	

SRE 3.1.2 KEY PERSONNEL - Structural

Legal Name of Individual:	
Name of Firm:	
Level of Security Clearance:	
Validity period of Security Clearance:	
Security Screening Certificate and Briefing Form File Number or CISC File Number:	

SRE 3.1.2 KEY PERSONNEL – Civil/Municipal

Legal Name of Individual:	
Name of Firm:	
Level of Security Clearance:	
Validity period of Security Clearance:	
Security Screening Certificate and Briefing Form File Number or CISC File Number:	

APPENDIX G - NON-DISCLOSURE AGREEMENT

THIS AGREEMENT made as of the ____ day of _____, 20____.

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF CANADA,
as represented by the Minister of Public Works and Government Services
Canada ("**PWGSC**")

- and -

XYZ, [a company incorporated under the laws of _____,
having its head office at _____] ("**XYZ**")

WHEREAS:

- A. PWGSC has Confidential Information that it is willing to share with the XYZ for the purposes of the project contemplated by solicitation EJ078-190917 (hereinafter the "Project");
- B. PWGSC wishes to preserve the confidentiality of its Confidential Information; and
- C. The Parties wish to set out in this Agreement their rights and obligations with respect to the disclosure and use of PWGSC's Confidential Information;

NOW THEREFORE IN CONSIDERATION of the mutual terms and conditions, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. PREAMBLE

The preamble forms an integral part of this Agreement.

2. DEFINITIONS

- a) "**Agreement**" means this agreement between PWGSC and XYZ respecting the Project, as the same may be amended from time to time.
- b) "**Confidential Information**" means the physical address of the facility, the intended purpose of the facility, the name of the client, and also, without limitation, all scientific, technical, business, financial, legal, marketing, or strategic information and data
 - i. that is non-public, protected, confidential, privileged or proprietary in nature;
 - ii. that may have actual or potential economic value, in part, from not being known;

- iii. however fixed, stored, expressed or embodied (and includes, without limitation, samples, prototypes, specimens and derivatives);
- iv. disclosed during discussions, telephone calls, meetings, tests, demonstrations, correspondence or otherwise;
- v. that is consistently treated as confidential;

or any part or portion thereof, related to the Project pursuant to this Agreement, whether or not such information is specifically marked confidential or identified as confidential at the time of disclosure.

- c) **“Party”** means either PWGSC or XYZ individually, and **“Parties”** means both PWGSC and XYZ collectively, and its Permitted Representatives.
- d) **“Permitted Representatives”** means, for PWGSC, government officials, employees and agents from any organization of the federal public administration, including, for greater certainty, departments and central agencies, as well as any contractors, representatives or advisors retained by any portion thereof; and for XYZ, directors, employees, authorized representatives or advisors.

3. CONFIDENTIALITY

- a) Obligation of Confidentiality – Confidential Information disclosed by PWGSC to XYZ under this Agreement shall be:
 - i. held in confidence by the XYZ;
 - ii. used by the XYZ exclusively for the Project;
 - iii. safeguarded by XYZ taking such action as may be appropriate to prevent the unauthorized access, use or disclosure of the Confidential Information;
 - iv. not be disclosed to third parties, except Permitted Representatives (and each Permitted Representative of XYZ is required to agree in writing to be bound by the terms of this Agreement) of XYZ and then only for the Project; and
 - v. not disclosed unless required by law.

XYZ is prohibited from referencing the Confidential Information, including the physical address of the facility, the intended purpose of the facility, and the name of the client, in any resulting proposal.

- b) No Waiver of Privilege – Each Party acknowledges that the Confidential Information of PWGSC is the property of PWGSC or a third party and that neither PWGSC nor the third party intends to, or does, waive any rights, title or privilege it may have in respect of any of the Confidential Information.

- c) Confidential Information may only be reproduced as necessarily required to carry out the Project, or with written permission from PWGSC.

4. RECORD AND LOCATION OF CONFIDENTIAL INFORMATION

- a) Secure Location – XYZ shall keep the Confidential Information in a secure location and ensure that only those with a need to know will be provided with confidential information.
- b) Return of Confidential Information – Upon demand from PWGSC, XYZ shall return the Confidential Information disclosed by PWGSC under this Agreement.

5. OWNERSHIP

Confidential Information is Proprietary – The Confidential Information of PWGSC is and shall remain the exclusive property of PWGSC [or third parties, as the case may be] and, apart from the terms of this Agreement, XYZ is granted no title, interest or ownership in the Confidential Information. XYZ shall not contest any such title, interest or ownership. XYZ shall not incorporate the Confidential Information or any resulting product based on or derived from the Confidential Information in any patent or copyright application.

6. EFFECTIVE DATE AND DURATION

This Agreement shall come into force and effect on the date of last signature (the “Effective Date”). The Confidential Information shall be held confidential in perpetuity from the Effective Date of this Agreement, notwithstanding termination of the Agreement.

7. INDEMNIFICATION

- a) XYZ shall, at its own cost, indemnify and save harmless PWGSC from and against all claims, demands, losses, damages, costs (including solicitor and own-client costs), actions, suits or other proceedings, all in any manner based upon, arising out of, related to, occasioned by or attributable to, any acts or omissions whatsoever of XYZ (whether by reason of negligence or otherwise) in the performance or breach by XYZ of the provisions of the Agreement or any activity undertaken or purported to be undertaken under the authority or pursuant to the terms of this Agreement.

8. TERMINATION AND EQUITABLE REMEDIES

- a) Upon expiration of this Agreement, or at the request of PWGSC, all Confidential Information in any form, including without limitation, any hard or electronic copies shall be promptly returned by XYZ to PWGSC and XYZ shall have no right

whatsoever to continue the use of or disclosure of the returned Confidential Information in any way whatsoever.

- b) Notwithstanding the expiration of this Agreement, all obligations of XYZ, which expressly or by their nature survive termination or expiration, shall continue in full force and effect subsequent to and notwithstanding such termination or expiration, until they are satisfied or by their nature expire, including without limitation, Confidentiality (Article 3) and Indemnification (Article 7).
- c) Should XYZ breach the provisions of this Agreement, PWGSC shall be entitled to equitable relief, in addition to all other remedies available to PWGSC at law or in equity. The Parties agree that an award of damages may not be an effective remedy in the event of a breach of this Agreement.

9. MISCELLANEOUS

- a) Entire Agreement – This Agreement constitutes the entire agreement between the Parties pertaining to the subject-matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, of the Parties pertaining to such subject-matter. There are no warranties, representations or other agreements between the Parties in connection with the subject matter hereof, except those specifically set out herein. The execution of this Agreement has not been induced by, nor do any of the Parties rely upon or regard as material, any representations not included in this Agreement.
- b) Amendment – No amendment to this Agreement shall be effective unless reduced to writing and signed by the authorized representatives of the Parties.
- c) Waiver – No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision (whether or not similar) nor shall such waiver constitute a continuing waiver unless otherwise expressly provided.
- d) Successors – This Agreement shall enure to the benefit of, and be binding upon, the Parties and their respective heirs, executors, administrators and permitted successors and assigns.
- e) Relationship – The Parties expressly disclaim any intention to create a partnership, joint venture or joint enterprise. [This Agreement shall in no way be interpreted as granting a license to technology to which the Confidential Information is a part.]
- f) Forum Conveniens and Applicable Laws – This Agreement shall be governed by and interpreted under the laws in force in the Province of Ontario, without regard to any choice of law rules. The courts of the Province of Ontario shall have

exclusive jurisdiction over all matters arising in relation to this Agreement and each Party hereby submits to the jurisdiction of the courts of the Province of Ontario.

- g) Assignment – This Agreement is personal to the Parties and cannot be assigned by a Party, in whole or in part, or any interest, right or obligations hereunder.

10. NOTICES

- a) Contact Individuals, Addresses and Numbers - unless otherwise notified, the representative of the Parties for the purpose of the Agreement shall be:

For PWGSC: [Insert name, address]
Telephone: [Insert telephone number]
Email: [Insert email address]

For XYZ: [Insert name, address]
Telephone: [Insert telephone number]
Email: [Insert email address]

- a) Mode of Service - Any notices or other communications required or permitted under this Agreement shall be in writing and shall be either
- i. personally delivered;
 - ii. sent by courier;
 - iii. sent by registered mail, postage prepaid; or
 - iv. sent by email;

to the addresses and persons cited above. Any Party may change the names of the intended recipient and addresses by written notice.

- b) Confirmation of Service - Any notice or communication
- i. given by personal delivery shall be deemed to have been received on the date of delivery;
 - ii. given by courier or registered mail shall be deemed to have been received on the date of signature on the delivery slip;
 - iii. given my email shall be deemed to have been received when the Internet “postmaster” states receipt of the electronic message.

- c) This Agreement may be executed in counterpart.

11. EXECUTION / SIGNATURES

IN WITNESS WHEREOF this Agreement has been executed by duly authorized representatives of the Parties.

HER MAJESTY THE QUEEN
IN RIGHT OF CANADA, *as represented by*
the Minister of Public Works and Government Services Canada

By: _____
[Name of official]
[Title]

Date

FOR XYZ:

By: _____
[Name of official]
[Title]
I have authority to bind the [corporation, etc.]

Date

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 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 three (3) 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 schedules, organization charts, or work breakdown structure will be counted as 1.0 page. The blank back side of aforementioned fold out sheet will not count in the page total. Use of 11"x17" pages for any other information will be counted as two (2) 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 (30) pages.

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

- Covering letter
- Consultant Team Identification (Appendix A)
- Declaration/Certifications Form (Appendix B)

- Integrity Provisions – Required Documentation
- Front page of the RFP
- Front page of revision(s) to the RFP Price Proposal Form (Appendix C)
- Information Related to Security Requirement (Appendix F)
- Non-Disclosure Agreement (Appendix G)

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.

3.1.1 Licensing, Certification or Authorization

The proponent shall be an Architect, licensed, 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 or territorial law in the province of Ontario.

3.1.2 Consultant Team Identification

The consultant team to be identified must include the following:

Proponent (prime consultant)

- Architect

Key Sub-consultants

- Mechanical Engineering
- Electrical Engineering
- Structural Engineering
- Civil/Municipal Engineering

If the proponent proposes to provide multidisciplinary services that might normally be provided by a sub-consultant, this should be indicated here.

Information required - name of firm, key personnel to be assigned to the project. For the prime consultant indicate current license and/or how you intend to meet the provincial or territorial 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.

3.1.3 Declaration/Certifications Form

- Proponents must complete, sign and submit the following:

Appendix B, Declaration/Certifications Form as required.

3.1.4 Integrity Provisions – Required documentation

In accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Proponent must provide, **as applicable**, to be given further consideration in the procurement process, the required documentation as per R1410T (2017-08-17), General instructions 1 (GI1), Integrity Provisions – Proposal, **section 3a**.

3.1.5 Security Requirement

- Proponents must meet the security requirements as outlined under SI6 and SC1.
- At Bid Close, the following conditions must be met:
 - The Proponent and Sub-Consultants/Specialists must meet the following security requirement:

Proponent/Sub Consultants/Specialists (Firms)	Security Clearance (FSC Secret) at Bid Close	Document Safeguarding (Secret) at Bid Close
Proponent (Prime Consultant)	X	X
Mechanical Engineer	X	
Electrical Engineer	X	
Structural Engineer	X	
Civil/Municipal Engineer	X	

To help PWGSC with the verification process, Proponent are being asked to complete Appendix F.

b. The Proponent Key Personnel must meet the following security requirement:

Key Personnel Category (Individuals)	Security Clearance (Secret) at Bid Close
Proponent (Prime Consultant)	X
Mechanical Engineer	X
Electrical Engineer	X
Structural Engineer	X
Civil/Municipal Engineer	X

To help PWGSC with the verification process, Proponent are being asked to complete Appendix F.

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) projects undertaken within the last ten (10) years that are of similar scope, multi-purpose spaces and offices, secured facilities, and 7,000 m² or larger building renovations/ Fit-ups designed and constructed.

Joint venture submissions are not to exceed the maximum number of projects.

Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives shall include a discussion of design philosophy / approach to meet the intent, design challenges and resolutions.
- Describe challenges encountered in previous identified projects and how these challenges were resolved, including lessons learned.
- budget control and management
- project schedule control and management
- names of key personnel responsible for project delivery
- awards received

In the event that the Proponent describes more than three (3) projects, only the first three (3) projects listed, in sequence, will be evaluated and rated (with any other submitted projects not being evaluated or rated by Canada and being deemed not received by Canada).

The Proponent (as defined in R1110T 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.

3.2.2 Achievements of Key Sub-consultants and Specialists on Projects

- Key sub-consultants (disciplines) are: Mechanical Engineers, Electrical Engineers, Structural Engineers, and Civil/Municipal Engineers.

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. Key sub-consultants are to describe up to a maximum of two (2) projects completed within the last ten (10) years that are of similar scope; multi-purpose spaces and Offices, security facilities, and building renovations/ Fit-ups.

Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives shall include a discussion of design philosophy / approach to meet the intent, design challenges and resolutions.
- Describe challenges encountered in previous identified projects and how these challenges were resolved, including lessons learned.
- budget control and management
- project schedule control and management
- names of key personnel responsible for project delivery
- awards received

In the event that the Proponent describes more than two (2) projects, only the first two (2) projects listed, in sequence per key sub-consultant or specialist, will be evaluated and rated (with any other submitted projects not being evaluated or rated by Canada and being deemed not received by Canada).

3.2.3 Achievements of Key Personnel on Projects

The Proponent should describe the individual and collective experiences and performance of key personnel (lead person Architectural, Mechanical, Electrical, Structural, and Civil/Municipal to be assigned to this project regardless of their 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.

Information that should be supplied for each key personnel:

- name of personnel and title
- professional accreditation
- accomplishments/achievements/awards
- relevant experience, expertise, number of years experience (A minimum 10 years' experience in their field of expertise is required for the lead person from the Proponent and individual Sub-Consultants/Specialists.)
- role, responsibility and degree of involvement of individual in past projects and what their involvement will be on this project.

3.2.4 Understanding of the Project:

The Proponent should demonstrate understanding, the functional/technical requirements, the constraints and the issues that may affect the design, delivery and implementation of the project.

Information that should be supplied:

- Demonstrate an understanding of the unique functional and technical requirements of the Client
- The relationship between this Project and any previously completed projects
- The project specific objectives and significant issues, challenges and constraints from the technical, logistical and construction point of view.
- Project schedule and cost. Review schedule and cost information and assess risk management elements that may affect the project planning of execution of work

3.2.5 Scope of Services:

The Proponent is to demonstrate capability to perform the services and meet project challenges and to provide a plan of action.

Information that should be supplied:

- Outline the scope of services required, which can be provided in-house, how an integrated team approach will be followed to provide the complete scope of services, and how major schedule milestones can be achieved while also limiting costs of construction and on time delivery.
- Work Plan - detailed breakdown of work tasks and deliverables
- Project schedule - proposed major milestone schedule, for Tender Packages 1 and 2 (see PD 2 Section 2.4)
- Schedule control - explain the methodology to control schedule
- Cost control methodology - explain how cost control will be applied

- Quality Control of the Services in each phase of the project
- Construction stage services
- Cost planning and control process
- Dispute management
- Communication strategies

3.2.6 Management of Services:

The Proponent is to describe how they propose to manage the services and meet the constraints, as described in the Project Brief; 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 in the existing structure of the firms; and to describe how the team will be managed. The Proponent is also to identify sub-consultant disciplines and specialists required to complete the consultant team.

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

Information to be supplied:

- Confirm the makeup and reporting relationships of the full project team including the names of sub-consultants and specialists personnel and their role on the project.
- Organization chart with position titles and names (Consultant team). Joint Venture business plan, team structure and responsibilities, if applicable
- Profiles of the key positions (specific assignments and responsibilities)
- Outline of an action plan of the services with implementation strategies and sequence of main activities (Work Plan)
- Response time: demonstrate how the response time requirements will be met.

3.2.7 Design Philosophy / Approach / Methodology

The proponent should elaborate on aspects of the project considered to be a major challenge which will illustrate design philosophy / approach / methodology. This is the opportunity for the Proponent to state the overall design philosophy of the team as well as their approach of resolving design issues and in particular to focus on the unique aspects of the current project.

Information that should be supplied:

- Design Philosophy / Approach / Methodology
- Describe the major challenges and how your team approach will be applied to those particular challenges.

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:

Criterion	Weight Factor	Rating	Weighted Rating
Achievements of Proponent	2.0	0 - 10	0 - 20
Achievements of Key Sub-consultants / Specialists	1.0	0 - 10	0 - 10
Achievements of Key Personnel on Projects	2.0	0 - 10	0 - 20
Understanding of the Project	2.0	0 - 10	0 - 20
Scope of Services	1.0	0 - 10	0 - 10
Management of Services	1.0	0 - 10	0 - 10
Design Philosophy / Approach / Methodology	1.0	0 - 10	0 - 10
Technical Rating	10.0		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

To be considered further, proponents **must** achieve a minimum Technical Rating of fifty (50) 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 fifty (50) points.

SRE 4 PRICE OF SERVICES

All price proposal envelopes corresponding to responsive proposals which have achieved the pass mark of fifty (50) points will be opened upon completion of the technical evaluation. When there are three or more responsive proposals, an average price is determined by adding all the price proposals together and dividing the total by the number of price proposals being opened. This calculation will not be conducted when one or two responsive proposals are received.

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 price proposals receive a Price Rating of 0.
- C. On the rare occasions where two (or more) price proposals are identical, the matching price proposals receive the same rating and the corresponding number of following ratings are skipped.

The Price Rating is multiplied by the applicable percentage to establish the Price Score.

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 submitting the lower price for the services will be selected.

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, G116 Submission of proposal, as amended in SI2 Proposal documents. 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 – Required documentation – **as applicable** in accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>) and as per R1410T (2017-08-17), General instructions 1 (G11), Integrity Provisions – Proposal, **section 3a**.
- ☐ Integrity Provisions - Declaration of Convicted Offences – **with its bid, as applicable** in accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>) and as per R1410T (2017-08-17), General instructions 1 (G11), Integrity Provisions – Proposal, **section 3b**.
- ☐ Proposal - one (1) original plus three (3) copies
- ☐ Front page of RFP
- ☐ Front page(s) of any solicitation amendment

In a separate envelope:

Price Proposal Form - one (1) completed and submitted in a separate envelope

PROJECT BRIEF

The Project Brief is divided into three sections :

1. Description of Project
2. Description of Services
 - Project Administration (PA)
 - Required Services (RS)

For standards relating to the service provisions herein please refer to the document “Doing Business with PWGSC” found in Appendix D. The standards must be adhered to in conjunction with this scope of services.

1. Description of Project

- | | |
|------|------------------------|
| PD 1 | Project Information |
| PD 2 | Project Identification |
| PD 3 | Project Background |
| PD 4 | Project Considerations |
| PD 5 | Existing Documentation |
| PD 6 | Program |
| PD 7 | Project Objectives |
| PD 8 | Consultant Services |

2. Description of Services

- | | |
|------|------------------------|
| PA 1 | Project Administration |
|------|------------------------|

Required Services

- | | |
|------|--|
| RS 1 | Pre-Design Services |
| RS 2 | Concept (Schematic) Design |
| RS 3 | Design Development |
| RS 4 | Construction Documents |
| RS 5 | Tender Call, Bid Evaluation & Construction Contract Award |
| RS 6 | Construction and Contract Administration and Post Construction Warranty Review |

DESCRIPTION OF PROJECT

PD 1 PROJECT INFORMATION

Public Works and Government Services Canada (PWGSC) intends to retain a firm of Architects, with an integrated multi-disciplinary team of mechanical engineers, electrical engineers, structural engineers, and civil/municipal engineers for the provision of the services required for this project as outlined in this Request for Proposal (RFP).

PWGSC Project Title: ***Operations Center Project (OCP)***
Location of the Project: ***Ottawa, Ontario***
PWGSC Project Number(s): ***R.060563.100 & R.090033.001***

PD 2 PROJECT IDENTIFICATION

2.1 DESCRIPTION

The Operations Centre Project (OCP) is to be housed in a Crown building, built in the late eighties and located within 20 kilometers of the downtown Ottawa core. Upgrades to this building are required to maintain asset integrity and to accommodate the requirements of a new Federal tenancy.

Professional Services are required for the OCP's base building and fit up, including but not limited to: roof raising, seismic upgrades, structural separation of one storey link, fit up space as well as enabling works & site works.

In general, the building is comprised of interconnected wings as well as auxiliary buildings. The project will be housed in one of the wings only (X-Wing), which is a stand-alone 5-storey structure with a full basement that includes a one-storey link to the other wings. This link needs to be separated. The OCP will occupy the top three (3) floors of the building, the basement, as well as the lobby area on the ground floor. The building footprint of X-Wing is approximately 2,500m². Other than a single window in the elevator lobby of each floor, the walls are windowless. In addition, the exterior walls include copper plating/mesh to prevent emissions transmission. Detailed building and background information is contained in documentation available during the SECURE VIEWING period (refer to section SI9).

Public Works and Government Services Canada (PWGSC) proposes to fit-up a high security facility in X-Wing measuring approximately 8,500 m² Gross Floor Area (GFA) of office space, multi-purpose rooms, various technical spaces, operations centre, storage, bathroom/shower facilities, fitness room and food services area and lounge.

The new office fit-up must be able to be adjusted to accommodate three -staffing levels for Full-Time Employees (FTE) i.e.:75, 112 and 136.

The breakdown per floor is as follows:

Level	Total (m2)	
Basement	1425	
Level 1	1550	Includes 91m2 of new construction
Level 2	0	
Level 3	2030	Includes 415m2 shell space reserved for future expansion
Level 4	1717	
Level 5	1665.8	
Total	8387.8	

5th Floor (complete): Operations Centre

- Space to accommodate up to 100 operators
- Ability to manage two events concurrently at different classification levels
- Ability to host secure discussions

4th Floor (complete): Standard Office Space

- Space to accommodate up to 80 employees
- Compliance with GCWorkplace

3rd Floor (partial): Common Areas

- Large kitchen and lunch room
- Lockers for employees
- Break room
- Multi-purpose spaces with storage (training rooms, meeting rooms and/or sleeping quarters)

1st Floor Main (partial):

- Main security lobby
- Space to accommodate corporate services staff (security, IT, accommodations)
- Lockers for visitors

Basement (partial):

- Gym, Shower/Change room facilities

There will be five levels of secure zones that require specific physical separation and/or access control. All areas and rooms of the new space will be assigned one of these security levels, depending on the type of work and information used in the area. Groups of offices, which are compartmentalized on the basis of these five security zones will require the appropriate access control equipment and wall construction standards to be used for perimeter wall, acoustic and fire separation. The following list summarizes the security zone requirements:

1. Public
 - Grounds outside the perimeter control
2. Reception
 - Main reception lobby
3. Operational
4. Security
5. High Security Zones
 - Most administration functions
 - Executive offices
 - Directors
 - All operational offices
 - Communication rooms
 - File storage

Security control centers

2.2 Project Framework

2.2.1 Tender Packages

In general, the detailed project service required is outlined in the document “RS1 Feasibility Report, dated 26 June 2017 (Option 1 “Structural Modifications”)”. This document contains a summary of the project background, existing conditions, the general project requirements including the functional program and its components, the operations centre’s conceptual design and approved floor layouts, options analysis and order of magnitude estimate.

The design and construction for this project will be carried out in two (2) distinct tender packages, i.e. TP1 and TP2. The required services apply equally to both TP1 and TP2 as further defined below:

Tender Package 1 (TP1)

- Phase 1 – Enabling Works & Site Works. This work includes items such as a new lobby entrance, a new guard post and modifications to the electrical, water, storm sewer, sanitary sewer services, etc.) For a complete description of the work refer to Items in Appendix 2 in the document “RS1 Feasibility Report, dated 26 June 2017 (Option 1 “Structural Modifications”)” of Element 9.0 Enabling Works, Element 10.0 Site Works and part and parcel of Element 15.0 Design Contingencies.
- Phase 2 - Base Building Upgrades and Structural Separation of one storey link building. The upgrades includes items such as demolition work, raising the building roof and seismic upgrades to one wall, etc. For a complete description of the work refer to Items in Appendix 2 in the document “RS1 Feasibility Report, dated 26 June 2017 (Option 1 “Structural Modifications”)” Element 1.0 Demolition, Element 2.0 Roof Modification, Element 3.0 Seismic Upgrades and part and parcel of Element 15.0 Design Contingencies.

Tender Package 2 (TP2) - Building Fit-up. For a complete description of the work refer to Items in Appendix 2 in the document “RS1 Feasibility Report, dated 26 June 2017 (Option 1 “Structural Modifications”)” Element 4.0 Architectural, Element 5.0 Fit Up, Element 6.0 Mechanical, Element 7.0 Electrical, and part and parcel of Element 15.0 Design Contingencies.

The list of Elements can be found in the Cost Estimate in Section 2.3 below.

It is noted that the scope of work of Element 8.0 Audio Visual is excluded from this Request for Proposal. PWGSC will tender the Audio Visual work under a separate contract. The Design consultant will coordinate the ancillary design requirements (i.e. electrical, cabling, etc.) with the Audio Visual consultant.

It is required that the Consultant design each tender package with dedicated staff so that work can be done in parallel. For each tender package a separate and distinct tender documents package is to be provided by the Consultant, as PWGSC will tender each package individually as separate projects. The two tender packages should be considered mutually exclusive so that one does not impact directly the other. Scheduling of tendering and construction activities will be at different times.

TP1 and TP2 design shall commence immediately upon award of Contract, independently of each other.

2.2.2 ‘Stand Alone’ Occupancy

Due to the unique and special requirements of the Client, the space must be designed for 24 hours/7 days per week operation as a ‘standalone’ occupancy, independent of current base building support systems.

2.3 COST

The total anticipated project scope cost described in 2.2.1 is estimated at \$34,900,000 excluding taxes broken down as follows:

Ref	Element	Option 1		TP 1 Phase 1	TP 1 Phase 2	TP 2
1	Demolition	\$ 586,579			\$ 586,579	
2	Roof modifications	\$ 1,445,431			\$ 1,445,431	
3	Seismic upgrades	\$ 1,013,700			\$ 1,013,700	
4	Architectural	\$ 718,350				\$ 718,350
5	Fit Up	\$ 5,416,862				\$ 5,416,862
6	Mechanical	\$ 7,915,900				\$ 7,915,900
7	Electrical	\$ 4,200,800				\$ 4,200,800
8	AV Budget					
9	Enabling works	\$ 602,950		\$ 602,950		
10	Site works	\$ 2,705,400		\$ 2,705,400		
11	Sub Total	\$ 24,605,972		\$ 3,308,350	\$ 3,045,710	\$ 18,251,912
12	Contractors General Requirements & Mark Up	\$ 3,936,956	16.000%	\$ 529,336.00	\$ 487,313.60	\$ 2,920,305.92
13	Escalation during construction (assume a 2 year duration)	\$ 738,179.16	3.000%	\$ 99,250.50	\$ 91,371.30	\$ 547,557.36
14	Sub Total	\$ 29,281,107		\$ 3,936,937	\$ 3,624,395	\$ 21,719,775
15	Design Contingencies	\$ 5,856,221.34	20%	\$ 787,387.30	\$ 724,878.98	\$ 4,343,955.06
TOTAL ESTIMATED CONSTRUCTION COST		\$ 35,137,328		\$ 4,724,324	\$ 4,349,274	\$ 26,063,730
		FOR RFP PACKAGES		\$ 4,700,000	\$4,200,000*	\$ 26,000,000
SUB TOTAL		\$ 34,900,000				
* Total modified to reflect modifications to seismic classification						

In Summary:

TP 1

Phase1 \$4.70M Enabling Works & Site Works

Phase2 \$4.20M Base Building Upgrades and Structural Separation of one storey link building

TP 2

\$26.00M Building Fit-up

Total \$34.90M

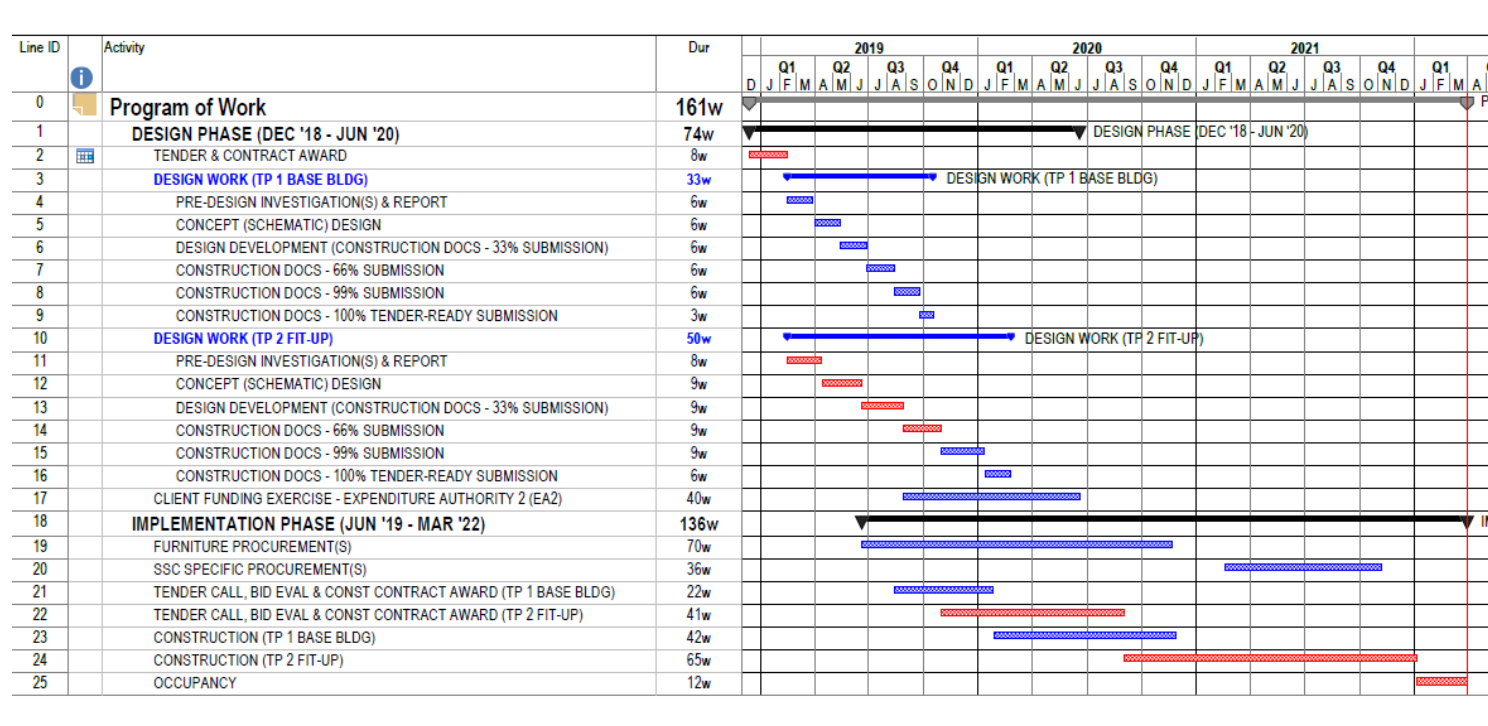
2.4 SCHEDULE

The high level schedule for selected Option 1 outlined in the document “RS1 Feasibility Report, 26 June 2017 (Option 1 “Structural Modifications) is 48 months (4 years).

Deliver the project in accordance with the project milestone listing identified below. During work, flexibility is very important in terms of accommodating unanticipated site requirements. The timelines indicated below include normal PWGSC turnaround time which is specified in PA1 Section 1.7 SUBMISSIONS, REVIEWS AND APPROVALS.

Note that the above time allocations are meant to provide a preliminary time frame of major activities and milestones. The schedule supplied by the Consultant shall be more detailed and representative of the achievable delivery.

In developing a detailed schedule, the Consultant shall find some activities are not interdependent and therefore can and shall be done concurrently.



Because submissions for Project Approval require detailed review and substantiation, the scheduling of the approval cannot be determined in advance. However, it is estimated that these approvals (for TP2 only) require **approximately ten (10) months**.

Projected Project date of Substantial Completion is **January 2022**.

2.5 IMPLEMENTATION STRATEGY

The project is to be implemented using the traditional design-bid-build approach with public tender.

The overall implementation of the project has been broken down into two packages to be tendered separately. Tender package 1 (TP1) is to be implemented in two phases.

Tender Package 1

Phase 1. Enabling Works & Site Works

Phase 2. Base Building Upgrades and Structural Separation of one storey link building

Tender Package 2

Building Fit-up

The general strategy is to complete the construction of TP1 Phase 2 prior to the construction of TP2.

PD 3 PROJECT BACKGROUND

3.1 CLIENT DEPARTMENT

The Client is a federal department in the Security Portfolio.

3.2 EXISTING CONDITIONS

Please refer to the documents below listed in section SI9 EXISTING DOCUMENTS SECURE VIEWING

- Building Condition Report (BCR) March 27, 2015
- RS1A Feasibility Report, 26 April 2017
- RS1 Feasibility Report, 26 June 2017

3.3.1 PROJECT CONSTRAINTS AND CHALLENGES

- Work is within a secured fenced-in unoccupied facility. An existing tenant is currently operating in an adjacent building and their operations cannot be interrupted by the works.
- Any BIM system capable of production to the current International BIM Standards is acceptable, however the Proponent must provide two (2) seat licenses to PWGSC at no cost for the installation and use of the Departmental Representative within three days of the initiation of RS-2 Design Concept.

PD4 PROJECT CONSIDERATIONS

4.1 PROFESSIONAL REQUIREMENTS

The Consultant's professional staff and its key-Sub Consultants must comply with the requirements of Section R1410T GI10 (2011-05-16) Licensing requirements.

The Consultant will undertake the design and construction administration of the project utilizing best practices of the professions, manufacturers, and trades involved and must meet or exceed the requirements of all applicable standards and codes suitable for a Government of Canada Fit-up Project, which will be provided to the Consultant upon award and will be available for secure viewing during the tender period.

4.2 ENVIRONMENTAL IMPACTS

The project must be conceived and developed in recognition of the need to minimize visual impact, noise impact and discharges into the environment, whether the receptor is soil, air or water. Minimal visual impact applies to the overall size, scale and architectural effect of the facility. Minimal audible impact applies to equipment selection. A minimal air emission applies primarily to the control of contaminants that may adversely affect other tenants and visitors within or next to the building. These factors must be considered in the context of the construction period and the ongoing operations following completion of construction. PWGSC will provide advice and information with regard to current Canadian Federal Government Environmental regulations pertinent to this Project.

4.3 STANDARDS, CODES, BY-LAWS, PERMITS

All Codes, Standards, By-laws, Permits, and authorities having jurisdiction approvals, including but not limited to the following must apply to the design and construction administration activities in connection with this project:

- The National Building Codes of Canada (latest edition) and its supplement
- Model National Energy Code
- Ontario Building Code (current edition) and its supplement(s)
- Canadian Standards Association (CSA), and American Society for Testing Materials (ASTM) standards.
- Local Provincial and Municipal Codes, Standards and Regulations accepted as having jurisdiction where work is being performed and for which the requirements are more stringent than those named above, shall be followed. Water servicing of the site must be in full compliance with City of Ottawa Design Guidelines and Standard Specifications. Sewers servicing must comply with City Standard Specifications and Ontario Provincial Standards.
- Metrification: Projects shall be in accordance to *Metric Drawings Practice and S.I. unit* issued by the Metric Commission of Canada.
- Government of Canada GCWorkplace, except in circumstances where the Client Agency deems that it is necessary to deviate from these standards for security or operational reasons.
- PWGSC Commissioning Standard
- PWGSC Technical Reference for Office Building Design
- PWGSC Standard: Control of Legionella Bacteria in Mechanical Systems

4.4 RISK MANAGEMENT

Identify any assumptions and constraints that the project is based on, including those relating to design, schedule, budget, resources, quality and health and safety. PWGSC will verify mitigation procedures with the Consultant's recommendation.

4.5 ADEQUATE INFORMATION

The Consultant will be responsible for arranging and undertaking all professional services necessary to complete this project.

The Consultant will be responsible to ascertain availability of all information from PWGSC that they anticipate they will require to complete their work, prior to the start of the Project and for determining the procedures to be followed throughout the course of the Project as well as other requirements needed on an ongoing basis.

PWGSC and the Client team will attempt to provide as much information as possible, however, they cannot verify the accuracy or completeness of this information. Information may include drawings, records, plans, photos, building reports and studies, department directives, guidelines and data. The Consultant must return all materials after the completion of the work in good condition. If the Consultant identifies information which may be unclear, missing or requiring further development during the Project, the Consultant will be responsible to provide notification to

PWGSC immediately for approval to do further research / testing as required. Prior to proceeding written approval from PWGSC must be obtained.

4.6 DOCUMENTATION

Design drawings must be provided in a format compatible with the latest version of AutoCAD on a standard PWGSC title block. (see Appendix D - DOING BUSINESS WITH NATIONAL CAPITAL AREA (NCA)

The final plans and specifications must conform to all applicable building codes, including barrier free design with the approval of authorities having jurisdiction – so that all information developed in this Scope of Work will be handed-over to PWGSC in this format as required, after completion of the project in ‘as-built’ drawings and specifications for all disciplines of construction, engineering and commissioning.

4.7 HERITAGE

The Consultant is to be aware of the Federal Heritage Buildings Review Office (FHBRO) Heritage Character Statement that is applied to the other wings of the building (“recognized” classification).

PD 5 EXISTING DOCUMENTATION

5.1 EXISTING DOCUMENTS

Secure Viewing Documents

- RS1A Feasibility Report, 26 April 2017
- RS1 Feasibility Report, 26 June 2017
- Seismic Report (Final Submission-Amendment to High Level Seismic Review July 5, 2016)
- Existing Building Layouts and Floor Plans
- Building Condition Report (BCR) March 27, 2015
- FHBRO Heritage Character Statement for the Building

Documents Provided upon Award

- Client Functional Program, 15 November 2013
- Client Security Design Brief
- PWGSC Technical reference for Office Building Design
- Seismic Assessment Report October 2016
- AutoCad Site Plans in Civil 3D format

PWGSC will provide to the Consultant all available studies, reports, drawings and specifications upon contract award. Documentation provided must be reviewed and returned to PWGSC at the completion of the Consultant's work / contract.

Floor Plans

PWGSC will provide the Consultant with the most current available building floor plans for the building. It will be the Consultant's responsibility to verify the accuracy of any plans provided by PWGSC prior to using them to develop new plans. Such verification is to be carried out during the first three months of the project and submitted to the Departmental Representative as a report entitled "Existing Building Plans – Accuracy and Potential Impacts". This report will set out any potential difficulties which may face the project as well as propose a plan and way forward to deliver on time and on budget.

Specifications

Specifications for furniture (generic CADD blocks shown on the Design Development Interior Design Drawings), data services, cabling, security, storage, cooling, power and the Client backup, etc. will be provided by PWGSC during formal information gathering sessions during the design phase of the project. Initial concept document in document "RS1 Feasibility Report, GRC Architects 26 June 2017" will be available during bidding process; however these documents will have to be read in a secure reading room (location to be determined).

PD 6 PROGRAM

6.1 FUNCTIONAL PROGRAM AND DESIGN REPORT

The Client has already prepared and published a comprehensive Functional Program, to be used as the requirements baseline to be satisfied by this project. The validated Functional Program will be provided upon contract award to enable the Consultant to comprehend the Client's security and operational requirements.

PD 7 PROJECT OBJECTIVES

7.1 GENERAL OBJECTIVES

The project is intended to provide the Client with a flexible office environment with a focus on security that will support their needs as described in the Functional Program. Of note, the Client operates in a high security environment which will have a significant impact on the resulting design.

The finished facility must be adaptable to readily support changes to mandate and priorities. The finished floors must be designed to be cost effective when considering initial construction cost and operation and maintenance costs over a life cycle of 30 years.

The project team will be initiating a Health + Wellness Study to be completed by NRC (National Research Council). The study will focus on the relationships between the physical work environment, building energy consumption, organizational productivity and occupant well-being in office buildings. The preliminary study will consist of an online survey to be completed by

employees as well as physical measurements of the occupied space. The Consultant must take the results of this study into account for the design of the future space to improve the wellbeing of the occupants.

7.2 FUNCTIONAL OBJECTIVES

The Consultant is to design the space to meet the requirements as described in “RS1 Feasibility Report, 26 June 2017.”

7.3 DESIGN INTENT

The design intent must ensure that the new space:

- Meets sustainable design principles and targets (refer to section 7.6 below) determined in consultation with the stakeholders and with PWGSC;
- Provides a safe and healthy working environment that meets or exceeds all codes for fire, health, and life safety to support optimal work productivity. Included, but not limited to, references are federal model codes, provincially endorsed codes, and the Canada Labor Code.
- The consultant will be involved with the Health & Wellness Study referenced in Section 7.1 above.

7.4 PROJECT DELIVERY

- Adherence to Schedule. The scheduled Substantial Completion date of December 2021, for the new space must be maintained throughout the project. Any alterations to milestones must maintain the scheduled occupancy date and be approved by the PWGSC Departmental Representative
- Project Delivery. The project delivery during construction must consider the impacts of construction on adjacent occupied and occupied spaces.
- Risk Management. Provide a quality management plan that includes a rigorous quality assurance process.

7.5 QUALITY

7.5.1 Design Principles - General

- All design elements, planning, architectural, and engineering, must be fully coordinated, and consistent in adherence to good design principles as identified by the respective governing bodies for all professionals.
- Quality of materials and construction methods must be commensurate with the type of building and the budget. Avoid experimental materials. Take into account the total life-cycling of the building.

7.5.2 Design Principles - Specific

The design must be developed through stakeholder involvement to ensure that the finished space achieves the following:

- Integrate and optimize the performance of all proposed additional building components and systems with existing systems to remain.
- Ensure efficiency in operations, maintenance and use over a designed 30 year life cycle. Design must consider repair and or replacement of systems during the building's life cycle.
- Provide for physical security of all staff and visitors to floors affected by the project and adjacent occupied floors.
- Ensure capacity to allow for growth and change over project lifecycle of 30 years.

7.6 SUSTAINABLE DEVELOPMENT

The following sustainable development goals, Departmental commitments, and guiding principles must be adhered to within this project under the issues of management, leadership, and operation:

Sustainable Development is defined in broad terms as a strategy that routinely and consistently includes the consideration of the environment, economics, and social implications of every decision within the project development. This project provides the opportunity to incorporate innovative, sustainable and environmentally responsive design into the fit-up design. Sustainable development objectives and design strategies must be addressed throughout the evolution of the Project. All efforts must be made to integrate strategies that result in a project design with minimal environmental impact and a reduced ecological footprint.

To address the government wide commitments set forth in the Federal Sustainable Development Strategy (FSDS) 2016-2019 and to confirm it's specific green building commitments established in previous PWGSC Sustainable Development Strategies, PWGSC has defined specific objectives and actions for integrating sustainable development principles into policies and operations in its Real Property Sustainability Framework. The project must ensure conformance with these green building commitments (where applicable) as they relate to environmental performance, water management and energy reduction. Specifically, this project is subject to the FSDS and PWGSC commitment of meeting the environmental performance requirement of (at minimum) Leadership in Energy and Environmental Design (LEED ®) CI Silver, 3 Green Globes for Sustainable Interiors (minimum 70% rating), or equivalent standard.

Through a consultative process, the Consultant must determine the appropriate sustainable design assist and assessment rating tool for the project. The Consultant will be responsible for all related tasks, including preparation of documentation required for certification and will balance the requirements of the rating systems' prerequisites and credits with other project requirements. Formal submittals for certification for the project will not be required due to the security requirements. Using the sustainable design assist and assessment tool, the Consultant will benchmark against which decisions can be readily analyzed. To ensure relevance to the project, all design decisions that promote a reduction in the environmental impact of the office space must be assessed against the project functional program, life cycle costing, energy consumption, and limitations due to the existing building condition to ensure the recommendation towards a sustainable strategy is viable on a holistic level.

In addition to PWGSC's FSDS commitments, and in line with the *Departmental Environmental Policy 074* to meet or exceed applicable environmental statutes, regulations and policies, and to pursue a pollution prevention approach in all aspects of its operations, the following sustainable design guiding principles should be actively pursued:

1. Applying an integrated design process
2. Energy efficiency and conservation, including use of renewable energy and energy modelling
3. Using a pollution prevention approach
4. Recycling and reuse of materials, systems, equipment;
5. Using durable building material and assemblies;
6. Using building products with high recycled content and low embodied energy;
7. Procurement of "green" materials, considering life cycle environmental impacts;
8. Water management and conservation
9. Waste reduction and management;
10. Indoor environmental quality (thermal, air, and lighting quality and control);
11. Site conservation (protection and/or rehabilitation of natural site features)
12. Life-cycle cost management to evaluate, compare and optimize options
13. Reducing the use of toxic and hazardous substances (i.e. Low VOC products)
14. Ozone depleting substances management

As well as the *Treasury Board Policy on Management of Real Property* other guidance documentation outlining sustainable design principles to be included for federal real property projects include:

- *Environmentally Responsible Construction and Demolition Handbook*
(http://publications.gc.ca/site/archievee-archived.html?url=http://publications.gc.ca/collections/collection_2013/tpsgc-pwgsc/P4-53-2001-eng.pdf)
- *PWGSC Green Building Implementation Guide*
http://www.gcpeia.gc.ca/wiki/Strategic_framework_guidance_general
- "Federal Sustainable Development Strategy"
(<https://www.canada.ca/en/services/environment/conservation/sustainability/federal-sustainable-development-strategy.html>)
- "The Environmentally Responsible Green Office" (http://publications.gc.ca/site/archievee-archived.html?url=http://publications.gc.ca/collections/collection_2014/tpsgc-pwgsc/P4-57-2001-eng.pdf)
- GC Workplace fit-up Standards:
http://www.gcpeia.gc.ca/gcwiki/images/8/8e/Workplace_Fit-up_Standards.pdf
- Treasury Board Secretariat Greening Standards: <https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html>

A coordinated team approach is crucial to sustainable design projects. It encompasses a methodology that is focused on a collaborative process involving input from all team members early in the project. To this end, the Prime Consultant shall lead the integrated design process to provide a holistic approach to the fit-up design with due consideration of the project scope, the intent should be to focus on the design, construction and operation of applicable systems, and the occupancy of the building over the complete life cycle, in a multi-disciplinary approach that clearly defines the functional, environmental and economic goals and objectives of the project. In doing so the following will be accomplished:

1. Establishment of an inter-disciplinary team including PWGSC and the Client/User;
2. Establishment of the priorities of the various performance issues;
3. Energy simulation on design options and objective information on system performance (within scope of project);
4. Provision of subject specialists to provide consultation;
5. Use of performance assessment tools (such as LEED or Green Globes);
6. Use of a facilitator to initiate and stimulate discussions; and
7. Use of team workshops.

7.7 NON HAZARDOUS WASTE MANAGEMENT

Pursuant to PWGSC's Real Property Sustainability Framework (v2015) and Real Property Sustainable Development and Environmental Strategy and in response to the FSDS 2016-2019 and the Treasury Board's Greening Government strategy (2017), all projects greater than \$1 million must implement Construction, Renovation and Demolition (CRD) waste management practices through reuse and recycling to achieve a minimum non-hazardous waste diversion rate of 75%. The project can likely achieve (and should consider) a much higher diversion rate. These higher diversion rates are important to consider as looking forward, the Treasury Board's Greening Government strategy (2017) sets the diversion rate requirement for CRD projects at 90%, striving to achieve 100% diversion by 2030.

The PWGSC Construction, Renovation, and Demolition (CRD) Non-hazardous Solid Waste Management Protocol provides direction on the undertaking of non-hazardous solid waste management actions for CRD projects. The protocol is designed to meet the requirements of federal and provincial policies and the objectives of PWGSC's Real Property sustainable development commitments as these relate to non-hazardous solid waste generated in CRD projects.

CRD waste should not include any hazardous materials (i.e. waste generated from asbestos, mould, lead abatements, PCB ballasts, fuels, other chemicals). Therefore a clear distinction must be established between CRD waste and hazardous waste.

The Consultant must develop a Non-Hazardous CRD Waste Management Program for the Project, which must include the following key deliverables:

1. Prior to construction:
 - o Waste Audit – Determines the types and volumes of construction materials that will be produced as surplus to the project, as well as the preliminary options and diversion potentials for waste reduction, reuse and recycling. Although PWGSC has committed to a diversion target of 75%, all efforts should be made to maximize waste avoidance and diversion, setting a revised target based on the results of the waste audit. The PWGSC Environmental Consultant will prepare the Consolidated Waste Inventory to inform the Waste Audit in full consultation and coordination with the Consultant based on the demolition and construction scope; and

- Waste Reduction Work Plan – Identifies the overall waste diversion goal and material specific targets. It describes project specific procedures to maximize the recovery of those materials identified in the Waste Audit. This also includes the Material Source Separation Program that details on-site sorting and labelling practices, tracking and reporting procedures and destinations for the materials recovered to be implemented during the construction phases of the project.
- 2. During and post-construction:
 - Training – Includes presentation of a mandatory training session to be given prior to the commencement of the work on site and attendance at a midpoint update meeting, convened by the project manager, to discuss progress and challenges of the Waste Reduction Work plan; and
 - Waste Diversion Report – Documents the recovered construction materials to ensure that the results anticipated in the Waste Audit and Waste Reduction Work plan are realized to the highest degree possible. It records the results at the end of the project, using hauling and tracking records to confirm the quantities (percent and tonnage) and final destinations of the materials diverted/landfilled.

Links:

- FSDS 2016-2019
<https://www.canada.ca/en/services/environment/conservation/sustainability/federal-sustainable-development-strategy.html>
- Treasury Board's Greening Government strategy (2017)
<https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html>

7.8 CODE COMPLIANCE

Codes, regulations, by-laws, and decisions of “authorities having jurisdiction” will be observed. National model codes, acts, and standards will be observed. PWGSC and the Client Departmental Policies, Directives, and Standards must be adhered to. In cases of overlap, the most stringent will apply. The Consultant must identify if other jurisdictions are appropriate to the project and apply them.

7.9 HEALTH AND SAFETY

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.

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.

DESCRIPTION OF SERVICES

PA 1 PROJECT ADMINISTRATION

INTENT

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

1.1 PWGSC PROJECT MANAGEMENT

The PWGSC Project Manager assigned to the project is the Departmental Representative. The Departmental Representative is the Departmental officer directly concerned with the project and responsible for its progress. The Departmental Representative is the liaison between the Consultant, Public Works and Government Services Canada and the Client Departments. 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 Departmental Representative, 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 must be provided plus two (2) copies must be provided in electronic format unless otherwise specified.

Electronic format must be:

1. For written reports, summaries and studies: MS Word 2013
2. For spreadsheets and budgets: MS Excel 2013
3. For Presentations: MS PowerPoint 2013
4. For Drawings and/or 3D Computer Model: BIM software to current International File Protocol Standard
5. For Specifications: MS Word 2013
6. For Schedules: MS Project 2007

1.3 LINES OF COMMUNICATION

Unless otherwise arranged with Departmental Representative, the Consultant shall communicate with the Departmental Representative only. There shall be no direct official contact between the Client and the Consultant.

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

- It is the responsibility of the Departmental Representative to provide correspondence from the Consultant to other stakeholders
- All formal directions regarding project scope, budget, schedule, etc. must come from the Departmental Representative, in writing.
- The Consultant shall contact appropriate organizations, both governmental and non-governmental, to obtain reports, studies and other information which may affect the work and to ensure that all local, provincial and federal codes and standards are observed.

- The Consultant is responsible to conduct Project Meetings, inviting the Departmental Representative, the Client Designees, and any other persons relevant for the decisions or information required at that event as required.
- It is the intent that the Departmental Representative be informed as soon as possible of any Schedule scope or Budget issues

1.4 MEDIA

The Consultant shall not respond to requests for project related information or questions from the media. Such inquiries are to be directed to the Departmental Representative.

1.5 MEETINGS

The Departmental Representative shall arrange meetings bi-weekly 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

The Consultant shall attend the meetings, record the issues and decisions and prepare and distribute minutes within 48 hours of the meeting.

1.6 PROJECT RESPONSE TIME

It is a requirement of this project that the key personnel of the Consultant and sub consultant or specialist firms be personally available to attend meeting or respond to inquiries within one (1) working day.

1.7 Presentations and Submissions to Stakeholders

Work in progress will be reviewed on a continual basis by the Departmental Representative and other persons from PWGSC, The Client and the authorities having jurisdiction. Formal submissions and presentations are required for design and project approvals. Presentations to the following stakeholders will be required:

1. PWGSC Departmental Representative
2. The Client
3. Authorities having Jurisdiction

The Consultant will attend all other meetings, as needed, and will make presentations to satisfy the authorities having jurisdiction.

1.8 SUBMISSIONS, REVIEWS AND APPROVALS

Work in progress is to be reviewed by the Departmental Representative as well as the following:

PWGSC in-house services Professional and Technical Services

- Submission Format: Reports, drawings and specifications;
- Submission Schedule: Submissions are reviewed at a time to be arranged with three (3) weeks notice;
- Expected Turnaround Time: Two (2) weeks unless otherwise identified in the schedule;
- Number of Submissions: Three (3) or until approval has been received.

Design review committee – Client Department

- A dedicated Client Design Review Committee, will be appointed to carry out reviews in a timely manner;
- Submission Format: Report, drawings and specifications;
- Submission Schedule: Submissions are reviewed at a time to be arranged with three (3) weeks notice;
- Expected Turnaround Time: Two (2) weeks unless otherwise identified in the schedule;
- Number of Submissions: Three (3) or until approval has been received.

PWGSC Fire Protection/Code Specialist

- Submission Format: Drawings and specifications;
- Submission Schedule: Submissions are reviewed at a time to be arranged with three (3) weeks notice;
- Expected Turnaround Time: Two (2) weeks;
- Number of Submissions: Two (2) or 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 Public Works and Government Services Canada Departmental Representative;
- Expected Turnaround Time: Two (2) weeks ;
- Number of Submissions: Until Building Permit has been issued.

Chart of Reviews and Approvals	PWGSC		Client		Fire Code	
	R	A	R	A	R	A
RS1 Pre-Design Services						
Project Scope of Services Report		x		x		
Class 'D' Estimate	x			x		
RS2 Concept (Schematic) Design						
Design Options	x		x			
Recommended Design Option		x		x	x	
Class 'C' Estimate(s)	x			x		
RS3 Design Development						
Design Development Documents		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			
99% Construction Drawings and Specs		x		x		
Class 'A' Estimate(s)	x			x		
Final Tender Documents		x		x	x	

R = Review

A = Approval

REQUIRED SERVICES

Under the leadership of the Consultant, the consultant team must be required to deliver integrated professional services in accordance with the requirements as set forth in this Project Brief. The services must be administered in 2 distinct packages, Tender Package 1 and Tender Package 2 (reference to Section PD 2.2.1 Tender Packages and Section 3.4 Implementation Strategy.) and the following Required Services apply to all packages / phases:

RS 1 Pre-Design Services

RS 2 Concept (Schematic) Design

RS 3 Design Development

RS 4 Construction Documents

RS 5 Tender Call, Bid Evaluation and Construction Contract Award

RS 6 Construction and Contract Administration and Post Construction Warranty Review

The outline of deliverables and processes as presented in this Project Brief are not exhaustive and does not preclude alternative or supplementary approaches as may be suggested by the Consultant for consideration and approval by the Departmental Representative.

RS 1 PRE-DESIGN SERVICES

1.1 INTENT

The purpose of this stage is to ensure the Consultant has reviewed and integrated all the project requirements, identified and evaluated conflicts or problems, presented and received approval on a Project scope, delivery process, schedule and estimate required to deliver a cohesive quality project. This approved deliverable will become the Project Scope of Services and will be utilized throughout the project to guide the delivery. In general, the intent is to confirm assumptions & findings from the Feasibility Report in order to build on previously completed work.

1.2 GENERAL

Scope and Activities:

1. Review:

The Consultant must:

- Conduct site reconnaissance, inspections, etc., to validate all pertinent information.
- Discuss findings and project requirements.
- Review the existing M/E systems and redundancy set up
- Attend project start up meeting
- Review the project requirements/Functional Program
- Review all existing documentation related to the project
- Review the proposed project schedule for verification that all milestone dates are

achievable

- Review the cost plan/budget for verification that the costs are realistic and achievable
- Review potential for environmental impacts and application of the Canadian Environmental Assessment (CEA) Act if applicable
- Review and validate the base building support and service spaces plus office standards.
- Review Client security brief report

2. Analyze the project requirements:

The Consultant must:

- Perform Building Code Analysis identifying constraints and issues. Identify critical deficiencies that would require immediate attention for health and safety reasons.
- Identify issues that require addressing prior to commencement of design;
- Develop sustainable development strategies and identify opportunities for sustainable development integration in the fit-up project;
- Develop strategies to enable reviews of all subsequent submissions against determined sustainability focus concepts and target level;
- Analyze all functional program requirements and program information to identify any conflicts or potential additional work and indicate the impact on project scope, schedule, and costs;
- Identify and verify all authorities having jurisdiction over the project;
- Identify and confirm all applicable codes, regulations, PWGSC departmental policies, standards, and directives that apply to the Project;
- Develop the telecommunications and security implementation strategies and report

3. Schedule Analysis:

The Consultant must:

- Establish a policy for the project to ensure that the project completion date is maintained throughout the contract duration.
- Identify opportunities to ameliorate the current project schedule through alternate project delivery methods, complete with implication to project scope, schedule, quality, and costs.

1.3 DELIVERABLES:

1.3.1 Project Summary Report

The Consultant must:

1. Prepare and submit a comprehensive summary of the project requirements through a Pre-Design Report to demonstrate an understanding of the scope of work. The Pre-Design report is to be submitted for review and acceptance by the Departmental Representative. The submitted reports must include the following:

- Executive Summary;
- Administrative aspects of project such as Quality Management and Schedule

- Management process for consultant team;
 - Confirmation that all necessary documentation has been provided;
 - Written identification of any problems, conflicts, or other perceived information/clarifying assumptions for the acknowledgment of the Departmental Representative;
Written identification of the selected sustainability tool, proposed target level of project certification, potential opportunities to achieve target certification level including a preliminary scorecard estimating the probability of securing each credit (i.e. high, med, low), and justification for sustainability decisions;
 - Regulatory Aspects of the project including, but not limited to, a preliminary summary of all regulatory and statutory requirements, authorities having jurisdiction along with codes, regulations and standards.
 - Report on existing site conditions and services including location, conditions of systems, deficiencies and life expectancy.
 - Confirmed or adjusted project cost and time plans. Prepare an implementation strategy that documents all activities, milestones and deliverables required for the effective delivery of the project including time frames for submissions, reviews and approvals.
 - Summary of the design and technical requirements (structural, enabling works, site works, mechanical, electrical, urban, architectural, fire protection telecommunication, etc.) for the program, including but not limited to:
 -
 - Code compliance analysis of the applicable codes and agency criteria that will govern the design of the project.
 - Provide an analysis of the potential shutdown and time required to tie-in into the existing systems.
 - Proposed special features of the systems to sustain operations during and after a disaster situation.
 - Plans showing equipment spaces for all electrical, mechanical, fire protection and telecommunication equipment.
 - Analysis of Accessibility, Acoustic, Life Safety and Fire protection, Building Connectivity Components (BCC), Functional Program, Security requirements including a design approach.
 - Condition confirmation and structural assessment related to all the applicable existing, modified and new structures including roof raising and seismic upgrading.
 - Identify project risks and probable impacts, opportunities to minimize or control risk with regard to design, technical, construction, site location, contract administration, and public reaction.
 - Upon receipt of PWGSC review of Consultant submissions the consultant must prepare a "Response to PWGSC Quality Assurance Report" for all design submissions.
2. Provide a feasibility narrative of 'Stand Alone' Occupancy status.
 3. Updated Schedule complete with preliminary commissioning plan.
 4. Class "D" Estimates
 5. Consultant to review, analyze, comment and integrate Departmental Representative comments into a final report.

Consultant must obtain written authorization from the Departmental Representative prior to proceeding to RS2.

RS 2 DESIGN CONCEPT

2.1 INTENT

To translate the project requirements into space parameters in a cost effective and sustainable manner. To explore proposed design and analyze with respect to priorities and program objectives previously identified. Propose enhancements to Selected Option 1 as required to help improve budget and scope.

2.2 GENERAL

Scope and Activities:

The Consultant must:

- Explain the main points of the design and the basic design determinants of the building layout.
- Explain features, context, and heritage implications, if any.
- Investigate requirements for utility services to the site.
- Produce an environmental assessment if required under Canadian Environmental Assessment Act 2012 (CEAA 2012); or incorporate the requirements as set out in the Evaluation of Environmental Effects (EEE) letter or report produced by PWGSC.
- Register the project with a Canadian recognized sustainability assessment system and produce a report that documents the current status of the sustainability of the project using a Canadian recognized sustainability design assist and assessment tool. This project may not seek or require formal certification due to security restrictions.
- Produce a class 'C' cost estimate;
- Produce an implementation schedule, including alternative procurement and construction strategies, as needed.

2.3 DETAILS

The Consultant and other members of the Consultant Team must provide:

2.3.1 Architectural:

- Site plan showing proposed building outlines, orientation, main accesses, traffic patterns, existing utilities.
- Schematic building plans showing relative disposition of main accommodation areas, circulation patterns, number of floors, security, functional program requirements and proposed materials. Provide a narrative including area calculations.
- Incorporate wellness elements into design schemes.
- Provide material samples.
- Confirm sustainability priorities and targets.
- Schematic elevations and sections indicating the basic design approach and aesthetic philosophy.

- Sketch perspectives or massing studies;
- Horizontal and vertical space relationships.
- Identify graphically “footprint” planning concepts for typical workstations, offices, support spaces and special purpose spaces.
- Describe how the concept meets the required accessibility requirements.
- Become familiar with PWGSC requirements for Sustainable Design for Office Buildings. Describe how the concept incorporates an environmentally responsible design approach.
- Code Compliance and Fire Protection Report: Describe the approach to be used to comply with code requirements.
- Describe the wayfinding strategy.
- Building Connectivity Components (BCC) coordination including but not limited to, furniture recommendation, schematic layout, finishes, Building Component Matrix, list, etc.

2.3.2 Structural:

- Confirm/propose structural systems and seismic upgrading solution.
- Provide load capacity calculations for the anticipated roof raising (impact of snow drift on adjacent roof) and other new or modified structures.
- Provide detailed options analysis report with justification supporting the selection of the proposed structural systems including seismic upgrading alternatives, in light of the recommendations previously provided in the existing seismic studies.
- Prepare and submit for approval identification of, any special services required to complete the structural design (geotechnical, vibration, model studies, etc.), any recent technical advances or innovations pertinent to project, any requirements to address sources of vibration, any unusual overhangs or cantilevers.
- Prepare identification of the preferred option in collaboration with other disciplines.
- Prepare and submit schematic design drawings of existing, modified and new structural systems including such elements as: plan views, elevations, sections, foundations, explanatory sketches and notes, analytical diagrams, etc.

2.3.3 Enabling Works & Site Works:

- Confirm/propose systems and upgrading solution, calculations, explanatory sketches, etc. and a copy of the site report on which the design is based, in concert with previously conducted studies.
- Drawings of existing, modified and new systems, including but not limited to sanitary, storm, water servicing, electrical
- Identification of the system in collaboration with other disciplines

2.3.4 Mechanical:

- Design Intent Document: For each system provide a description including the design criteria and design intent to meet these criteria. The concept submission must include a description a specific mechanical requirements and function for each area (room) in the building. Incorporate in the submission a schedule of requirements listing all rooms and identify the mechanical building services to be provided.

- Use schematic and diagrammatic layout drawings to fully explain the strategy for each system, its controls, its operation due to partial occupancy off hours operations, its chemical treatment, its normal and emergency modes of operation and its relationship of all other systems, its interrelation with electrical systems and EMCS system, its operational procedures under all start-up, change over, shut down, normal and failure conditions.
- Building service strategies include elevators, plumbing, HVAC, fire protection and detection, building automation, energy management controls, security, acoustical isolation or speech privacy and intelligibility.
- Provide a fire protection design synopsis and schematics describing fire protection systems and submit it for approval to the Authority having Jurisdiction.
- Provide advice on using existing building mechanical equipment services spare capacity such as cooling chillers, boilers, and/or other services.
- Explain in the concept submission the manner in which the proposed mechanical systems correlate with Client requirements. State the advantages, disadvantages and recommendations for the mechanical systems and components.
- Identify the volume of outdoor air to be supplied per person for all building zones, including sub-basement, as well as the outdoor air per area for those zones where the criteria is outdoor air per area. in compliance with the National Building Code and applicable ventilation standards
- Identify the delivery rate of supply air to occupied spaces.
- Identify whether full time operating staff will be needed for operating any of the mechanical equipment. Differentiate between staff that is needed by code requirements versus that staff which is needed because of the nature and size of the facility and clients requirement's to operate twenty-four (24) hours per day, seven (7) days per week.
- Identify location of entry point of all mechanical services into the space.
- Identify in square metres the area to be provided for mechanical rooms, and then identify what percentage of total space area this represents. Identify location of mechanical spaces.
- Carry out energy analysis of alternative mechanical systems at the conceptual design stage to evaluate energy consumption of systems, operating and maintenance costs. Perform Life cycle cost analyses to determine the most beneficial mechanical systems alternative, based on a projected building life of 50 years. Submit input and output data of the energy simulation to PWGSC for verification purposes. Provide breakdown of energy use: lighting, fans, cooling, heating, equipment, pumps, etc.). Describe energy reduction achieved in each option.
- Submit proposed single line schematics of mechanical systems including heating, ventilation, air conditioning, plumbing, fire protection, controls. Identify location of mechanical spaces.
- Provide description of Building Control system.
- Provide description of acoustic attenuation measures that ensure design limits for noise are not exceeded.
- List of non-Canadian products and materials proposed for the project with written justification.

2.3.5 Electrical:

- Proposed basic electrical systems of significance to the early design.
- Site plan showing location of service entrances and identifying pathways to the space.

- Distribution drawings showing single line diagrams to distribution centres. Include emergency system, metering information and load calculations.
- Floor plans complete with locations of major electrical equipment and distribution centres.
- Lighting layouts for office space and storage space, including control zones.
- Ceiling distribution systems for lighting, power, and telecommunications.
- Fire alarm and voice communication system riser diagram.
- Security system riser diagram.
- Provide an electrical design synopsis, describing the electrical work in sufficient detail that demonstrates compliance with the project requirements.
- The Consultant is required to obtain and review the following reports if they are available;
 - Short Circuit Study / System Protection Coordination Study / Arc Flash Study / Device Evaluation Study
 - Infrared Study
 - Electrical Load Analysis / Load Monitoring Surveys
 - Emergency Power Study
 - Electrical Maintenance Report
 - Hydro Utility Reports
- List of non-Canadian products and materials proposed for the project with written justification.
- Telecommunications;
 - a) Submit information necessary to demonstrate ability in meeting telecommunications design concepts.
 - b) Submit drawings illustrating the telecommunications concept, including but not limited to : Telecommunication rooms, closets and main conduit system
 - c) Backbone telecommunication system riser diagram, including raceway system
 - d) Typical floor horizontal telecommunications raceway system, including raceway details
 - e) Typical telephone rooms, conduits and telecommunication cable systems requirements and layout.
- Provide an electrical design synopsis that includes:
 - a) The electrical work in sufficient detail to demonstrate compliance with the project.
 - b) The electrical distribution scheme addressing any special power and reliability requirement.
 - c) Possible options for the power distribution comparing advantages and disadvantages of each approach.
 - d) lighting systems features including fixture type, layout and control.
 - e) Special spaces such as lobbies and communications rooms.
 - f) Proposed method for energy conservation.
 - g) Proposed security system feature including but not limited to: Card access control, CCTV and intrusion protection system.

2.3.6 Commissioning:

The Consultant must:

- Define Commissioning Requirements.
- Develop preliminary Commissioning Plan
- Define project archives, including an outline of the O&M manual and Building User Guide.

2.3.7 Sustainable Development:

The Consultant must:

- Design and evaluate the Design Option using either LEED or Green Globes to meet or exceed the National Energy Building Code requirements. Identify the opportunities in a report for the;
 - a) Recycling and reuse of materials, systems, equipment
 - b) Procurement of “green” materials
 - c) Energy reduction and management
 - d) Waste reduction and management
 - e) Life cycle costing, cost benefit analysis
- Environmental Assessment and the CEA Act Screening Report (if required)
- Follow the recommendations and design strategies of;
 - a) “Federal Sustainable Development Strategy”
(<https://www.canada.ca/en/services/environment/conservation/sustainability/federal-sustainable-development-strategy.html>)
 - b) “PWGSC Green Building Implementation Guide”.
(http://www.gcpcedia.gc.ca/wiki/Strategic_framework_guidance_general)
 - c) “The Environmentally Responsible Green Office”
(http://publications.gc.ca/site/archived-archived.html?url=http://publications.gc.ca/collections/collection_2014/tpsgc-pwgsc/P4-57-2001-eng.pdf)
 - d) “The Environmentally Responsible Construction and Renovation Handbook” (PWGSC&EC). (http://publications.gc.ca/site/archived-archived.html?url=http://publications.gc.ca/collections/collection_2013/tpsgc-pwgsc/P4-53-2001-eng.pdf)
 - e) GC Workplace fit-up Standards:
http://www.gcpcedia.gc.ca/gcwiki/images/8/8e/Workplace_Fit-up_Standards.pdf
 - f) Treasury Board Secretariat Greening Standards:
<https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html>
- Follow standards of sustainable design demonstrating innovation, flexibility and connectivity in design with effective strategies for a high level of;
 - 1 Energy efficiency. Every effort shall be made to minimize the energy use requirements of this project. Life cycle costing of all components affecting the

energy use of the project should identify and select the option that minimizes the impact on energy use over the life of the equipment or system. ASHRAE 90.1 (2010) requirements shall be incorporated in the design of this project.

2 Occupant comfort and productivity including:

i. Indoor air quality.

- Indoor air quality must meet the standards as required by the Canada Labour Code Part II as well as ANSI/ASHRAE Standard 62-2010 and ANSI/ASHRAE Standard 55-2010 at a minimum.
- All noxious or unpleasant odors arising as a result of construction activities shall be purged from the space/facility prior to occupancy and filters replaced.

ii. Lighting quality.

- Lighting strategies shall be designed to apply the minimum for way-finding and employ task lighting to the maximum extent feasible and consistent with functional requirements.
- Lighting strategies shall be designed to maximize the availability of natural light while effectively addressing the adverse effects of lighting glare (both natural and artificial) on video display terminals (VDTs).
- The most current industry standards for indoor environmental controls for air and light quality shall be specified.

iii. Thermal quality.

- Passive ventilation systems shall be investigated to replace or supplement mechanical HVAC systems.
- Design options such as CO2 sensors, demand controlled ventilation, humidity sensors, operable windows, motorized windows and individual air volume controls shall be examined for their feasibility.

iv. Acoustic quality.

v. Optimal space use.

3 Reduction of environmental impacts including:

i. Optimal use of site resources.

ii. Use of environmentally responsible building materials and products.

- Where feasible and meet the performance requirements, products will be specified that meet the requirements necessary for

certification by the Environmental Choice (EcoLogo) Program or other equivalent programs.

- Products are specified that eliminate hazardous materials in their content, manufacture, application, and use.
- Where feasible and meet the performance requirements, products such as paints, adhesives and sealant that will be specified will have no or low levels of emissions of volatile organic compounds (VOCs).
- Where feasible and meet the performance requirements, products will be specified that contain the highest percent of post -consumer recycled product possible.
- Where feasible, design will incorporate the concept of "designing for disassembly" to promote reuse and to reduce waste (CSA Z782-06 Guideline for design for disassembly and adaptability in buildings)

iii. Reduction of polluting substances.

iv. Enhancement of the site micro climate and restoration of the natural ecology.

v. Use of sound environmental construction practices.

vi. Control soil erosion, waterway sedimentation and airborne dust generation for all construction activities

vii. Low water consumption.

viii. Low operating and maintenance costs.

ix. Low life cycle costs.

Review and update the sustainability assessment scorecard in order to firmly establish specific sustainability targets for the project, further clarifying targeted from potential credits.

2.3.8 Specifications

The Consultant must provide a preliminary outline specification in Unifomat indicating main building components and options for use of "Green" components systems.

2.3.9 Cost Plan

The Consultant must:

- Prepare class "C" cost estimate
- Cost estimates prepared by the cost specialist are to be reviewed by each discipline to ensure they accurately reflect all design assumptions, before the estimate is submitted to PWGSC.
- Investigate and report on life cycle costs
- Document all unit pricing, analysis, and valuation

2.3.10 Time Plan (Schedule)

The Consultant must:

- Prepare project master schedule
- Identify potential risks to schedule
- Advise on alternative procurement and construction strategies to create efficiencies wherever possible.

2.4 DELIVERABLES

The Consultant must provide:

- Design Concept Drawings for all disciplines
- Class 'C' Estimate, life cycle costing and building area calculations
- Report on negotiation with authorities and strategies for jurisdictional approval
- Report on deviation from schedule and recommend corrective measures or updated time line.
- Risk analysis - design, procurement, implementation
- Update sustainable development strategies report and assessment scorecard

Consultant must obtain written authorization from the Departmental Representative prior to proceeding to RS3

RS 3 DESIGN DEVELOPMENT

3.1 INTENT

To further develop Selected Option 1. The Design Development documents consist of drawings and other documents to describe the size and character of the entire project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate. This will require frequent working meetings, reports and presentations to describe the architectural, mechanical, structural, electrical systems, sustainable design strategies, as well as the construction strategies that minimize the risk to the project. Coordination with the AV consultant and Sustainability expert will be required.

3.2 GENERAL:

Scope and Activities:

The Consultant must:

- Obtain written approval from Departmental Representative for development of retained Design Concept option.
- If any alterations are demanded, document all required changes, analyze the impact on all project components, and resubmit for approval if required.
- Expand and clarify the Concept Design intent for each design discipline.
- Present the design materials to the client, design review or other committees as indicated by the Departmental Representative.
- Present the design to the government or local authorities where required.
- Ensure coordination of all disciplines' design development.
- Analyze the constructability of the project and advise on the construction process and duration.
- Based on all material available at the time, prepare a milestone schedule.
- Continue to review all applicable statutes, regulations, codes and by-laws in relation to the design of the project.
- Provide a list and draft specification sections of all NMS sections to be used, complete with a full draft specification, catalogue cuts and sustainable development/green choices. Provide in the outline specifications manufacturer's literature about principal equipment and system components proposed for use in this project.

3.3 DETAILS

Scope and Activities:

The Consultant Team must provide:

3.3.1 Architectural:

- Floor and Reflective Ceiling Plans of each floor showing all accommodation required, including all necessary circulation areas, stairs, elevators, etc., and ancillary spaces

- anticipated for service use. Indicate building grids, modules, etc., and key dimensions.
- Furniture and Equipment plans.
- Samples of proposed finishes.
- Produce all drawings, details, etc., in BIM.
- Elevations of all exterior building façades showing all doors and windows accurately sized and projected from the floor plans and sections. Indicate clear floor and ceiling levels and any concealed roof levels.
- Cross Sections through the building(s) to show floor levels, room heights, inner corridor or court elevations, etc.
- Detail Sections of walls or special design features requiring illustration and explanation of this stage, including fireproofing methods.
- Architectural features, including materials, millwork and finishing details and samples.
- Drawings for build-in furniture
- All schedules (rooms, doors, windows, etc.)
- Lighting design for interior
- Accessibility strategy
- Acoustics
- Finalize area calculations and confirm program area requirements are met.

3.3.2 Structural Drawings:

- Produce all drawings, details, etc. in BIM.
- Structural drawings to be separate from the Architectural sheets. Include a copy of the site report on which the design is based.
- Update the seismic report.
- Provide load calculations updates.
- Without being limited to the following, Design Development Drawings shall:
 - (a) Include a title drawing, listing all other structural drawings;
 - (b) Include a legend showing all symbols being used;
 - (c) Include a glossary of all abbreviations being used;
 - (d) Include a Site Plan showing project location within site and/or within existing building, and bearing a North arrow;
 - (e) Include demolition plans;
 - (f) Include plans, elevations, sections and perspective views of all structural elements to be detailed in Construction Drawings;
 - (g) Include specifications for principal components;
 - (h) Indicate modifications to existing structures or new structural systems, types of foundation, structural materials and all other pertinent details;
 - (g) Show all design loads (e.g. dead, live and lateral loads) on all plans, particularly any atypical loads;
 - (h) Identify structural constraints that may affect construction;
 - (I) present, in the general notes, a summary the results of any earthquake resistance assessments that may have been done, as well as actions included in the design to improve earthquake resistance;
 - (J) Include, as required, supporting drawings from other disciplines that may affect the structural design development (e.g. Architectural).

3.3.3 Enabling Works and Site Works Drawings:

- Produce all drawings, details, etc, in BIM.
- Drawings (including all plans, profiles, sections, elevations and details for existing, modifications to existing and new elements) indicating the proposed new systems and tie-in to existing systems, and other significant or unusual details proposed. Enabling drawings to be on separate plans from other disciplines. Include a copy of the site report on which the design is based.

3.3.4 Mechanical:

- Produce all drawings, details, etc., in BIM.
- Site Plan showing service entrances for water supply, sanitary and storm drains and connections to public utility services, including all key invert elevations.
- Drawings showing preliminary sizing of ventilation, cooling and heating systems showing locations, and all major equipment layouts in mechanical rooms.
- Drawings of plumbing and sanitary systems, showing routing and sizing of major lines and location of pumping and other equipment where required.
- Provide riser diagrams for heating, cooling, ventilating, sanitary, storm, fire protection, and plumbing systems.
- Drawings of the fire protection systems showing major components.
- Produce preliminary designs based on the approved concept. Update the energy analysis and energy budget established at the concept design stage.
- Update the schedule of requirements, including equipment list of all equipment with number and location.
- Provide information of all internal and external energy loads in sufficient detail to determine the compatibility of the proposal with existing services, approved concept and energy budget.
- Analysis of selected equipment and plant with schematics and calculations sufficient to justify the economy of the selected systems.
- Describe the mechanical systems to be provided and the components of each system. Describe the perceived operation of the mechanical systems.
- Describe how the mechanical systems will be able to sustain operations during and after a disaster situation.
- Explain what operating staff will be needed to operate the building systems and the expected functions of the operation staff.
- Describe the building systems control architecture. Provide preliminary building control system network architecture, mechanical control schematics, and sequence of operation.
- Explain what acoustical and sound control measures are to be included in the design.
- Obtain written approval from the Authority having Jurisdiction concerning fire protection systems.

3.3.5 Electrical drawings:

- Produce all drawings, details, etc, in BIM.
- Provide drawings showing advanced development of the following:

- 1 Single line diagram of the power circuits with their metering and protection, including:
 - i. Complete rating of equipment.
 - ii. Ratios and connections of CT's and PT's.
 - iii. Description of relays when used. Maximum short circuit levels on which design is based.
 - iv. Identification and size of services.
 - v. Connected load and estimated maximum demand on each load centre.
 - 2 Electrical plans with:
 - i. Floor elevations and room identification.
 - ii. Legend of all symbols used.
 - iii. Circuit numbers at outlets and control switching identified.
 - iv. All conduit and wire sizes except for minimum sizes which should be given in the specification.
 - v. A panel schedule with loadings for each panel.
 - vi. Telephone conduits system layout for ceiling/floor distribution.
 - 3 Elementary control diagrams for each system.
 - 4 Schedule for motor and controls.
 - 5 Complete lighting layout and fixture schedule clearly indicating methods of circuiting, switching and fixture mounting.
 - 6 Electric heating layout and schedule.
- Provide the following data:
 - 1 Total connected load.
 - 2 Maximum demand and diversity factors.
 - 3 Sizing of standby load.
 - 4 Short-circuit requirements and calculations showing the ratings of equipment used.
 - 5 Provide a narrative description and discussion regarding the following:
 - i. Finalize the design analysis of power distribution scheme.
 - ii. Finalize lighting systems analysis including but not limited to:
 - a) fixture type;
 - b) layout and
 - c) control.
 - iii. Provide method for energy conservation coordinated with the other disciplines including but not limited to:
 - a) daylight harvesting;
 - b) building automation control and
 - c) demand limit control.

- iv. Provide detail description of exterior lighting scheme design as per CPTED principles.
 - v. Provide a detail analysis coordinated with the other discipline for the proposed security system feature including but not limited to:
 - a) card access control;
 - b) CCTV and
 - c) intrusion protection system.
 - vi. Description of the fire alarm system.
 - vii. Sub metering as applicable.
 - viii. Total connected load analysis with maximum demand and diversity factors.
 - ix. Short circuit analysis and calculation showing the rating of the equipment used.
 - x. Site plan with power and communication distribution, location of exterior lighting fixtures, transformer, generator, and any others main electrical systems.
 - xi. Finalization of lighting and main power distribution systems single line diagram (include normal, emergency and UPS power risers).
 - xii. Finalization of fire alarm system riser diagram.
 - xiii. Finalization of telephone and telecommunication riser diagram.
 - xiv. Finalization of security system riser diagram.
 - xv. Floor plan of proposed electrical conduit distribution system complete with location of all power distribution points and equipment rooms.
 - xvi. Floor plan with typical office lighting layout.
 - xvii. Floor plan of proposed telecommunication conduit routing and equipment rooms.
 - xviii. Floor plan of proposed locations of security devices such as but not limited to:
 - a) CCTV;
 - b) sensor and detection devices;
 - c) access control and
 - d) local security panels.
 - xix. Schedule for motors and controls.
- Electrical drawings must include the following information;
 - 1 Proposed site plan with power and communication distribution, transformer, generator, and any others main electrical systems.
 - The existing load capacity of the main power distribution system to be compared against the load requirements for the additional FTEs. The Hydro Utility Reports and any Electrical Load Studies / Load Monitoring Surveys on the normal power distribution to be evaluated for this process.

- If the load capacity of the main power distribution system is sufficient, then the Consultant must verify if the electrical maintenance/infrared scans have been completed within the last 3-5 years. If there are no reports available, then it is required to have this completed to verify if the existing electrical systems can remain in operation to support the new FTEs.
- If the main power distribution system has to be upgraded to accommodate the additional FTEs, then a complete Short Circuit Study / System Protection Coordination Study / Arc Flash Study / Device Evaluation Study will be required if it has not been completed within the last five years

2 Floor plans with:

- i. Proposed electrical rooms and closets;
- ii. Proposed telecommunication rooms and closets;
- iii. Circuit numbers at outlets and control switching identified;
- iv. Panel schedule with loading for each panel;
- v. Telephone conduits system layout for ceiling/floor distribution;
- vi. Electrical heating layout;
- vii. Client security requirements;
- viii. Dedicated emergency generator system for portions of facility to remain operation during emergencies.

3 Provide a typical floor plans for office, workstation/ work setting layouts for the following items. Coordinate with architectural and interior-fit-up designs:

- i. Lighting layout
- ii. Location of light switches;
- iii. Location and number of telephone, data and video outlets.
- iv. Personal Environmental Controls (PEC) locations

3.3.6 Cost Plan:

The Consultant must:

- Prepare and submit Class "B" (Substantive) Cost Estimate based on the final design documents.
- Supplement with updated cost plans.
- Prepare a breakdown of the cost estimate into work to suit project objectives, and the sequence management strategy.
- Provide reconciliation of Class 'C' and Class 'B' Estimates detailing cause of change.
- Include cash flow analysis.

3.3.7 Time Plan (Schedule):

The Consultant must:

- Revise work plan to maintain schedule and to reflect project current requirements, constraints, risks etc.

3.3.8 Operating Manual and Design Intent Reports:

At this stage of the project's development, this may be in preliminary outline form only. The Consultant must describe the proposed design philosophy for the operation of each main system.

3.3.9 Outline Specification:

- Submit an outline specification (all relevant sections).
- Provide a list of all NMS sections to be used.
- Submit outline specifications for all systems and principal components and equipment.
- Provide in the outline specifications manufacturer's literature about principal system components proposed for use in this Project.
- Highlight proposed "Green" materials, components and systems.

3.3.10 Commissioning

- Define operational requirements.
- Define Commissioning Requirements.
- Prepare a commissioning Brief describing major commissioning activities for mechanical, electrical and integrated system testing.
- Update Commissioning Plan
- Define and establish project specific archives.

3.3.11 Sustainable Development

- Update and refine the options exploring positive environmental strategies
- Optimise sustainable design opportunities, strategies, update budgets. Provide a LEED scorecard indicating which LEED credits the design does or will meet.
- Update the sustainability assessment scorecard indicating which credits the design does or will meet.
- Identify outstanding design issues or otherwise impacting the confirmation and securement of sustainable targets and credits that require immediate follow-up.

3.3.12 Deliverables

The Consultant must provide:

- Design development drawings
- Produce all drawings, details, etc., in BIM.

- Floor plans including all disciplines showing all floor elements and services to detail necessary to make all design decisions and to substantially estimate the cost of the project
- Architectural, structural, engineering, millwork and finishing details to determine choice of materials and finishes, respecting the goals and targets of the sustainable design strategies
- Reflected ceiling plans, including the selection of specialty lighting for special purpose and support spaces
- Elevations
- Finished and colour schemes
- Outline specifications for all systems and principle components or equipment
- Class 'B' cost estimate
- Preliminary construction schedule including long term delivery items
- Fire Protection Engineers Report including requirements, strategies or interventions for protection of the building and its occupants
- Project dossier detailing the basic assumptions of the project and the justifications for all major decisions
- Updated Commissioning Plan
- Updated sustainable development strategy report
- Selection of furnishings and equipment for special purpose and support spaces

Consultant must obtain written authorization from the Departmental Representative prior to proceeding to RS4.

RS 4 CONSTRUCTION DOCUMENTS

4.1 INTENT

To prepare drawings and specifications of the Project setting forth in detail the requirements for the construction and final cost estimate of the project as follows:

- 33% indicates technical completeness of all working documents
- 66% indicates substantial technical development of the project - well advanced architectural and engineering plans, details, schedules and specifications
- 99% is the submission of complete Construction Documents ready for tender call and submission to local authorities for pre-permit purposes
- Develop project specific Systems Operations Manual (SOM)
- Final Submission incorporates all revisions required in the 99% version and is intended to provide PWGSC with complete construction documents for each tender call.

4.2 GENERAL

Activities are similar at all three stages; completeness of the project development should reflect the stage of a submission.

Scope and Activities:

The Consultant must:

- Obtain Departmental Representative's approval for Design Development submissions (33%, 66%, 99% and final)
- For the 33%, 66%, and 99 % submissions provide six (6) copies of plans and specifications plus 2 CADD files in electronic format (CD/DVD)
- Produce all drawings, details, etc, in BIM.
- Confirm format of drawings and specifications (refer to Doing Business with NCA)
- Clarify special procedures (i.e. phased construction)
- Submit drawings and specifications at the required stages. (33%, 66%, 99% and final)
- Provide written response to all review comments and incorporate them into Construction Documents where required.
- Advise as to the progress of cost estimates and submit updated cost estimates as the project develops
- Update the project schedule
- Prepare a final Class 'A' estimate Review and approve materials and construction processes specifications to meet sustainable development objectives.

4.3 DETAILS

4.3.1 Technical and Production Meetings

- Production of construction documents at the 33%, 66%, and 99% submissions will be reviewed during the meetings arranged by Project Manager and Consultant;

- Representatives from Client Department(s) and PWGSC support staff will be present as arranged by the Departmental Representative.
- Consultant must ensure that their staff and the sub-consultant representatives attend the technical and production meetings as required.
- Consultant must ensure all documents are coordinated with all sub-consultants and disciplines;
- Consultant must arrange for all necessary data, progress prints, etc.
- Consultant must prepare minutes of the meetings and distribute copies to all participants.

4.3.2 Progress Review

- As work progresses on construction drawings, submit drawings, schedules, details, pertinent design data and updated Cost Plan and Project Schedule as required.
- Calculations submitted shall not necessarily be reviewed. They are required for record purposes and in certain instances to assist in the understanding and interpretation of designs. Calculations shall be submitted in a format that is legible, neat and easily understandable.
- Specifications and an index of specifications. The specifications shall consist of typed and edited PWGSC amended NMS sections, PWGSC in-house master specs sections and NMS sections.

4.3.4 33% Submission

This submission indicates the intended scope of the Construction Documents, and illustrates initial progress in technical development of the approved design. The submission includes but is not limited to the following:

1 General

- i. List of intended working drawings.
- ii. List of specification divisions and sections.
- iii. Updated Cost Estimate and Schedule.
- iv. Risk strategies will be formulated and any special work packaging identified.
- v. Separate tendering packages will be identified

2 Architectural Drawings

- i. Plans of each floor, with room names and numbers
- ii. All exterior and principal interior elevations
- iii. Cross sections through the building.
- iv. Typical exterior wall sections showing typical stabilization work.
- v. Preliminary door, window, finish schedules
- vi. Controlling horizontal and vertical dimensions.
- vii. Listing of green materials, equipment and technologies
- viii. Listing of Building Connectivity Components

- ix. Interior Details
- x. Reflective Ceiling Plans
- xi. Acoustic construction requirements
- xii. Exiting requirements

3 Structural Drawings:

- i. Submission of all NMS sections to be used including initial editing of specification sections. The latest edition of NMS is to be used. Provide a summary list of specification sections and indicate the degree to which the individual specification section has been edited (i.e. unedited, partially edited, or fully edited).
- ii. Construction drawings advanced, as a minimum, to the point where all major drawing layouts (plans and elevations) are established, members indicated, design demand loads noted, key details and sections indicated, drawing scales established, and title blocks filled in.
- iii. Elevations and cross sections of major elements;
- iv. Lateral load resisting systems (LLRS: cross-bracing, shear walls, moment connections);
- v. Horizontal Design loadings on relevant plans: [Earthquake loads (base overturning moments and shears), Wind loads (base overturning moments and shears), Lateral earth pressures, Hydrostatic pressures]
- vi. Vertical Design loadings on relevant plans: [Dead and superimposed dead loads, Occupancy live loads, Snow loads (including accumulation), Elevator and mechanical equipment loads, Construction loads, Crane loads]
- vii. Serviceability Requirements (i.e.: floor/roof deflection ratios, storey drift ratios, vibration, etc.)
- viii. Special loading considerations (compact shelving, heavy vehicles, storage, vaults, heavy partitions, etc.)
- ix. Strengths of structural materials.
- x. Design load calculations (including full wind, snow, and seismic).
- xi. Show reinforcement conditions in detail.
- xii. Show floor elevation differences where applicable.
- xiii. Show different covers for reinforced members.

4 Mechanical Drawings:

- i. Floor plans.
- ii. Sections.
- iii. General plumbing and fixture layouts and pipe sizes.
- iv. General ductwork layouts and duct sizes.
- v. Boiler or furnace room plan and preliminary details.
- vi. Schematics of controls and wiring diagrams.
- vii. List of standard PWGSC details to be utilized.

- viii. Heating, cooling, ventilation and specialty system schematic design.
- ix. Mechanical room layout plans and sections.
- x. Riser diagrams.
- xi. Balancing drawings.
- xii. Initial Building Control System strategies including use of Open Protocols such as BACnet.
- xiii. Chillers and cooling tower layout plans and preliminary details
- xiv. Floor sprinkler layout plans
- xv. Equipment layout plans and sections
- xvi. Preliminary equipment and components schedule
- xvii. Updated energy simulations
- xviii. Updated energy compliance and compare to the requirements of the Model of National Energy Code
- xix. Preliminary schematic of controls and wiring diagrams including sequence operation, input, output and control points

5 Electrical Drawings:

- i. Floor plans.
- ii. Distribution centres.
- iii. Major electrical equipment.
- iv. Lighting layouts.
- v. Power outlets.
- vi. Floor ducts and riser locations.
- vii. List of standard details to be utilized.
- viii. Set out separate electrical documents required for the electronic security package.
- ix. Conduit schedules
- x. Conduit layout drawings for power, communications, security, etc.

6 Voice and Data Communications strategies.

7 Enabling Works & Site Works

- i. Plan view of layout and profiles
- ii. Elevations
- iii. Cross sections
- iv. Details of connections including tie-in
- v. Conduit schedule

8 Specifications:

- i. Draft sections as available at this stage from each discipline. The section should be minimum 33% complete and must include all sections required for the project.

9 Security:

- i. Describe the specific design and systems selections to demonstrate compliance with the Functional Requirements document. Set out documentation requirements.

4.3.5 66% Submission

This submission indicates substantial technical development of the project - well advanced architectural and engineering plans, details, schedules and specification data. The submission includes but is not limited to the following:

1 General:

- i. Updated list of working drawings and specification sections.
- ii. Updated Cost Estimate and Schedule.
- iii. Risk strategies
- iv. Commissioning, Mechanical, Electrical work will be fully co-ordinated.
- v. Phased tendering documents will be finalized.

2 Architectural Drawings:

- i. Site plan showing the building and development of landscape.
- ii. Plans of each floor showing room names and numbers, all door swings, fire hose cabinets, drinking fountains.
- iii. All elevations showing materials, floor and ceiling levels, footings and roof levels, fixed and opening windows, wall louvers.
- iv. Cross and longitudinal sections, interior corridor or court elevations.
- v. Detailed wall, floor and roof sections, partition details.
- vi. Millwork and finishing carpentry details.
- vii. Door, window and finish schedules, and details, well advanced from the 33% stage.
- viii. Stair details, ramps, exterior steps.
- ix. Reflected Ceiling Plans for hung ceilings, showing lights and diffusers.
 - x. All grid lines, dimensions, scales and detail symbols.
- xi. Hoarding layout and design for Contractor's Yard.
- xii. Fit-Up drawings showing layouts in detail.
- xiii. Building Connectivity Components
- xiv. Interior Details
- xv. Reflective Ceiling Plans
- xvi. Acoustic construction requirements
- xvii. Exiting requirements

3 Structural Drawings:

Detailed development, including the size of footings (including size of reinforcing), size and detailing of all structural elements, type and detailing of waterproofing, detailing of expansion joints, complete with Operational and Functional Components design to Clause 4.1.8.18 of the National Building Code of Canada, etc.

4 Mechanical Drawings:

Detailed development from the 33% submission.

5 Electrical Drawings:

Detailed development from the 33% submission.

6 Voice and Data Communications:

Detailed development from the 33% submission.

7 Enabling Works & Site Works:

Detailed development from the 33% submission.

8 Specifications:

All specification sections must be 66% complete.

9 Commissioning:

Outline Strategies and requirements.

10 Security:

Validate the specific design and systems selections.

4.3.6 99% Submission

The submission of complete Construction Documents ready for tender call. All documents at this stage must include all revisions required by previous reviews. The submission includes but is not limited to the following:

- 1 Completed construction drawings. Stamped original drawings and specifications incorporating all review comments.

- 2 Completed Specifications Documents.
- 3 Updated Cost Estimate. (This to include the building permit costs)
- 4 Update Time Schedule with explanation of changes in target dates, etc.
- 5 All necessary standard details and master specification clauses from PWGSC incorporated into the Construction Documents.
- 6 All construction details necessary to accommodate fine work or special co-ordination.
- 7 All site information, surveys, borings, etc., required by the Contractor.
- 8 All documentation needed for separate tenders.
- 9 Support data, studies, calculations, design intent documents, etc., required by PWGSC engineering disciplines for final checking and record purposes. This data to be submitted in bound volumes.
- 10 Final Project Description:
Construction co-ordination, risk management and dispute resolution issues and strategies will be finalized. Commissioning strategies and requirements will be set out and submitted.
- 11 Inspection Authorities Submission:
Submit and obtain approval on plans and specifications required by Inspection Authorities before tender call.

4.3.7 DELIVERABLES

For each of the Project Phases, deliverables must occur in four stages, completeness of the project development must reflect the stage of submission: 33%, 66%, 99% and final. The consultant team shall prepare and submit an integrated construction document report as well as the final construction documents (drawings and specifications) for review and approval by the Departmental Representative. Revise as required by the Departmental Representative. Resubmit for acceptance. The construction document report will update the design development report, consolidate the Scope and Activities identified above, and will continue to be utilized as the benchmark project control document to monitor progress of the project. The construction document report must include in written narrative, graphic, model (traditional and / or computer generated), and photographic format, but is not limited to the following:

A. Executive Summary

The executive summary is intended to provide a summary of the construction document report and outline any recommendations requiring PWGSC approval.

B. Administrative

Aspects to be included (but not limited to):

- copy of authorization to proceed with construction documents;
- summary of participation in design charrettes / workshops;
- summary of participation in information exchange / team meetings;
- summary of participation in partnering and team building session;
- update of quality management process(es) for the consultant team; and
- Administrative section of the construction document report.

C. Regulatory

Aspects to be included (but not limited to) are:

- detailed building code analysis (code statement);
- detailed zoning analysis (zoning statement);
- detailed fire and life safety strategy (fire and life safety statement);
- detailed standards analysis (standards statement);
- detailed summary of meetings with authorities having jurisdiction;
- copy of permit application;
- summary of follow-up regarding building permit application; and
- Regulatory Analysis section of the design development report.

D. Program Design

Aspects to be included (but not limited to) are detailed refinement and development of:

- updated diagrams for programmatic accommodation, including horizontal and vertical zoning diagrams;
- updated spatial relationship diagrams;
- updated area calculations and analyses; and
- Program Design section of the design development report.

E. Site and Building Design

E1. Construction Documents 33% submission:

fully integrated, discipline specific:

- drawings, specifications and construction document report;
- updated project schedule; and

E2. Construction Documents 66% Submission:

fully integrated, discipline specific:

- drawings, specifications and construction document report (including area measurement and space usage report);
- QA meeting - demonstrate to PWGSC how consultant is ensuring QA activities and how disciplines and specialties are co-ordinated;
- updated cost estimate;
- updated project schedule;

E3. Construction Documents 99% Submission:

fully integrated, discipline specific:

- complete working drawings, specifications and construction document report. Include:

1. Support data, studies, calculations, etc., required by PWGSC engineering disciplines for final checking;
 2. Complete colour schedules, including textures, sheens, graphics, colour chips and material samples;
 3. Updated energy study including estimated annual energy and operations/maintenance costs using current energy rates ; and
 4. Copies of investigation reports, tests, logs, etc.
- class 'A' estimate;
 - updated project schedule;

E4. Final 100% Complete Submission (signed and sealed by all relevant disciplines):

This submission incorporates all revisions required by the review of the 99% submission and, with a view to issuing tender documents, any necessary finalization. Provide the following in both official languages:

- complete set of originals of the working drawings;
- complete set of original specifications;
- construction documents report;
- complete commissioning plan and associated documents, as required;
- complete set of original colour schedule;
- one copy of soil investigation report with amendments, if any (obtain from Departmental Representative and include in specifications);
- one copy of the designated substance survey report (obtain from Departmental Representative and include in specifications); and
- as a safeguard against loss or damage to the originals, retain one (1) complete set of drawings in reproducible form as well as one (1) copy of the specifications.

F. Budget and Schedule:

Aspects to be included (but not limited to) for each tender are:

- class 'A' estimate;
- milestone cost summary report and cost exception report;
- updated life cycle cost analysis;
- updated work breakdown structure, complete with summary of revisions and mitigation strategies (if significant change occurs);
- updated milestone project schedule, complete with summary of revisions and mitigation strategies (if significant change occurs);
- updated risk implications and mitigation strategies; and
- Budget and Schedule section of the construction document report.

G. Response to PWGSC Quality Assurance Report

Aspects to be included (but not limited to):

- a review and analysis of comments provided by PWGSC project management team, including the COE technical resources team and client design review team;
- prepare and submit a written response to all comments provided by the above team(s).

Consultant must obtain written authorization from the Departmental Representative prior to proceeding to RS5

RS 5 TENDER CALL, BID EVALUATION & CONSTRUCTION CONTRACT AWARD

5.1 INTENT

To obtain and evaluate bids from qualified contractors to construct the project as per the Tender Documents. To award the construction contract according to government regulations.

5.2 GENERAL

Scope and Activities:

The Consultant must:

- Attend tenderers briefing meeting(s)
- Prepare addenda based on questions arising in such meetings for issue by the Departmental Representative. Provide the Departmental Representative with all information required by tenderers to fully interpret the Construction Documents.
- Keep full notes of all inquiries during the bidding period and submit same to Departmental Representative at the end, for PWGSC records. Update drawings and specifications to suit addenda.
- Assist in tender evaluation by providing advice on the following:
 - i. The completeness of tender documents in all respects.
 - ii. The technical aspects of the tenders.
 - iii. The effect of alternatives and qualifications which may have been included in the tender.
 - iv. The tenderers capability to undertake the full scope of work.
 - v. The availability of adequate equipment to carry out the work.
 - vi. A summary of cost with respect to the Class "A" estimate/
- If PWGSC decides to re-tender the project, provide advice and assistance to the Departmental Representative
- Revise and amend, at your cost, the construction documents to bring the cost of the work within the limits stipulated
- Examine and report on any cost and schedule impact created by the issue of tender / contract addenda
- In the event that construction documents are revised or amended, the consultant must prepare new documents which are completely coordinated with the original documentation to be preserved. Deleted or replaced material will be removed from documents to prevent duplications

5.3 DELIVERABLES

The Consultant must provide:

- Originals of drawings and specifications
- Electronic copies of drawings and specifications.
- Addenda where needed
- Changes to the documents, if re-tendering is necessary
- Updated cost estimate or schedule

Consultant must obtain written authorization from the Departmental Representative prior to proceeding to RS6

RS 6 CONSTRUCTION AND CONTRACT ADMINISTRATION AND POST CONSTRUCTION WARRANTY REVIEW

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.

6.2 GENERAL

Scope and Activities:

The Consultant must:

- Act on PWGSC's behalf to the extent provided in this document during the implementation of the project
- Prepare Contract Documents - 'Issued for Construction, signed and sealed.
- Update the tendered Contract Documents - drawings and specifications - to include all revisions which have occurred as a result of addenda issued during the tender period.
- Confirm in writing to the Departmental Representative that all addenda have been integrated into the Contract Documents - 'Issued for Construction'.
- During the implementation of the project, act on PWGSC's behalf to the extent provided in this document
- Carry out the review of the work at intervals appropriate to determine if the work is in conformity with the Contract Documents
- 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
- Act as interpreter of the requirements of the Contract Documents and Supplemental Instructions
- Provide cost advice during construction
- Advise the Departmental Representative of all potential changes to scope for the duration of the implementation
- Complete necessary documentation to permit the evaluation of the project using the Canadian recognized sustainability design assist and assessment tool and submit necessary documentation to the sustainability. This project may not seek or require formal certification due to security restrictions.
- Prepare CCN's to be issued by PWGSC
- Review the Contractor's submittals
- Prepare and justify change orders for issue by the Department Representative
- Indicate any changes or material/equipment substitutions on Record Documents and update sustainability documentation.
- During the twelve (12) month warranty period investigate all defects and alleged defects and issue to the instructions Contractor
- Instruction of Operating Personnel; Operation and Maintenance Manuals;
- Conduct a final warranty review
- Ensure compliance with Commissioning Plan, update plan as necessary

- Commissioning:
 - i. Ensure compliance with and implementation of the Commissioning and Training Plans.
 - ii. Update plans as necessary throughout the construction and commissioning phases of the project.
 - iii. Witness and certify all testing, including testing off-hours or off-site, if required.
 - iv. Prepare and post Operating Instructions
 - i. Prepare as-builts (by Contractor) and Record Drawings (by Consultant) (this task is to be ongoing throughout the project and prepared within the Consultant's BIM modelling system)
 - ii. Package, Organize and BIM digitize all of the Contractor's as-builts Drawings and Specifications
 - iii. Prepare Consultant Record Drawings/ Specifications
 - iv. Prepare Consultant As-built Drawings/ Specifications
- During the twelve (12) month warranty period investigate all defects and alleged defects as required and issue instructions to the Contractor
 - i. Prepare and post Systems Operating Instructions
 - ii. Finalize Systems Operations Manual
 - iii. Conduct a final warranty review at the 11th month

6.3 DETAILS

Scope and Activities:

6.3.1 Construction Meetings

The Consultant must:

- Immediately after contract award arrange a briefing meeting with the Contractor and the Departmental Representative. Consultant to prepare minutes of the meeting and distribute copies to all participants and to other persons agreed upon with the Departmental Representative within 48 hours.
- Attend biweekly job meetings, commencing with the construction briefing meeting. The meetings shall include the job superintendent, main sub-subcontractors, affected sub-consultants and PWGSC representatives as necessary. The Departmental Representative may invite client Departments to attend any of these meetings. Consultant to prepare minutes of the meeting and distribute copies to all participants and to other persons agreed upon with the Departmental Representative within 48 hours.

6.3.2 Project Schedule

The Consultant must:

- Obtain Project Schedule in both PDF and MS Project formats with detailed commissioning component shown separately, 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 Department concerning any delays.
- Keep accurate records of causes of delays.
- Make every effort to assist the Contractor to avoid delays.

6.3.3 Time Extensions

The Consultant must:

- Only the Department may approve any request for Time Extensions. Approval will be issued in writing by the Departmental Representative.

6.3.4 Cost Breakdown

The Consultant must:

- Obtain from the Contractor detail cost breakdown on standard PWGSC form and submit to the Department with the first Progress Claim.

6.3.5 Sub-Consultant Changes

- The Consultant is required to use the sub-consultants listed on the tender form unless a change is authorized by the Department. Changes are only considered when they involve no increase in cost. Review all requests for changes of sub-consultants, and submit recommendations to the Departmental Representative.
- When sub-consultants have not been listed on the Tender Form, obtain the list from Consultant no later than 10 working days after date of award.

6.3.6 Labour Requirements

- The Contractor is bound by the Contract to maintain competent and suitable workmen 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 must ensure that a copy of the Labour Conditions for the Contract is posted in a conspicuous place on site.

6.3.7 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.

6.3.8 Construction Safety

- All construction projects that are occupied by federal employees during construction are subject to the Canada Occupational Safety and Health Act and Regulations as administered by Health and Welfare Canada, and/or Provincial Regulations -which ever is more restrictive.

- Fire safety provisions during construction must comply with FCC Standards 301 and 302, administered by Fire Protection Engineering Services, Labour Program, Human Resources and Social Development Canada, formerly known as the Fire Commissioner of 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 jurisdiction 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 throughout construction. Notify the Property Manager each time the fire protection and suppression systems are bypassed and advise of estimated reinstatement time. Ensure the Contractor is mandated to provide Watchman Service as defined in FC 301 and by the Fire Commissioner.

6.3. 9 Site Visits

- Provide construction inspection services. Ensure compliance with contract documents. Site testing of materials related to civil works, ie compaction testing, concrete testing, material (asphalt, granulars) sampling and testing will be carried out by PWGSC.
- Provide services of qualified personnel who are fully knowledgeable with technical and administrative requirements of project.
- Establish a written understanding with contractors as to what stages or aspect 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.
- Inspect materials and prefabricated assemblies and components at their source or assembly plant, as necessary for the progress of the project.
- Any directions, clarifications or deficiency list must be issued in writing to PWGSC.

6.3.10 Clarifications

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

6.3.11 Progress Reports

- Report to the Departmental Representative regularly on the progress of the work.
- Provide written reports to the Departmental Representative on the progress of the work every two weeks and provide a written summary report for each month.

Document all decisions, directions, acceptances and communications with the Contractor to establish an accurate time and event project record. Register and record the receipt and processing time for all project administration documents and information required by the Contractor. In the event that the Contractor maintains a time and event log, review and respond to information issued in order to ensure an accurate project record.

The Consultant's project record will be referenced on any related contract issues requiring clarification. Therefore, this record is part of the risk management process.

6.3.12 Work Measurement

- If work is based on unit prices, measure and record the quantities for verification of monthly progress claims and the Final Certificate of Measurement.
- When Contemplated Change Notice is to be issued based on Unit Prices, keep accurate account of the work. Record dimensions and quantities.

6.3.13 Detail Drawings

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

6.3.14 Shop Drawings

- On completion of project forward three copies of reviewed shop drawings to the Departmental Representative. Ensure that shop drawings include the project number and are recorded in sequence.
- Verify the number of copies of shop drawings required. Consider additional copies for Client's departmental review.
- Shop drawings must be stamped: "Checked and Certified Correct for Construction" by the Contractor and stamped: "reviewed" by the Consultant before return to the Contractor.
- Expedite the processing of Shop Drawings.

6.3.15 Inspection and Testing

- Prior to tender, provide Departmental Representative with recommended list of tests to be undertaken, including on site and factory testing
- Ensure all testing is detailed within commissioning plan
- When contract is awarded, assist Departmental Representative in briefing 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 Departmental Representative when tests fail to meet project requirements and when corrective work will affect schedule.
- Assist Departmental Representative in evaluating testing firm's invoices for services performed.

6.3.16 Construction Changes

- The Consultant does not have authority to change the work or the price of the Contract. However, the Consultant will prepare Contemplated Changes Notices (CCNs) and Change Orders (COs).
- Changes which affect cost or design concept must be approved by the Departmental Representative in writing.
- Upon Departmental Representative approval obtain quotations from the Contractor in detail. Review prices and forward promptly recommendations to the Department.
- The Departmental Representative 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.

6.3.17 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:
 - i. Request for Construction Payment
 - ii. Cost Breakdown for Unit and/or combined Price Contract
 - iii. Cost Breakdown for Fixed Price Contract
 - iv. Statutory Declaration Progress Claim
- Workplace Safety and Insurance Board Certificate.
- Review and sign designated forms and promptly forward claims to the Departmental Representative for processing.
- Submit with each progress claim:
 - i. Updated schedule of the progress of the work.
 - ii. Photographs of the progress of the work as per Client Security Protocol.

6.3.18 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 Departmental Representative.
- Detailed list of materials with supplier's invoice showing price of each item 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.

6.3.19 Acceptance Board

- Inform the Departmental Representative when satisfied that the project is substantially completed. The Consultant shall ensure that their representative, their sub-consultant's representative, Contractor and major sub-trades representatives shall form part of the Project Acceptance Board and attend all meetings as organized by the Department as organized by the Departmental Representative.

6.3.20 Interim Inspection

- The Acceptance Board shall inspect the work and list all unacceptable and incomplete work on a designated form. The Board shall accept the project from the Contractor subject to the deficiencies and uncompleted work listed and priced. All commissioning activities and deliverables are to be completed before interim acceptance is granted.

6.3.21 Substantial Certificate of Completion

- Payment requires completion and signing, by the parties concerned, of the following documents:
 - i. Substantial Certificate of Completion
 - ii. Cost Breakdown for Fixed Price Contract
 - iii. Cost Breakdown for Unit or Combined Price Contract
 - iv. Inspection and Acceptance
 - v. Statutory Declaration Substantial Certificate of Completion
 - vi. Workplace Safety and Insurance Board Certificate.
- Verify that all items are correctly stated and ensure that completed documents and any supporting documents are furnished to the Departmental Representative for processing.

6.3.22 Building Occupation

- The Department or Client Department may occupy the building after the date of acceptance of the building by the Acceptance Board. The acceptance date is normally that of the Substantial Completion Certificate issued to the Contractor. As of the acceptance date, the Contractor may cancel the Contract Insurance, and the Department or Client Department (as the case may be) assumes responsibility for:
 - i. Security of the work(s).
 - ii. Fuel and utility charges.
 - iii. Proper operation and use of equipment installed in the project.
 - iv. General maintenance and cleaning of the work(s).
 - v. Maintenance of the site. (Except any landscaping maintenance covered by the contract.)

6.3.23 Operation and Maintenance Data Manual

- Operation and Maintenance Data Manual: four (4) sets of each volume produced by Contractor of project specification, verified for completeness, relevance and format by the Architectural, Mechanical and Electrical Consultants, shall be submitted to PWGSC Departmental Representative prior to interim acceptance or actual start of operation and instruction period, whichever occurs first. The Consultant shall retain one copy of each volume for their record and use during the instruction period.

6.3.24 Instruction of Operating Personnel

- Make arrangements and ensure that Department's operating personnel is properly instructed on the operation of all services and systems using the final manuals as reference.
- Consultant to provide training sessions, as required, on the subject of design intent and systems operations. Utilize Systems operations manual for training sessions.

6.3.25 Keys

- Ensure that all keys and safe combinations are delivered to the Department and/or the Client Department as applicable.

6.3.26 Final Inspection

- Inform the Departmental Representative when satisfied that all work under the contract has been completed, including the deficiency items. Inspection and Acceptance as a result of the Substantial Completion Inspection. The Department 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.

6.3.27 Final Certificate

- i. The final payment requires completion and signing, by the parties concerned, of the following documents:
 - ii. Final Certificate of Completion
 - iii. Cost Breakdown for Fixed Price Contract
 - iv. Inspection and Acceptance
 - v. Statutory Declaration Final Certificate of Completion
 - vi. Cost Breakdown for Unit and/or Combined Price Contract
 - vii. Workplace Safety and Insurance Board Clearance Certificate
 - viii. Hydro Certificate
- Verify that all items are correctly stated and ensure that completed documents and any supporting documents are furnished to the Department for processing.

6.3.28 Take-over

- The official take-over of the project, or parts of the project, from the Contractor is established by the PWGSC Project Team which includes the Consultant and the Client Department. The date of Substantial Certificate of Completion and the Final Certificate of Completion signifies commencement of the 12 month warranty period for work completed on the date of each certificate in accordance with the General Conditions of the Contract.
- Provide Department 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.

6.3.29 As-Built and Record Drawings and Specifications

- Following the take-over, obtain As-Built drawings from the Contractor.
- Produce Record Drawings - these will include:
 - i. transference of information from the contractor's as-built drawings
 - ii. incorporation of known site variants not shown on as-built drawings
 - iii. incorporation of addenda into the originals

- iv. incorporation of change orders into the originals
- v. Production of same (all As-built requirements) into BIM model

- Submit As-Built drawings (including BIM model).
- Submit Record Drawings in number and format required by the Consultant Agreement within [8] weeks of final acceptance.
- Provide a complete set of final shop drawings.

6.3.30 Commissioning

- Prepare final commissioning plan and evaluation report, including but not limited to: operational requirements, commissioning requirements, major commissioning activities for mechanical, electrical and integrated system testing and project specific archives.

6.4 DELIVERABLES:

The Consultant must provide:

- 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
- Sustainability assessment certification document/report confirming achievement of targetted sustainability level (minimum LEED Silver, 3 Green Globes or equivalent)
- Additional detail drawings when required to clarify, interpret or supplement the Construction Documents
- Written Site Instructions
- O&M manuals
- As-Built (by Contractor) and Record Drawings (by Consultant)
- Substantial or/and Final certificates
- Commissioning Plan
- Reviewed and Accepted Commissioning (Evaluation) Report
- Warranty deficiency list and final warranty report