Public Works and Government Services Canada | Travaux publics et Services gouvernementaux Canada

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

Public Works and Government Services Canada
ATB Place North Tower
10025 Jasper Ave./10025 ave. Jaspe
5th floor/5e étage
Edmonton
Alberta
T5J 1S6
Bid Fax: (780) 497-3510

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

Issuing Office - Bureau de distribution

Public Works and Government Services Canada
ATB Place North Tower
10025 Jasper Ave./10025 ave Jasper
5th floor/5e étage
Edmonton
Alberta
T5J 1S6

Title - Sujet
RCMP Detachment, Wabasca, AB, A&E

Solicitation No. - N° de l'invitation	Date
M7594-151563/A	2015-11-04

Client Reference No. - N° de référence du client
RCMP M7594-151563

GETS Reference No. - N° de référence de SEAG
PW-$PWU-909-10610

File No. - N° de dossier	CCC No./N° CCC - FMS No./N° VME
PWU-5-38220 (909)	

Solicitation Closes - L'invitation prend fin
at - à 02:00 PM
on - le 2015-12-15

Time Zone
Fuseau horaire
Mountain Standard Time MST

F.O.B. - F.A.B.
Plant-Usine: ☐ **Destination:** ☐ **Other-Autre:** ☐

Address Enquiries to: - Adresser toutes questions à:	Buyer Id - Id de l'acheteur
Mayhew (RPC), Sylvia	pwu909

Telephone No. - N° de téléphone	FAX No. - N° de FAX
(780) 497-3645 ( )	(780) 497-3510

Destination - of Goods, Services, and Construction:
Destination - des biens, services et construction:
ROYAL CANADIAN MOUNTED POLICE
SEE HEREIN

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
See Herein	

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**

Canada

:

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

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:

SUPPLEMENTARY INSTRUCTIONS TO PROPONENTS (SI)

SI1 INTRODUCTION

1. Public Works and Government Services Canada (PWGSC) intends to retain an individual consulting firm or joint venture to provide the professional services for the project as set out in this Request for Proposal (RFP).

2. Because of the considerable time and expense involved in the preparation, submission and evaluation of full proposals, proponents responding to this RFP are requested to submit a proposal in two phases. Phase One proposals cover only the qualifications, experience and organization of the proposed Consultant Team. Following evaluation and rating of these proposals, proponents are advised of their competitive standing and have the opportunity to decide whether or not to continue their participation by submitting a Phase Two proposal. Phase Two proposals cover the detailed approach to the work, and the pricing and terms offered. A combination of the Phase One and Phase Two submissions constitutes the final proposal.

3. Initially, firms are invited to submit a proposal in the first phase of the selection procedure outlined below. Only the Phase One information asked for in the RFP is to be included in the Phase One proposal, and evaluation and rating of Phase One proposals will be carried out only on the Phase One information requested. **IN PHASE ONE, NO MATERIAL IS TO BE SUBMITTED ON THE SUBJECT PROJECT ITSELF**.

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.

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2. The following are the proposal documents:

   (a) Supplementary Instructions to Proponents (SI);
   R1110T (2015-07-03), General Instructions (GI) – Architectural and/or Engineering Services – Two Phase Request for Proposal;
   Submission Requirements and Evaluation (SRE);

   (b) the general terms, conditions and clauses, as amended, identified in the Agreement clause;

   (c) Statement of Work;

   (d) the document entitled "General Procedures and Standards";

   (e) the **Security Requirements Check List** (SRCL);

   (f) any amendment to the solicitation document issued prior to the date set for receipt of Phase Two proposals;

   (g) the proposal submitted at Phase One and Declaration/Certifications Form; and

   (h) the proposal submitted at Phase Two 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 Phase One solicitation period must be submitted in writing to the Contracting Authority named on the RFP - Page 1 as early as possible. Enquiries should be received no later than ten (10) working days prior to the closing date identified on the front page of the Request for Proposal. Enquiries received after that date may not be answered prior to the closing date of the solicitation.

SI4 CANADA'S TRADE AGREEMENTS

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

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SI5 CERTIFICATIONS

1. **Integrity Provisions – Declaration of Convicted Offences**
   As applicable, pursuant to subsection Declaration of Convicted Offences, of section 01 of the General Instructions, the Proponent must provide with its bid, a completed Declaration Form, to be given further consideration in the procurement process.

2. **Federal Contractors Program for Employment Equity - Proposal Certification**

   By submitting a proposal, the Proponent certifies that the Proponent, and any of the Proponent's members if the Proponent is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Employment and Social Development Canada (ESDC) - Labour's website.

   Canada will have the right to declare a proposal non-responsive if the Proponent, or any member of the Proponent if the Proponent is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

   Canada will also have the right to terminate the Agreement for default if a Consultant, or any member of the Consultant if the Consultant is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Agreement.

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

SI6 SECURITY REQUIREMENT

1. Before award of a contract, 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. Proponents are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful Proponent to obtain the required clearance will be at the entire discretion of the Contracting Authority.

3. For additional information on security requirements, proponents should refer to the Canadian Industrial Security Directorate (CISD), Industrial Security Program of Public Works and Government Services Canada (http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html) website.

4. Proponents must also comply with the RCMP's Security Clearance Guidelines and Documents, Appendix "G" and with the RCMP Security Requirements as indicated in Supplementary Conditions SC1

SI7 - WEBSITES

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

Employment Equity Act
http://laws-lois.justice.gc.ca/eng/acts/E-5.401/index.html

Federal Contractors Program (FCP)
http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/index.shtml

Certificate of Commitment to Implement Employment Equity form LAB 1168
http://www.servicecanada.gc.ca/cgi-bin/search/eforms/index.cgi?app=profile&form=lab1168&dept=sc&lang=e

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

Contracts Canada
https://buyandsell.gc.ca/

Supplier Registration Information
https://srisupplier.contractscanada.gc.ca

Consultant Performance Evaluation Report Form
http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913-1.pdf

Canadian economic sanctions
http://www.international.gc.ca/sanctions/index.aspx?lang=eng

National Joint Council (NJC) Travel Directive
http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php

:

TERMS, CONDITIONS AND CLAUSES

AGREEMENT

1. The Consultant understands and agrees that upon acceptance of the offer by Canada, a binding Agreement shall be formed between Canada and the Consultant and the documents forming the Agreement shall be the following:

   (a) the Front Page and this Agreement clause;
   (b) the General Terms, Conditions and Clauses, as amended, identified as:
   R1210D (2015-07-09), General Condition (GC) 1 - General Provisions – Architectural and/or Engineering Services
   R1215D (2014-06-26), General Condition (GC) 2 - Administration of the Contract
   R1220D (2015-02-25), General Condition (GC) 3 - Consultant Services
   R1225D (2015-04-01), General Condition (GC) 4 - Intellectual Property
   R1230D (2015-02-25), General Condition (GC) 5 - Terms of Payment
   R1235D (2011-05-16), General Condition (GC) 6 - Changes
   R1240D (2011-05-16), General Condition (GC) 7 - Taking the Services Out of the Consultant's Hands, Suspension or Termination
   R1245D (2012-07-16), General Condition (GC) 8 - Dispute Resolution
   R1250D (2015-07-03), General Condition (GC) 9 - Indemnification and Insurance
   Supplementary Conditions
   Agreement Particulars
   (c) Statement of Work;
   (d) the document entitled "General Procedures and Standards";
   (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 Phase One proposal and Declaration/Certifications Form;
   (h) the Phase Two proposal and 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) Statement of Work;
   (h) the document entitled “General Procedures and Standards”;
   (i) the document entitled “**Security Requirement Check List**”;
   (j) the proposal.

SUPPLEMENTARY CONDITIONS (SC)

SC1 SECURITY REQUIREMENTS

SECURITY REQUIREMENT FOR CANADIAN SUPPLIER - CISD

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

1.1. The Contractor must, at all times during the performance of the Contract, hold a valid **Designated Organization Screening (DOS), with approved Document Safeguarding and Production Capabilities at the level of PROTECTED B**, issued by the Canadian Industrial Security Directorate, Public Works and Government Services Canada.

1.2. The Contractor personnel requiring access to **PROTECTED** information, assets or work site(s) must EACH hold a valid **RELIABILITY STATUS**, granted or approved by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).

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

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

:

1.5. The Contractor must comply with the provisions of the:

(a) **Security Requirements Check List and security guide (if applicable), attached at Appendix F;**
(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 _____

RCMP SECURITY REQUIREMENTS (IN ADDITION TO CISD SECURITY REQUIREMENTS ABOVE):

(i) The Contractor's resources must obtain RCMP security clearances in order to work on site or see certain documentation or have access to RCMP systems. The Contractor will have to participate in the following procedures, at its own cost, throughout the Contract period or any extension period.

(ii) The Contractor will assign a Security Officer, who will:

(A) Act as the Contractor's security co-ordinator for completion of all RCMP Security forms throughout the contract period or any extension period; and
(B) Ensure that all forms are properly completed and received by the Technical Authority within the time frames specified below.

(iii) The Contractor's Security Officer will ensure that Security Forms for all Contractor personnel or subcontracted personnel are completed and received by the Technical Authority. Each of the Contractor's proposed personnel will be required to be fingerprinted and to attend an individual security interview (that could last up to 2 hours each) at an RCMP designated location.

:

(iv) Security Procedures for Resources

(A) Within ten (10) days of Contract award, the Contractor will provide the RCMP with a) the name of the resource(s) who will be directly liaising with the Project Authorities or who will need access to RCMP facilities on a regular basis, and b) their completed RCMP security clearance forms.

(B) For personnel security clearance obtained under another entity or with a Federal Government Department other than PWGSC, the Contractor should contact the CISD security officer as soon as possible to be guided through the process of completing any paperwork required to request a transfer, or a duplicate of the security clearance or a new application for security clearance as appropriate.

(C) For both the processing of initial security clearances and for ongoing security clearances during the Contract period and any extension period, the Contractor will have to take the following timelines into consideration when proposing new personnel that do not have an RCMP security clearance at the required level.

	Activity	Time Frame
1.	Security Forms Completed by proposed resource (sample forms available upon request)	Timelines herein are based on the RCMP Security Forms being completed correctly with all mandatory information. These are general guidelines only - individual security clearances may take more or less time than the timeframes stated herein.
2.	Review of Security Form by RCMP to ensure completeness	Within 15 business days of receipt
3.	Field Assessment, if necessary	Within 50 business days
4.	Security Interview with Successful Bidder's proposed resource	Within 15 business days of completion of the field assessment
5.	Notification of Security Status	Within 10 business day of completion of security interview
	Total Elapsed Time (from receipt of a correctly completed Security Form)	Up to 100 business days

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SC2 FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – DEFAULT BY THE CONSULTANT

The Consultant understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Consultant and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the contract. If the AIEE becomes invalid, the name of the Consultant will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by ESDC will constitute the Consultant in default as per the terms of the contract.

AGREEMENT PARTICULARS

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

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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: .....
.....
.....

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

.....
.....
.....
.....
.....

II. Key Sub Consultants / Specialists:

Mechanical Engineer
Firm Name: .....
.....
.....

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

.....
.....
.....
.....
.....

:

II. Key Sub Consultants / Specialists: Continued

Structural Engineer
Firm Name: .....
.....
.....

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

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

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II. Key Sub Consultants / Specialists: Continued

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

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Landscape Architect
Firm Name: .....
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.....

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

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APPENDIX B - DECLARATION/CERTIFICATIONS FORM

Project Title: **RCMP Wabasca Detachment, Alberta**

Name of Proponent: _____

Street Address: **Mailing Address:**

_____ _____
_____ _____
_____ _____

Proponent's Proposed Site or premises Requiring Safeguard Measures (refer to SI16 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:	**Size of Organization:**
_____ Sole Proprietorship _____ Partnership _____ Corporation _____ Joint Venture	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 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

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

A5. The Proponent has a combined work force in Canada of 100 or more employees; and

( ) 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)

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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.

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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.

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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 Phase One proposal, but may be submitted afterwards as follows: if Appendix "B" is not completed and submitted with the proposal, the Contracting Authority will inform the Proponent of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the proposal non-responsive.

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APPENDIX C - PRICE PROPOSAL FORM

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

PROPONENTS SHALL NOT ALTER THIS FORM

Project Title: **RCMP Detachment, Wabasca, Alberta**

Name of Proponent: _____

The following will form part of the evaluation process:

REQUIRED SERVICES

Fixed Fee (including all disbursements per R1230D (2015-02-25), GC 5 - Terms of Payment)

SERVICES	**FIXED FEE**
Pre-Design Services	$.....
Schematic Design	$.....
Design Development	$.....
Construction Documents 33%	$.....
Construction Documents 66%	$.....
Construction Documents 99%	$.....
Tender Documents	$.....
Construction Administration Services	$.....
Post-Construction Services	$.....
MAXIMUM FIXED FEES	**$.....**

Travel time and/or expenses will not be reimbursed separately (Refer to R1230D (2015-02-25), GC 5.12 – Disbursements).

:

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

The following will NOT form part of the evaluation process

Canada may accept or reject any of the following hourly rates. Canada reserves the right to negotiate on these hourly rates.

THE FOLLOWING HOURLY RATES MAY BE USED FOR FUTURE CONTRACT AMENDMENTS

1. **Architect (Prime Consultant)**

Category of Personnel:	**Single Fixed Hourly Rate (CAD):**
Partners or Principals	$_____
Senior Resource	$_____
Intermediate Resource	$_____
Junior Resource	$_____
Administrative Resource	$_____
Cost Specialist	$_____

2. **Mechanical Engineer (Sub-Consultant)**

Category of Personnel:	**Single Fixed Hourly Rate (CAD):**
Partners or Principals	$_____
Senior Resource	$_____
Intermediate Resource	$_____
Junior Resource	$_____

:

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

3. Structural Engineer (Sub-Consultant)

Category of Personnel:	**Single Fixed Hourly Rate (CAD):**
Partners or Principals	$_____
Senior Resource	$_____
Intermediate Resource	$_____
Junior Resource	$_____

4. Electrical Engineer (Sub-Consultant)

Category of Personnel:	**Single Fixed Hourly Rate (CAD):**
Partners or Principals	$_____
Senior Resource	$_____
Intermediate Resource	$_____
Junior Resource	$_____

5. Civil Engineer (Sub-Consultant)

Category of Personnel:	**Single Fixed Hourly Rate (CAD):**
Partners or Principals	$_____
Senior Resource	$_____
Intermediate Resource	$_____
Junior Resource	$_____

:

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

6. Landscape Architect (Sub-Consultant)

Category of Personnel:	**Single Fixed Hourly Rate (CAD):**
Partners or Principals	$_____
Senior Resource	$_____
Intermediate Resource	$_____
Junior Resource	$_____

END OF PRICE PROPOSAL FORM

:

APPENDIX D – GENERAL PROCEDURES AND STANDARDS

(REFER TO THE ATTACHED DOCUMENT)

NOTE:

All reference to a PWGSC Project Manager is to be replaced with an RCMP Project Manager. The RCMP is responsible for the Project Management of this Project.

UNDER SECTION 3.8 PWGSC RESPONSIBILITIES, Delete reference to PWSGC. Insert the RCMP.

:

APPENDIX E - HEALTH AND SAFETY

Workers Compensation

1. The recommended Proponent shall provide to the Contracting Authority, prior to Contract award:

   a) a Workers Compensation Board letter of good standing, also listing covered Directors, Principals, Proprietor(s) or Partners who will be or who are anticipated to be present on the work site(s).

2. The recommended Proponent shall deliver all of the above documents to the Contracting Authority on or before the date stated (usually 3-5 days after notification) by the Contracting Authority. Failure to comply with the request may result in the proposal being declared non-compliant.

Employer/Prime Consultant:

1. During the Design Stage

   a) The Consultant shall, where the Consultant is working on Federal property and is in control of the work site (no Federal presence or construction contractor), for the purposes of the applicable provincial or territorial Occupational Health & Safety Acts and Regulations, and for the duration of the Work of the Contract**:**

      i) act as the Employer, where the Consultant is the only employer on the work site, in accordance with the Authority Having Jurisdiction;

      ii) assume the role of Prime Consultant, where there are two or more employers (including sub-consultants) involved in work at the same time and space at the work site, in accordance with the Authority Having Jurisdiction; and

2. During the Construction Stage

   a) The Consultant shall, for the purposes of the Occupational Health & Safety Acts and Regulations, and for the duration of the Work of the Contract**,** agree to accept that the Construction Contractor is the Principal/Prime Contractor, and to conform to that Contractor’s Site Specific Health and Safety Plan.

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Travaux publics et Services gouvernementaux Canada
Canada

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GENERAL PROCEDURES & STANDARDS

For Professional & Design Services

MMXI Edition

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1 INTRODUCTION

1.1 GENERAL PROCEDURES AND STANDARDS

1.1.1 GENERAL

.1 These PWGSC *General Procedures and Standards* (P&S) have been developed to:
- .1 Facilitate the development of a rational, well-documented design process; and
- .2 Ensure compliance with federal government standards, PWGSC Policies and Treasury Board directives.

1.1.2 HARMONIZATION WITH THE TERMS OF REFERENCE (TOR)

.1 The P&S document must be used in conjunction with the TOR, as the two documents are complimentary.

.2 The TOR describes project-specific requirements, services and deliverables while the GP&S document outlines with minimum standards and procedures common to all projects.

.3 In the case of a conflict between the two documents, the requirements of the TOR override this document.

1.2 PROJECT DELIVERY

1.2.1 GENERAL REQUIREMENTS

.1 The project delivery requirements outlined in this section are applicable to the design and construction of all PWGSC projects in Western Region, unless otherwise indicated in the TOR.

.2 Under the direction of the Consultant, the Consultant team shall provide fully integrated and coordinated professional and design services for the delivery of a project, in accordance with the requirements in the TOR and as contained herein.

.3 The Consultant must:
- .1 Obtain written authorization from the Departmental Representative before proceeding from one phase of work to the next phase of a project;
- .2 Coordinate all services with the Departmental Representative;
- .3 Deliver each project utilizing best practices in support of User Department needs, respecting the approved financial budget, schedule, scope, quality energy budget;
- .4 Establish a cohesive functional partnership and open communication between all members of the project delivery team throughout all phases of the project life;
- .5 Ensure that the Consultant team has an in-depth understanding and collective 'buy-in' of the project requirements, scope, budget and scheduling objectives, working constructively to build a collaborative and cooperative team approach with knowledgeable and timely input and contribution by all project team members, including representatives from PWGSC and the User Department;
- .6 Conduct rigorous quality assurance reviews during the design and construction phases, including the application of value engineering principles during the design of all complex systems;
- .7 Provide a written response to all PWGSC comments included in Quality Assurance reviews conducted throughout the design of the project;
- .8 If any alterations are required during the development of the design, analyse the impact on all project components and resubmit for approval before proceeding further;
- .9 Establish and maintain a change control procedure for scope changes;

.10 Ensure that an experienced Project Architect or Project Engineer is assigned to each project, who shall be responsible for the production, coordination and delivery of all design and construction documents for all project disciplines;
.11 Prepare a continuous risk identification and management program employing effective methodologies to ensure construction safety as well as claims avoidance;
.12 Provide continuous and comprehensive documentation of the project at all stages of the project implementation;
.13 Ensure continuity of key personnel and maintain a dedicated working team for the life of the project;

1.2.2 SERVICE DELIVERY FOR ALL PROJECTS

.1 For all projects, the Consultant shall:
  .1 Deliver the project to be within;
    .1 The established construction budget,
    .2 The key milestones, according to the established project schedule.
  .2 Ensure that each Consultant team member:
    .1 Understands the project requirements, for seamless delivery of the required services;
    .2 Functions as a cohesive partnership with open communication between all members of the project delivery team throughout all phases of the project life;
    .3 Function as an integrated and focused team with an in-depth understanding and collective 'buy-in' of the project requirements, scope, budget and scheduling objectives.
  .3 Provide;
    .1 Full co-ordination of services with other consultants engaged by PWGSC,
    .2 A continuous risk management program to address the risks associated specifically with this project, including construction safety and claims avoidance issues.
  .4 Deliver the work in a professional manner during all phases of the project, employing best practices for budget, schedule, quality, and scope management;
  .5 Maintain continuity of key personnel and maintain a dedicated working team for the life of the project.

1.2.3 SERVICE DELIVERY (BUILDINGS)

.1 For Building projects, where an Architectural firm is the Prime Consultants, the Consultant team shall, as a minimum, adhere to the standards of services outlined in the "Canadian Handbook of Practice for Architects - Volume 2 Management" (latest edition) distributed by the Royal Architectural Institute of Canada (RAIC).

1.2.4 SERVICE DELIVERY (ENGINEERING)

.1 For Engineering projects, where an Engineering firm is the Prime Consultants, the Consultant team shall adhere to the standards of services established by the Professional Engineering Association in the Province or Territories where the project is located.

1.3 PROCUREMENT OF GOODS AND SERVICES

1.3.1 PUBLIC PROCUREMENT

.1 Public procurement by Canada is legislated and guided by a number of international and national trade agreements, and acts, as well as policies, directives, and guidelines provided by the Treasury Board Secretariat (TBS) and PWGSC.

.2 There is one over-arching principle for all PWGSC procurement activities: Integrity. Subordinate to this are guiding principles, which provide the framework for PWGSC procurement process.

.3 For further information refer to the following web link;

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

1.3.2 INTEGRITY AND GUIDING PRINCIPLES

.1 PWGSC procurement processes will be open, fair and honest.

.2 Client Service:

.1 PWGSC will make every reasonable effort to satisfy the operational requirements of its clients, while obtaining the best value in each procurement process.

.3 National Objectives:

.1 PWGSC procurement activities will advance established government policies, within the limits imposed by international trade obligations.

.4 Competition:

.1 PWGSC procurement will be competitive, with specific exceptions.

.5 Equal Treatment:

.1 PWGSC must ensure that all potential bidders of a particular requirement are subject to the same conditions.

.6 Accountability:

.1 PWGSC is accountable for the integrity of the contracting process.

2 REQUIRED SERVICES STANDARDS

2.1 GENERAL

.1 Where Services are called for in the project specific TOR, the standards outlined in the following articles apply.

2.2 COST MANAGEMENT

2.2.1 GENERAL

.1 The following provides a general indication of the information needed by the Consultant's cost estimator to prepare specific classifications of estimates.

.2 These are the minimum requirements only and should be supplemented where additional information exists or is warranted.

.3 Construction cost estimates are to be prepared and submitted to PWGSC at various stages during the design process.

.4 In addition to the Consultants' estimate, PWGSC may have independent estimates performed to compare with the Consultant estimate.

2.2.2 TREASURY BOARD (TB) SUBMISSIONS

.1 Projects that are subject to TB approval are normally submitted twice.

- .1 The first submission is for Preliminary Project Approval (PPA) at Pre-Design or Schematic Design stage of a project and must include an Indicative Estimate for the cost of the work.
- .2 The second submission is for Effective Project Approval (EPA) at the completion of Design Development or Pre-Tender stage of a project and must include a Substantive Estimate for the cost of the work.

.2 The Treasury Board estimate definitions are:

- .1 Indicative Estimate;
  - .1 A low quality, order of magnitude estimate that is not sufficiently accurate to warrant TB approval as a Cost Objective.
- .2 Substantive Estimate;
  - .1 An estimate which is of sufficiently high quality and reliability as to warrant TB approval as a Cost Objective for the project phase under consideration.
  - .2 It is based on detailed systems and component design, taking into account all project objectives and deliverables.

.3 TB Terminology:

- .1 Constant dollar estimate;
  - .1 This is an estimate expressed in terms of the dollars of a particular base fiscal year.
    - .1 It includes no provision for inflation.
    - .2 Cash flows over a number of fiscal years may also be expressed in constant dollars of the base year including no allowance for inflation in the calculation of costs.
- .2 Budget-year (BY) dollar estimate:
  - .1 Budget year dollars is also be referred to as Nominal dollars or Current dollars.
    - .1 This is an estimate based on costs arising in each FY of the project schedule.
    - .2 It is escalated to account for inflation and other economic factors affecting the period covered by the estimate.
  - .2 The costs and benefits across all periods should initially be tabulated in budget year dollars for thee following reasons:

.1 First; this is the form in which financial data are usually available,
.2 Second; adjustments, such as tax adjustments, are accurately and easily made in budget year dollars,
.3 Finally; working in budget-year dollar enables the analyst to construct a realistic picture over time, taking into account changes in relative prices.

2.2.3 CLASSES OF ESTIMATES

.1 PWGSC applies a detailed, four level, classification using the terms Class A, B, C and D.
.2 Apply these estimate classifications at the project stages as defined in the TOR.
.3 For projects required to be submitted to TB for approval:
  .1 An Indicative Estimate shall be at least a class 'D'; and
  .2 A Substantive Estimate shall be at least a class 'B'.

2.2.4 CLASS 'D' (INDICATIVE) ESTIMATE

.1 Based upon a comprehensive statement of requirements and an outline of potential solutions, this estimate is to provide an indication of the final project cost, and allow for ranking of all the options being considered.
.2 Submit Class 'D' cost estimates in elemental analysis format, in accordance with the latest edition issued by the Canadian Institute of Quantity Surveyors, with cost per m^2 for current industry statistical data for the appropriate building type and location.
.3 Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.
.4 The level of accuracy of a class D cost estimate shall be such that no more than a 20% design contingency allowance is required.

2.2.5 CLASS 'C' ESTIMATE

.1 Based on a comprehensive list of requirements and assumptions, including a full description of the preferred Schematic Design option, construction experience, design experience and market conditions, this estimate must be sufficient for making the correct investment decision.
.2 Submit Class 'C' cost estimates in elemental analysis format, in accordance with the latest edition issued by the Canadian Institute of Quantity Surveyors, with cost per m^2 for current industry statistical data for the appropriate building type and location.
.3 Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.
.4 The level of accuracy of a class C cost estimate shall be such that no more than a 15% design contingency allowance is required.

2.2.6 CLASS 'B' (SUBSTANTIVE) ESTIMATE

.1 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 must provide for the establishment of realistic cost objectives and be sufficient to obtain effective project approval.
.2 Submit Class 'B' cost estimates in both elemental analysis format and trade divisional format, in accordance with the latest edition issued by the Canadian Institute of Quantity Surveyors.
.3 Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.
.4 The level of accuracy of a class 'B' cost estimate shall be such that no more than a 10% design contingency allowance is required.

2.2.7 CLASS 'A' (PRE-TENDER) ESTIMATE

.1 Based on completed construction drawings and specifications prepared prior to calling competitive tenders, this estimate must be sufficient to allow a detailed reconciliation and/or negotiation with any contractor's tender.
.2 Submit Class 'A' cost estimates in both elemental analysis format and trade divisional format, in accordance with the latest edition issued by the Canadian Institute of Quantity Surveyors.
.3 Include a summary in the cost estimate, plus full back up, showing items of work, quantities, unit prices, allowances and assumptions.
.4 The level of accuracy of a class 'A' cost estimate shall be such that no more than a 5% design contingency allowance is required.

2.3 SCHEDULE MANAGEMENT

2.3.1 SCHEDULER

.1 The Scheduler shall provide a Project Planning and Control Schedule for the project, for the purpose of Planning, Scheduling, Progress Monitoring (Time Management), during all the design phases up to the construction procurement phase.
.2 A qualified Scheduler, with experience commensurate with the complexity of the project, is required to develop and monitor the project schedule during the design process.
.3 The Scheduler shall adhere to good industry practices for schedule development and maintenance, as recognized by the Project Management Institute (PMI).
.4 PWGSC presently utilizes the Primavera Suite software and Microsoft Project for it's current Control Systems and any software used by the consultant should be fully integrated with either of these programs, using one of the many commercially available software packages.

2.3.2 PROJECT SCHEDULE

.1 A Detailed Project Schedule is a schedule developed in reasonable detail to ensure adequate Time Management planning and control of the project.
.2 Project Schedules are used as a guide for the planning, design and implementation phases of the project, as well as to communicate to the project team when activities are to happen, based on network techniques using Critical Path Method (CPM).
.3 When building a Project Schedule, the Consultant must consider:
  .1 The level of detail required for control and reporting;
  .2 The reporting cycle shall be monthly, unless otherwise identified in the Terms of Reference;
  .3 What is required for reporting in the Project Teams Communications Plan; and
  .4 The nomenclature and coding structure for naming of scheduled activities, which must be submitted to the Project Manager for acceptance.

2.3.3 MILESTONES

.1 The Major Milestones are standard Deliverables and Control Points within NPMS and are required in all schedule development.
.2 These Milestones will be used in Time Management Reporting within PWGSC as well as used for monitoring project progress using Variance Analysis.
.3 Milestones may also be external constraints such as the completion of an activity, exterior to the project, affecting the project.

2.3.4 ACTIVITIES

.1 All activities will need to be developed based on:
  .1 Project Objectives;
  .2 Project Scope;

.3 Milestones;
.4 Meetings with the project team; and
.5 The scheduler's full understanding of the project and it's processes.

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

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

.4 These elements will become activities, interdependently linked in the Project Schedule.

2.3.5 SCHEDULE REVIEW AND APPROVAL

.1 Once the scheduler has identified and properly coded all the activities to the acceptance of the Project Manager, the activities are then sorted into a logical order and appropriate duration are applied to complete the schedule.

.2 The scheduler, together with the Project Team, can then analyze the schedule to see if the milestone dates meet the project timelines and then adjust the schedule accordingly by modifying durations or changing logic.

.3 When the schedule has been satisfactorily prepared, the scheduler can present the detailed schedule back to the Project Team for acceptance and application as the project baseline.

.4 There may be several iterations before the schedule meets with the Project Teams agreement and the critical project timelines.

.5 The final agreed version must be copied and saved as the baseline to monitor variances during the design process.

2.3.6 SCHEDULE MONITORING AND CONTROL

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

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

.3 There will be several schedules generated from the analysis of the baseline schedule as outlined in the Required Services Sections of the TOR.

.4 Each updated schedule reflects the progress of each activity to date, any logic changes, both historic and planned, projections of progress and completion indicating the actual start and finish dates of all activities being monitored.

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

.6 If unforeseen or critical issues arise, the Scheduler will advise the Project Manager and submit proposed alternative solutions in the form of an Exception Report.
.1 An Exception Report will include sufficient description and detail to clearly identify:
.1 Scope Change: Identifying the nature, reason and total impact of all identified and potential project scope changes affecting the project;
.2 Delays and accelerations: Identifying the nature, the reason and the total impact of all identified and potential duration variations;
.3 Options Enabling a Return to the project baseline: Identifying the nature and potential effects of all identified options proposed to return the project within baselined duration.

.7 At each submission or deliverable stage, provide an updated schedule and exception report.

2.4 RISK MANAGEMENT

2.4.1 CONTEXT

.1 The Departmental Representative prepares the Risk Management Plan.

.2 The Departmental Representative may ask for assistance from the Consultant Team for identification of risk items and factors arising from the technical requirements of the project.

2.5 WASTE MANAGEMENT

2.5.1 PROTOCOL

.1 The Construction, Renovation, and Demolition (CRD) Non-hazardous Solid Waste Management Protocol to which PWGSC is bound, provides direction on the undertaking of non-hazardous solid waste management actions on projects.

.1 The protocol is designed to meet the federal requirements, provincial/territorial policies and the objectives of the PWGSC Sustainable Development Strategy (SDS).

.2 The contractor must implement a solid waste management program.

.3 Contractors must be instructed to plan for extra project time when implementing CRD waste diversion initiatives.

.1 Added labour costs can be recuperated and waste management costs savings can be achieved through reduced tipping fees, avoided haulage costs, and the sale of reusable and recyclable materials.

2.5.2 CONSULTANT RESPONSIBILITIES

.1 Research and investigate hazardous waste disposal strategies in context of the project and make recommendations.

.2 Include in the contract documents, a requirement for the contractor to develop a waste reduction and management plan during the construction of this project.

.3 Identify, on the site plan where large (garbage) bins shall be stored, as well as easy disposal truck access/exit to/from same, to assist the Contractor in reducing waste or re-cycling of materials on and off site.

2.6 TECHNICAL REPORTS

2.6.1 PURPOSE

.1 This section provides direction and standards for the preparation of reports delivered to PWGSC during all the various stages of project delivery and for specific services such as investigations, studies, analysis, strategies, audits, surveys, programs, plans, etc.

.2 Technical Reports are official government documents, which are typically used to support an application for approval or to obtain authorization or acceptance and as such they must:

.1 Be complete, clear and professional in appearance and organization, with proper reference to related parts and contents in the report;

.2 Clearly outline the intent, objectives, process, results and recommendations;

.3 Present the flow of information and conclusions in a logical, easy to follow sequence;

.4 Be in written narrative, graphic, model (traditional and / or computer generated), and photographic format, which can be web enabled;

.5 Ensure that all pages are numbered in sequence; and

.6 Be printed double-sided, if hard copies are produced.

2.6.2 STANDARDS FOR PWGSC TECHNICAL REPORTS

.1 Standard practice for the organization of technical reports requires:

.1 A cover page, clearly indicating the nature of the report, the date, the PWGSC reference number and who prepared the report;
.2 A Table of Contents;
.3 An Executive Summary;
.4 The body of the report is to be structured such that the reader can easily review the document and locate, respond to and /or reference related information contained elsewhere in the report;
.5 Appendices used for lengthy segments of the report, supplementary and supporting information and / or for separate related documents.

.2 The report content must:
.1 Ensure that the executive summary is a true condensed version of the report following the identical structure, including only key points and results / recommendations requiring review and / or approval;
.2 Use a proper numbering system (preferably legal numbering), for ease of reference and cross-reference;
.1 The use of 'bullets' is to be avoided.
.3 Use proper grammar, including using complete sentences, in order to ensure clarity, avoid ambiguity and facilitate easy translation into French, if required;
.1 The use of undefined technical terms, industry jargon and cryptic phrases are to be avoided.
.4 Be written as efficiently as possible, with only essential information included in the body of the report and supporting information in an appendix if needed.

2.6.3 PRE-DESIGN REPORT CONTENT

.1 Administrative aspects to be included (but not limited to) are:
.1 Quality management process for the consultant team;
.2 Confirmation that all necessary pre-design documentation required for this project is available and confirmation that the information is still current and up-to-date.

.2 Regulatory Analysis aspects to be included (but not limited to) are:
.1 Preliminary summary of regulatory and statutory requirements, authorities having jurisdiction, and codes, regulations, and standards.

.3 Program Analysis aspects to be included (but not limited to) are a review and analysis of:
.1 Functional program, User Department reports and studies, Space data sheets, Work stations, offices, common areas and commercial space requirements, Laboratories, Data Room requirements, etc.

.4 Site Analysis aspects to be included (but not limited to) are a review and analysis of:
.1 Site features and restrictions (i.e. landscape features, topographical feature, climatic influences, setback requirements, easements, existing buildings, and / or structures.);
.2 Subsurface, geotechnical analysis of soils;
.3 Municipal infrastructure, subsurface and above grade services, including capacities and limitations (i.e. storm water drainage, fire protection, domestic water, power, telecommunications,);
.4 Historical/archaeological features, previous uses;
.5 Environmental features including sustainable design opportunities.

.5 Building Analysis aspects to be included (but not limited to) are a review and analysis of:
.1 Substructure, including foundations and basement(s), parking;
.2 Shell, including superstructure, interior structural systems, exterior enclosure, roofing;
.3 Interiors, including interior construction, stairs, interior finishes;

.4 Services, including conveying (elevators, escalators), plumbing, HVAC, fire protection, electrical, telecommunications, building automation;
.5 Equipment and furnishings;
.6 Special construction and demolition, materials abatement.

.6 Budget, Schedule, and Risk Analysis aspects to be included (but not limited to) are:
.1 Updated Class 'D' estimate and revised schedule;
.2 Analysis of risk implications and preliminary mitigation strategies.

.7 Sustainable Development Strategies
.1 Proposed policy for the project to minimize environmental impacts consistent with the project objectives and economic constraints, including:
.1 Recommendations on Sustainable Development Design standards to be applied to the project;
.2 Achievable levels for LEED® or Green Globes certification;
.3 Preliminary sustainability targets for water and energy use, waste reduction etc.
.2 Environmental impacts and application of the Canadian Environmental Assessment (CEA) Act.

2.6.4 SCHEMATIC DESIGN REPORT CONTENT

.1 Standard practice for the organization of technical reports requires:
.1 Executive Summary;
.2 Regulatory Analysis;
.1 Preliminary building code analysis,
.2 Preliminary zoning analysis,
.3 Fire and life safety strategy, and
.4 Preliminary standards analysis.
.3 Program Analysis;
.1 Updated Functional Program requirements,
.2 Preliminary horizontal and vertical zoning diagrams,
.3 Spatial relationship diagrams,
.4 Facilities services strategy,
.5 Basic area calculations and analyses.
.4 Site Analysis;
.1 Drawings, renderings and supporting 3D visualization illustrating the building and site,
.2 Site features and restrictions (i.e. landscape features, topographical features, climatic influences, setback requirements, easements, existing buildings and/or structures etc.),
.3 Subsurface features,
.4 Municipal infrastructure, subsurface and above grade services, including capacities and limitations (i.e. storm water drainage, fire protection, domestic water, power, telecommunications etc.),
.5 Historical site features,
.6 Archaeological features,
.7 Environmental features including sustainable design strategies (i.e. storm water management, landscaping etc.).

.2 Building Analysis and Design Options;
.1 Architectural,

.1 Prepare a site plan indicating relationships, landscape concept, building outlines, main accesses, roadways, vehicular and pedestrian traffic patterns,
.2 Provide building plans, showing relative disposition of main accommodation areas, circulation patterns, floors, horizontal and vertical space relationships, mechanical / electrical shafts,
.3 Include elevations, sections and typical wall details for the building envelope,
.4 Provide perspectives and / or 3D visualization diagrams, and
.5 Calculate the gross building area and provide a net area summary of all accommodation areas required.

.2 Civil,
.1 Describe the overall impact on the site systems infrastructure,
.2 Verify of all site services information,
.3 Provide a site plan showing the existing building, proposed site services, building service connections, site drainage, roads, parking and sidewalks, and
.4 Include a preliminary analysis of the impact on existing systems, where contributing to existing sewer lines.

.3 Structural / Seismic,
.1 Describe the potential impact on the existing building structure and include any required structural modifications and /or upgrades,
.2 Provide a general description of structures, including systems considered and benefits/disadvantages,
.3 Include design loads for all load cases, and
.4 Prepare concept drawings of structural systems proposed, including typical floor plans, foundations, lateral systems and explanatory sketches.

.4 Mechanical Engineering,
.1 Provide narratives describing the following,
.1 Overview,
.2 Code & Standards Considerations & Concerns,
.3 Potential Energy Conservation Measures,
.4 Description of three distinct mechanical options including,
.1 Narratives of each option,
.2 Discussion of advantages and disadvantages of each,
.3 System schematics sufficient to describe each option,
.4 Preliminary energy analysis for each,
.5 Discussion of recommendations.

.5 Electrical Engineering,
.1 Provide an electrical design synopsis, describing the electrical work in sufficient detail for assessment and acceptance by the Departmental Representative,
.1 Include feasibility and economic studies of proposed systems complete with cost figures and loads, and in accordance with Sustainable Development requirements.
.2 Prepare a site plan showing the location of electrical and telecommunication service entrances.
.3 Prepare floor plans indicating locations and size of,
.1 Major electrical equipment and distribution centres,
.2 Telecommunications rooms, closets and major conduits,

.4 Provide Normal and Emergency power distribution details, including a diagram showing the distribution up to distribution centres on each floor,
.5 Indicate typical lighting concepts for the interior and exterior environments,
.6 Indicate typical ceiling (or floor) distribution systems for lighting, power and telecommunications, and
.7 Provide concept descriptions of Fire alarm and Security systems.

.3 Commissioning;
.1 Provide preliminary commissioning plan.
.4 Cost Management;
.5 Schedule Management;
.6 Furniture / Equipment;
.1 Prepare a Furniture Recommendation Report based on the Functional Program and on parameters developed in conjunction with the Departmental Representative and the Client / User. Report to include an examination of the following;
.1 Procurement process and requirements,
.2 Furniture type and layout,
.3 Panel screen height,
.4 Power requirements,
.5 Finishes.
.2 Recommendations are to take into consideration current inventory of furniture and reflect the client's vision, functional requirements, proposed planning alternatives, space allocation and project budget.
.3 Prepare a Class 'C' cost estimate for refurbishment of existing furniture and / or the purchase of new furniture and equipment.
.4 Document scheduling requirements for refurbishment of existing furniture and / or the procurement of new furniture and equipment.
.7 Budget;
.1 Class 'C' Estimates for each option.
.8 Schedule;
.1 Milestone project schedule including allowances for reviews and approvals for each stage of the project life cycle.
.9 Risk Analysis;
.1 Report on any deviations that may affect cost or schedule and recommend corrective measures.
.10 Sustainable Development Strategies;
.1 Indicate how each option can meet the sustainability targets, and
.2 Provide energy simulations of the proposed design options, including estimated annual energy cost as predicted by using current energy cost for the appropriate area.
.11 Response to PWGSC Quality Assurance Report ; and
.12 Project Log tracking all approved major decisions including those affecting changes to project scope, budget and schedule.

2.6.5 DESIGN DEVELOPMENT REPORT CONTENT

.1 Executive Summary
.2 Regulatory Analysis
.1 Preliminary building code analysis;

.2 Preliminary zoning analysis;
.3 Fire and life safety strategy;
.4 Preliminary standards analysis

.3 Program Analysis
.1 Updated Functional Program requirements
.2 Preliminary horizontal and vertical zoning diagrams;
.3 Facilities services strategy;
.4 Basic area calculations and analyses;

.4 Site Analysis
.1 Drawings, renderings and supporting 3D visualization illustrating the building and site,
.2 Site features and restrictions (i.e. landscape features, topographical features, climatic influences, setback requirements, easements, existing buildings and/or structures etc.);
.3 Subsurface features;
.4 Municipal infrastructure, subsurface and above grade services, including capacities and limitations (i.e. storm water drainage, fire protection, domestic water, power, telecommunications etc.);
.5 Historical site features;
.6 Archaeological features;
.7 Environmental features including sustainable design strategies (i.e. storm water management, landscaping etc.);

.5 Building Analysis and Design Options
.1 Architectural
.1 Prepare a site plan showing the building and Infrastructure items including the following:
.1 Pedestrian, vehicular, security, delivery service access,
.2 Provide floor plans of each level (including the roof) showing all accommodation required, including all necessary circulation areas, stairs, elevators, and ancillary spaces anticipated for service use. Indicate building grids, modules, and key dimensions.
.3 Provide reflected ceiling plans of ceilings with special features.
.4 Show elevations of all exterior building facades indicating all doors and windows, accurately sized and projected from the floor plans and sections.
.1 Clearly indicate levels for grade, all floors, ceilings, roof and penthouse levels.
.5 Develop cross-sections through the building to show floor levels, room heights, inner corridor elevations, etc.
.6 Identify primary architectural materials proposed for the exterior and interior of the building, including choice of finishes.
.7 Provide plans and preliminary details for millwork, built-in furniture and lab casework.
.8 Provide detail sections of walls with special design features requiring illustration and explanation at this stage, such as firewalls, acoustical barriers, security partitions, isolation or separation of laboratory spaces, etc.
.9 Special construction and demolition, including heritage conservation and rehabilitation requirements, hazardous materials abatement,
.10 Provide sections and details for any spaces requiring acoustic security.
.1 Include STC ratings for doors, transfer ducts and other assemblies
.2 Civil

.1 Further refine site plans showing site services and building service connections referenced to proposed building outlines, site access roads and sidewalks, including existing and proposed grades and drainage improvements.
.2 Indicate locations of manholes (complete with invert elevations), valves, and fire hydrant locations.
.3 Identify proposed pipe sizes and slopes, where applicable, and include pipe invert elevations at building foundation.
.4 Identify, by means of Design Summary Sheets, pipe capacity and estimated flows for storm and sanitary sewers. Where contributing to an existing sewer, include analysis of impact on existing systems.
.5 Provide Hydraulic Analysis of any relevant alterations to existing water distribution system in the vicinity of the proposed building to confirm anticipated maximum available fire flow. Calculate and compare site flows to building site fire flow.
.6 Provide typical trench and related details, including profiles of below grade services.

.3 Structural
.1 Provide drawings indicating modifications to existing structure and new structural systems, structural materials, cladding details, fireproofing methods and other significant or unusual details.
.2 Indicate all design loads, e.g. dead and live loads on all plans with atypical loads marked. Live loads to include localized seismic, wind and snow.
.3 Provide brief design calculations including outputs from computerized analysis.

.4 Mechanical
.1 Provide narratives describing the following
.1 Overview
.2 Code & Standards Analysis
.3 Site Services & Utilities
.4 Fire Protection Systems
.5 Plumbing Systems
.6 Heating Systems
.7 Cooling Systems
.8 Ventilation Systems
.9 Exhaust Systems
.10 Insulation
.11 Humidification Systems
.12 Acoustic and sound control measures
.13 Controls
.14 Energy Conservation Measures & Energy Analysis & Report
.2 Provide system schematics for heating water, chilled water, ventilation and plumbing systems.
.3 Provide catalogue cut sheets of representative equipment for each type of component to be used on the project.
.4 Provide preliminary layout drawings showing locations of all major components.
.5 Provide brief design calculations including outputs from computerized analysis.

.5 Electrical
.1 Update the electrical design synopsis for the selected option. Provide data on the total connected load, the maximum demand and diversity factors, and the sizing of the emergency load.

.2 Elaborate on proposed emergency power scheme and provide preliminary installation details for any emergency generator installation.
.3 Indicate metering locations on distribution diagram.
.4 Provide typical lighting, power and telecommunication system details for all workspaces.
.5 Include lighting design and control schemes for typical lighting arrangements.
.6 Elaborate on exterior lighting scheme. Provide typical fixture concepts.
.7 Provide a fire alarm riser diagram.
.8 Indicate security system major conduit requirements on floor plans.
.9 Provide typical security system details (conduit and boxes) that will be included on construction drawings.
.10 Provide brief design calculations including outputs from computerized analysis.

.6 Sustainable Development Strategies:
.1 Indicate how each option can meet the sustainability targets
.2 Provide energy simulations of the proposed design options, including estimated annual energy cost as predicted by using current energy cost for the appropriate area,

.7 Response to PWGSC Quality Assurance Report

2.7 CODES, ACTS, STANDARDS, REGULATIONS

2.7.1 GENERAL

.1 The Codes, Acts, Standards and Guidelines listed in the following articles, may apply to this project. The Consultant must identify and analyse the applicable documents in the Code Analysis.
.2 In all cases the most stringent Code, standard and guideline shall apply.

2.7.2 PWGSC DOCUMENTS AVAILABLE FROM PWGSC PROJECT MANAGER:

.1 PWGSC Fit-Up Standards: Technical Reference Manual;
.2 Public Works and Government Services MD Standards – Departmental Representative to provide on request;
.1 MD 15000; Environmental Standards for Office Accomodation,
.2 MD 15116-2006; Computer Room Air conditioning Systems,
.3 MD-15126; Laboratory HVAC (currently in draft form),
.4 MD 15128; Laboratory Fume Hoods: Guidelines for owners, design professionals and maintenance personnel – 2008,
.5 MD 15129; Guidelines for Perchloric Acid fumehoods and their exhaust systems – 2006,
.6 MD 15161; Control of Legionella in Mechanical Systems - 2006,
.7 MD 250005; Energy Monitoring and Control Systems Design Guidelines - 2009,
.3 PWGSC Best Practice; Prescribing indoor humidity levels for Federal Buildings - 2006,
.4 Public Works and Government Services Commissioning Standards and Guidelines,
.5 PWGSC Commissioning Manual CP-1 version 2006.

2.7.3 CODES AND REGULATIONS:

.1 The NRC National Building Code of Canada 2010;
.2 The NRC National Fire Code of Canada, 2010;
.3 The NRC National Plumbing Code of Canada 2010;
.4 The NRC Model National Energy Code for Buildings 2011;
.5 CSA C22.1-09, Canadian Electrical Code Part I Safety Standard for Electrical Installations and CE Code Handbook. Amendments for Provinces;

.6 Canadian Code for Preferred Packaging;
.7 National Electrical Manufacturers Association (NEMA);
.8 Electrical and Electronic Manufacturers' Association of Canada (EEMAC);
.9 American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE) - ANSI/IEEE C62.41-1991, Surge Voltages in Low-Voltage AC Power Circuits;
.10 American Society for Testing and Materials (ASTM);
.11 ASTM F 1137-00(2006), Specification for Phosphate/Oil and Phosphate/Organic Corrosion Protective Coatings for Fasteners;
.12 The Canada Labour Code;
.13 http://laws.justice.gc.ca/en/L-2/
.14 The Canada Occupational Health and Safety Regulations;
.15 http://laws.justice.gc.ca/eng/SOR-86-304/index.html
.16 All other Territorial and Municipal Acts, Codes, By-laws and regulations appropriate to the area of concern.

2.7.4 STANDARDS AND GUIDELINES PRODUCED BY THE GOVERNMENT OF CANADA:

.1 Standards and Directives of the Treasury Board (TB):
  .1 http://www.tbs-sct.gc.ca/pol/index-eng.aspx?tree=standard
  .2 http://www.tbs-sct.gc.ca/pol/index-eng.aspx?tree=directive
  .3 And including;
    .1 Accessibility Standard for Real Property,
      .1 http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12044
    .2 Fire Protection Standard.
      .1 http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=17316
.2 Labour Canada's, Fire Commissioner of Canada Standards;
  .1 http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/index.shtml.
  .2 And including,
    .1 FC-301 Standard for Construction Operations, June 1982,
    .2 FC-302 Standard for Welding and Cutting, June 1982,
    .3 FC-311 Standard for Record Storage, May 1979.
    .4 FC-403 Fire Protection Standard for sprinkler Systems, November 1994
.3 The Standards and Guidelines for the Conservation of Historic Places in Canada
  .1 www.historicplaces.ca;
.4 Labour Canada's, Technical Documents;
  .1 http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/guidelines/index.shtml
  .2 And Including,
    .1 Fire Protection for Information Technology Facilities and Equipment.
.5 Canadian Food Inspection Agency's Containment Standard for Facilities Handling Plant Pests.
.6 Public Health Agency of Canada's Laboratory Biosafety Guidelines, 3rd Edition,
.7 Canadian Council of Animal Care's Guidelines on: Laboratory Animal Facilities – Characteristics, Design and Development.

2.7.5 HEALTH CANADA STANDARDS AND GUIDELINES:

.1 Guidelines for Canadian Drinking Water Quality – Sixth Edition – 1996;
.2 Guidelines for Canadian Drinking Water Quality – Summary Table – Dec 2010;

.3 Guidance for Providing Safe Drinking Water in Areas Of Federal Jurisdiction – Version 1 – 2005;
.4 The Canadian Council of Ministers of the Environment (CCME) ;
.5 Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (CCME, 2003);
.6 Canada – Wide Strategy for the Management of municipal Waste Water Effluent;
.7 The Canadian Environmental Protection Act (CEPA, 1999);
.8 The Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, published in Canada Gazette Part II on June 12, 2008 (Registration SOR/2008-197).

2.7.6 STANDARDS AND GUIDELINES:

.1 Air Conditioning and Refrigeration Institute (ARI);
.2 American Conference of Governmental Industrial Hygienists (ACGIH, Industrial Ventilation Handbook);
.3 Air Diffusion Council (ADC);
.4 Air Movement and Control Association (AMCA);
.5 American Association of State Highway and Transportation Officials (AASHTO) Standards
.6 American National Standards Institute (ANSI);
.7 ANSI/AIHA Z9.5, Laboratory Ventilation;
.8 .1 ANSI/NEMA C82.1-04, Electric Lamp Ballasts-Line Frequency Fluorescent Lamp Ballast;
.9 .2 ANSI/NEMA C82.4-02, Ballasts for High-Intensity-Discharge and Low-Pressure Sodium Lamps;
.10 ANSI/TIA/EIA-606- Administration Standard for the Telecommunications Infrastructure of Commercial Buildings;
.11 ANSI Z358.1, Emergency Eyewash and Shower Equipment;
.12 American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), including but not limited to;
  .1 ASHRAE Laboratory Design Guide,
  .2 ASHRAE Standards and Guidelines,
  .3 ASHRAE Applications Handbook – 2007,
  .4 ASHRAE HVAC Systems and Equipment Handbook – 2008,
  .5 ASHRAE Fundamentals Handbook – 2009,
  .6 ASHRAE Refrigeration Handbook – 2010,
  .7 ASHRAE 52.2 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size – 2007,
  .8 ANSI/ASHRAE 55, Thermal Environmental Conditions for Human Occupancy – 2004,
  .9 ANSI/ASHRAE 62.1, Ventilation for Acceptable Indoor Air Quality – 2010,
  .10 ASHRAE 90.1, Energy Efficient Design of New Buildings – 2010,
  .11 ASHRAE 105: Standard Method of Measuring and Expressing Building Energy Performance,
  .12 ASHRAE 110, Method of Testing Performance of Laboratory Fume Hoods,
  .13 ASHRAE 111; Practices for Measurement, Testing, Adjusting and Balancing of Building HVAC&R Systems,
  .14 ASHRAE 114; Energy Management Control Systems Instrumentation, and
  .15 ASHRAE 135; BACnet: A Date Communication Protocol for Building Automation and Control Networks.
.13 Asphalt Institute Standards for Hot Mix;

.14 American Society of Mechanical Engineers (ASME);
.15 American Society for Testing and Materials (ASTM);
.16 American Water Works Association (AWWA) Standards;
.17 American Welding Society (AWS);
.18 Associated Air Balance Council (AABC);
.19 Canadian Standards Association;
.20 CSA A23.3-04 (2010) Design of Concrete Structures;
.21 CSA B51-09 Boiler, pressure vessel and pressure piping Code;
.22 CSA B52-05 Mechanical Refrigeration Code;
.23 CSA B64-01 Backflow Preventers and Vacuum Breakers;
.24 CSA B139-09 Installation Code for Oil Burning Equipment;
.25 CSA B149.1-10 Natural Gas and Propane Installation Code;
.26 CSA B651-04 Accessible Design for the Built Environment;
.27 CSA C22.2 No. 41-07 Grounding and Bonding Equipment;
.28 CSA S16-09 Design of Steel Structures;
.29 CSA Z204-1994 Guideline for Managing Indoor Air Quality in Office Buildings;
.30 CSA Z320-11 Building Commissioning Standard & Check Sheets;
.31 CSA Z316.5-94, Fume Hoods and Associated Exhaust Systems;
.32 CAN/CSA-23.1-04 and CAN/CSA-A23.2-04 Concrete materials and methods of concrete construction; and Methods of test and standard practice for concrete CAN/CSA-C22.2 No. 214-94 "Communications Cables";
.33 CAN/CSA-C22.3 No.3-[98(R2007)], Electrical Co-ordination;
.34 CAN/CSA-B651-04(R2010), Accessible Design for the Built Environment;
.35 CAN3 C235-[83(R2010)], Preferred Voltage Levels for AC Systems, 0 to 50,000 V;
.36 CAN/CSA-T528-93, "Design Guidelines for Administration of Telecommunications Infrastructure in Commercial Buildings", Canadian Standards Association;
.37 CAN/ULC – S524-06 Standard for the Installation of Fire Alarm Systems;
.38 CAN/ULC – S537-04 Fire Alarm System Verification Report;
.39 CAN/ULC – S102-07 Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies;
.40 CAN/ULC – S102.2-07 Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies
CAN/ULC S112-M90 (R2001) Standard Methods of Fire Test of Fire-Damper Assemblies;
.41 CAN/ULC S115-05 Standard Method of Fire Tests of Fire stop Systems;
.42 International Mechanical Code – Latest Version;
.43 Institute of Boiler and Radiation, Hydronic Institute (IBR);
.44 Manufacturers Standardization Society of Valve and Fitting Industry (MSS);
.45 National Fire Protection Association (NFPA), including;
    .1 NFPA 10; Standard for Portable Fire Extinguishers – 2010,
    .2 NFPA 13; Standard for Installation of Sprinkler Systems – 2010,
    .3 NFPA 14; Standard for Installation of Standpipe and Hose Systems – 2010,
    .4 NFPA 24: Standard for the Installation of Private Fire Service Mains and Their Appurtenances-2010,
    .5 NFPA 30; Flammable and Combustible Liquids Code,
    .6 NFPA 45; Standard on Fire Protection for Laboratories Using Chemicals,
    .7 NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting-2007.

.46 SEFA 1.2, Scientific Equipment & Furniture Association;
.47 Sheet Metal and Air Conditioning Contractors National Association (SMACNA);
.48 Transportation Association of Canada (TAC) Guide for Canadian Roads;
.49 Manual of Uniform Traffic Control Devices (MUTCD);
.50 Telecommunications Industry Association (TIA);
  .1 Commercial Building Telecommunications Cabling StandardTIA/EIA-568,
    .1 Part 1: General Requirements, TIA/EIA-568-B.1,
    .2 Part 2: Balanced Twisted Pair Cabling Components, TIA/EIA-568-B.2,
    .3 Addendum 1 - Transmission Performance Specification for 4-pair 100 Ohm Category 6 Cabling, TIA/EIA-568-B.2-1,
    .4 Optical Fibre Cabling Components Standards, TIA/EIA-568-B.3.
  .2 ANSI/TIA/EIA-569-A Commercial Building Standards for Telecommunications pathways and spaces,
  .3 Pathways and Spaces, ANSI/TIA/EIA-569-B,
  .4 Telecommunications Infrastructure Standard for Data centers TIA-942,
  .5 J-STD-607-A Commercial Building Grounding and - Bonding Requirements for Telecommunications.
.51 Underwriters' Laboratories of Canada (ULC);
.52 ULC/CSA Approval is required for all electrical and mechanical equipment.

2.7.7 STANDARDS AND GUIDELINES FOR TRANSPORTATION

.1 Canadian Highway Bridge Design Code
.2 Transportation Association of Canada - Manuals, Guides and Handbooks.

2.8 COMMISSIONING PROCESS

2.8.1 GENERAL

.1 This section summarizes the PWGSC commissioning process, the requirements and associated roles and responsibilities as they relate to the various phases in the delivery of a project.
.2 It is to be used as a guide in further developing the commissioning plan, specification and related documents for a project.
.3 Commissioning is not a replacement for good design and construction practices.
  .1 It requires coordinated efforts on the part of all parties involved in the Project.
.4 The Commissioning overlaps the design phase through construction and into the operation phase.
.5 The PWGSC Commissioning Manual CP.1 4th edition, November 2006, is available for free download at the following site:
  .1 http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/tech/miseenservice-commissioning/manuel-manual-eng.html
.6 The PWGSC Commission Manual CP.2 – Commissioning Glosary is available for free download at the following site:
  .1 http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/tech/miseenservice-commissioning/manuel-manual-b-eng.html
.7 "Commissioning" is a quality assurance process, in which the functional requirements of the Owner/occupant and the operational requirements of facility management are proven to function as intended.

.8 The "commissioning process" is a planned program of quality management and information transfer that extends through all phases of a project's development and delivery, up to and including the warranty period.

.9 The process consists of a series of checks and balances to ensure that the work is designed, installed and proven to operate as intended.

.10 Commissioning has two main components, functional and operational.

.1 The functional component deals with:

.1 Security, Health (indoor air quality) and occupant safety;

.2 Comfort (temperature, relative humidity, ventilation, air flow patterns, air purity and well being);

.3 Cost-effectiveness of design; and

.4 Systems and equipment supporting Owner's functional requirements.

.2 The operational component deals with:

.1 Operation and Maintenance (O&M) issues; e.g., design review with a particular concern for the operation and maintenance of the systems today and in the future, when repairs are required;

.2 Performance evaluation of systems and equipment;

.3 Accessibility to O&M Documentation; and

.4 Review of the training plan against the current needs now and in the future.

2.8.2 COMMISSIONING PLAN

.1 The Commissioning Plan will typically be developed by the Contractor through his own Commissioning Agent.

.2 The Commissioning Plan is the project-specific document and which describes the process for verifying that all built works meet the Investor's requirements within the limits of the working documents.

.3 It is essential that the Consultant provide specifications that detail requirements for all submittals and testing in each Specification Section in order for the Contractor to properly prepare a complete Commissioning Plan.

.4 The Commissioning Plan will be reviewed and accepted by the Departmental Representative prior to commencement of construction.

.5 The Commissioning Plan may require periodic update throughout design.

2.8.3 COMPONENT VERIFICATION

.1 Component verification sheets (CV) sheets are developed by the Consultant and incorporated in the contract documents to ensure the facility is an operating entity and meets the requirements as described in the Agreement.

.2 The CV sheets are intended to monitor and track the supply and shop drawing requirements associated with each component. The *Consultant* must verify that the components being installed in the built works are acceptable to their design and the approved shop drawings.

.3 The commissioning process requires the documentation of all the components installed as part of a system that will have performance verification testing conducted.

.4 Sample CV sheets for various types of components are to be provided by the Consultant in Div 01.

2.8.4 SYSTEM & INTEGRATED SYSTEM TESTING

.1 The "performance verification tests" (PVTs) are developed by the Design-Builder to ensure the facility is an operating entity and meets the requirements as described in the Agreement.

.2 The PVTs are intended to demonstrate the functional performance of the systems & integrated system during the various modes of operation, against the design intent. Each test must be uniquely identified and reflected in the contractor's commissioning schedule.

.3 Once the contract has been awarded the Design-Builder must monitor the sub-contractor's process to help ensure the timely completion of these tests. The Design-Builder must witness each test. The Design-Builder must provide final certification of the test results. After an acceptable review of the test document, the PWGSC Commissioning Specialist will recommend to the Departmental Representative the acceptance or rejection of the test results.

.4 Sample PVT sheets for various types of system are to be provided by the Consultant in Div 01.

2.8.5 TEST REQUIREMENTS

.1 Each CV or PVT shall be uniquely named, numbered and categorized by discipline.

.2 Tests shall define:

- .1 Test Purpose;
- .2 System design narrative;
- .3 Test Prerequisites;
- .4 Testing Procedures;
- .5 Test Comments; and
- .6 Test Sign-off Block.

.3 System Performance Verifications Tests

- .1 These tests have prerequisites that are to be completed and approved prior to conducting the tests, which, may include but are not limited to:
  - .1 CV and PVT sheets developed and accepted,
  - .2 Contractor proving start-up and tests,
  - .3 Manufacturers start-ups,
  - .4 Consultant has certified testing, adjusting & balancing (TAB) results, per TAB specification.
    - .1 TAB work must be completed and approved prior to the control system Pts.
  - .5 Associated control device calibrations and physical point verifications are completed and approved.
    - .1 Note, control system end to end checks to be completed and approved prior to the control system PVTs.
  - .6 Other specified deliverables, i.e. factory test reports, O&M submissions, etc.
  - .7 System performance tests associated with the integrated systems under test,
  - .8 Integrated System Performance Verifications,
  - .9 Fire alarm verifications.

2.8.6 COMMISSIONING (EVALUATION) REPORT

.1 The Commissioning (Evaluation) Report must provide:

- .1 An executive summary,
- .2 Completed CV and PVT sheets,
- .3 A complete assessment of the project,
- .4 Lessons learned from this project and any necessary recommendations,
- .5 Variances between the actual and planned levels of performance,
- .6 An evaluation of the validation and acceptance process and of the commissioning phase.

2.8.7 OVERVIEW OF ROLES AND RESPONSIBILITIES

.1 The following provides a general overview of the roles, responsibilities and implementation of the commissioning process. The commissioning process is a logical sequence of verifications from component verifications through to system & integrated system, performance verification testing.

.2 At completion of the commissioning process all results are documented and audited for acceptance.

2.8.8 MAJOR TASKS AND RESPONSIBILITIES

.1 Schematic Design and Design Development Phase:

- .1 Consultant;
  - .1 Develop commissioning strategy,
  - .2 Develop preliminary commissioning plan.
- .2 Construction Documentation Phase:
  - .1 Consultant;
    - .1 Complete the final commissioning plan,
    - .2 Specify the Commissioning requirements in Div 01 and provide sample Commissioning CV and PCT sheets in Div 01 for Bidders purposes,
    - .3 Develop project specific CV and PVT sheets.
- .3 Construction Phase:
  - .1 Consultant;
    - .1 Monitor and report on contract commissioning activities,
    - .2 Finalize development of job specific CV and PVT sheets,
    - .3 Review and certify component verification sheets as they are completed by the Contractor, and
    - .4 Review commissioning schedule
  - .2 Contractor;
    - .1 Comply with the requirements in the Specifications,
    - .2 Complete the component verification,
    - .3 Conduct the equipment system start-up and proving, and
    - .4 Develop the commissioning schedule, reflecting the PVTs.
- .4 Commissioning Phase
  - .1 Consultant
    - .1 Witness all system and integrated systems tests,
    - .2 Review and certify commissioning test results,
    - .3 Track and compile all commissioning documentation submitted by the contractor and confirm that all commissioning tasks are completed,
    - .4 Incorporate all commissioning documentation into a preliminary commissioning report and recommend interim acceptance.
    - .5 Identify "deferred" commissioning tests due to seasonal constraints, etc.
  - .2 Contractor
    - .1 Comply with the requirements in the specifications,
    - .2 Conduct the system testing, and
    - .3 Conduct the integrated system testing.
- .5 Operating Phase
  - .1 Consultant
    - .1 Provide advice and recommendations for fine tuning, if required,
    - .2 Witness "deferred" commissioning tests,

.3 Review and certify "deferred" systems test results,
.4 Incorporate deferred system test results and all other commissioning documentation into a final commissioning report with an executive summary recommending final acceptance.
.2 Contractor
.1 Address warranty issues,
.6 Evaluation Phase
.1 Consultant
.1 Provide advice and recommendations during the final evaluation.

2.9 CONSTRUCTION DOCUMENTS

2.9.1 PURPOSE

.1 This section provides direction in the preparation of construction contract documents (namely specifications, drawings and addenda) for PWGSC.
.2 Drawings, specifications and addenda must be complete and clear, in order that a contractor can prepare a bid without guesswork. Standard practice for the preparation of construction contract documents requires that:
.1 Drawings are the graphic means of showing work to be done, as they depict shape, dimension, location, quantity of materials and relationship between building components.
.2 Specifications are written descriptions of materials and construction processes in relation to quality, colour, pattern, performance and characteristics of materials, installation and quality of work requirements.
.3 Addenda are changes to the construction contract documents or tendering procedures, issued during the tendering process.

2.9.2 PRINCIPLES FOR PWGSC CONTRACT DOCUMENTS

.1 PWGSC's contract documents are based on common public procurement principles.
.2 PWGSC does not use Canadian Construction Document Committee (CCDC) documents.
.3 The construction contract and the terms and conditions are prepared and issued by PWGSC, along with all other related bidding and contractual documents.
.1 For more detailed information, the clauses are available on the following web site:
.2 http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp
.3 Any questions should be directed through the PWGSC Project Manager.

2.9.3 QUALITY ASSURANCE

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

2.9.4 ADDENDA

.1 Format
.1 Prepare addenda using the format shown in Appendix 'C'.
.2 No signature type information is to appear.
.3 Every page of the addendum (including attachments) must be numbered consecutively.
.4 All pages must have the PWGSC project number and the appropriate addendum number.
.5 Sketches shall appear in the PWGSC format, stamped and signed.
.6 No Consultant information (name, address, phone #, consultant project # etc.) may appear in the addendum or its attachments (except on sketches).
.2 Content

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

2.9.5 SUBMISSIONS

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

2.9.6 PWGSC ROLE

.1 PWGSC shall provide:
  .1 General and Special Instructions to Bidders
  .2 Bid and Acceptance Form
  .3 Standard Construction Contract Documents

2.10 SPECIFICATIONS

2.10.1 GENERAL

.1 In preparing project specifications, the Consultant must use the current edition of the National Master Specification (NMS) in accordance with the "NMS User's Guide".

2.10.2 NATIONAL MASTER SPECIFICATION (NMS)

.1 In preparing project specifications, the Consultant must use the current edition of the National Master Specification (NMS) in accordance with the "NMS User's Guide".
.2 The NMS is a master construction specification available in both official languages, which is divided into 48 Divisions (Masterformat 2004) and is used for a wide range of construction and/or renovation projects.
.3 The Consultant retains overriding responsibility for content and shall edit, amend and supplement the NMS as deemed necessary to produce an appropriate project specification, free of conflict and ambiguity.

2.10.3 SPECIFICATION ORGANIZATION

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

.3 For specifications not included in the NMS, but required for the project, follow the number and title recommendations of Masterformat 2004
.4 Number each page and start each Section on a new page
.5 Bind specifications
.6 Include Division 1, edited to PWGSC requirements.
.7 Note: Consultant's name is not to be indicated in the specifications..

2.10.4 TERMINOLOGY

.1 Use the term "Departmental Representative" instead of Engineer, PWGSC, Owner, Consultant or Architect.
.2 "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.
.3 Notations such as: "verify on site", "as instructed", "to match existing", "example", "equal to" or "equivalent to", "to be determined on site by "Departmental Representative", should not be indicated in the specifications as this promotes inaccurate and inflated bids.
.4 Specifications must permit bidders to calculate all quantities and bid accurately.
  .1 If quantities are impossible to identify (i.e. cracks to be repaired) give an estimated quantity for bid purposes (unit prices).
.5 Ensure that the terminology used throughout the specifications is consistent and does not contradict the applicable standard construction contract documents.

2.10.5 DIMENSIONS

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

2.10.6 STANDARDS

.1 As references in the NMS may not be up to date, it is the responsibility of the consultant to ensure that the project specification uses the latest applicable edition of all references quoted.
.2 Canadian standards should be used wherever possible.

2.10.7 SPECIFYING MATERIALS

.1 The practice of specifying actual brand names, model numbers, etc., is against departmental policy except for special circumstances.
.2 The method of specifying materials shall be by using industry recognized standards.
.3 If the above method cannot be used and where no standards exist, specify by a non-restrictive, non-trade name "prescription" or "performance" specifications.
.4 In exceptional or justifiable circumstances, or if no standards exist and when a suitable non-restrictive, non-trade name "prescription" or "performance" specification cannot be developed; specify by trade name
.5 Include all known materials acceptable for the purpose intended, and in the case of equipment, identify by type and model number.

2.10.8 ACCEPTABLE PRODUCTS AND MATERIALS

.1 The term "Acceptable Manufacturers" must not be used, as this restricts competition and does not ensure the actual material or product will be acceptable.
  .1 A list of words and phrases that should be avoided is included in the NMS User's Guide.
.2 Listing of acceptable products or materials is to be an exception, due to a unique specification or for the purpose of assisting bidders in identifying lesser known potential products or materials.

.3 For exceptions, provide justifiable reasons for listing products and materials and submit to the *Departmental Representative* for acceptance.

.4 When authorized to list acceptable products or materials, list all, with a minimum of three (3), trade names of products and materials acceptable for the intended purpose.

2.10.9 ALTERNATE PRODUCTS AND MATERIALS

.1 Alternates must be approved by addendum issued by the *Departmental Representative* in accordance with Instructions to bidders.

.2 Review applications for approval of alternate products and materials and provide recommendations to the *Departmental Representative.*

.3 Compare products/materials to specifications. Do not compare product-to-product or material-to-material.

2.10.10 SEPARATE AND ALTERNATE PRICES

.1 Do not include Separate or Alternate Pricing .

2.10.11 SOLE SOURCING

.1 Sole sourcing for materials and work may be used for proprietary systems (i.e. fire alarm systems, EMCS systems).

.2 Substantiation and/or justification will be required.

.3 Prior to including sole source materials and/or work, the Consultant must contact the Departmental Representative to obtain the approval for the sole sourcing.

2.10.12 UNIT PRICES

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

2.10.13 CASH ALLOWANCES

.1 Construction contract documents should be complete and contain all of the requirements for the contractual work.

.2 Cash allowances are to be used only under exceptional circumstances (i.e. utility companies, municipalities), where no other method of specifying is appropriate.

.3 Obtain approval from the Project Manager in advance to include cash allowances and then use "Section 01 21 00 - Allowances" of the NMS to specify the criteria.

2.10.14 WARRANTIES

.1 It is the practice of PWGSC to have a 12-month warranty and to avoid extending warranties for more than 24 months.

.2 When it is deemed necessary to extend a warranty beyond the 12 month period provided for in the General Conditions of the contract, obtain approval from the Project Manager.

.3 Delete all references to manufacturers' guarantees.

2.10.15 SCOPE OF WORK

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

2.10.16 SUMMARY AND SECTION INCLUDES

.1 In Part -1 All Sections; do not use (delete):

.1 "Summary" and

.2 "Section Includes."

2.10.17 RELATED SECTIONS

.1 In Part 1 All Sections; do not use (delete)

2.10.18 INDEX

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

2.10.19 HEALTH AND SAFETY

.1 Confirm with the Project Manager to determine if there are any instructions to meet regional requirements.

2.10.20 EXPERIENCE AND QUALIFICATIONS

.1 Remove experience and qualification requirements from specification sections.

2.10.21 PREQUALIFICATION

.1 Do not include in the specification any mandatory contractor and/or subcontractor prequalification requirements that could become a contract award condition.

.2 If a prequalification process is required, contact the Project Manager.

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

2.10.22 CONTRACTING ISSUES

.1 Specifications describe the workmanship and quality of the work.

.1 Contracting issues should not appear in the specifications.

.2 Division 00 of the NMS is not used for PWGSC projects.

.3 Remove all references within the specifications, to the following:

.1 General Instructions to Bidders
.2 General Conditions
.3 CCDC documents
.4 Health and Safety requirements
.5 Priority of documents
.6 Security clauses
.7 Terms of payment or holdback
.8 Tendering process
.9 Bonding requirements
.10 Insurance requirements
.11 Alternative and separate pricing
.12 Site visit (Mandatory or Optional)
.13 Release of Lien and deficiency holdbacks

2.11 DRAWINGS

2.11.1 GENERAL

.1 Drawings shall be in accordance with PWGSC Western CADD Standards and CSA B78.3.

.2 Refer to:

.1 http://www.tpsgc-pwgsc.gc.ca/cdao-cadd/ouest-western/tdm-toc-eng.html
.2 The above link is subject to change
.3 The Consultant shall check with the Project Manager to ensure that the link is current.

.3 Download and use the Toolkit which includes drawing border templates, layer utility and drawing standards checker.

2.11.2 TITLE BLOCKS

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

2.11.3 DIMENSIONS

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

2.11.4 TRADE NAMES

.1 Trade names on drawings are not acceptable.
.2 Refer to SECTON 2.3, SPECIFICATIONS; 2.3.6 Specifying Materials for specifying materials by trade name.

2.11.5 SPECIFICATION NOTES

.1 No specification type notes are to appear on any drawing.

2.11.6 TERMINOLOGY

.1 Use the term "Departmental Representative" instead of Engineer, PWGSC, Owner, Consultant or Architect.
.2 "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.
.3 Notations such as: "verify on site", "as instructed", "to match existing", "example", "equal to" or "equivalent to", "to be determined on site by "Departmental Representative", may not be indicated on the drawings or in the specifications as this promotes inaccurate and inflated bids.
.4 Specifications & drawings must permit bidders to calculate all quantities and bid accurately.
.5 If quantities are impossible to identify (i.e. cracks to be repaired) give an estimated quantity for bid purposes (unit prices).
.6 Ensure that the terminology used throughout the drawings & specifications is consistent and does not contradict the applicable standard construction contract documents.

2.11.7 INFORMATION TO BE INCLUDED

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

2.11.8 DRAWING NUMBERS

.1 Number drawings in sets according to the type of drawing and the discipline involved as follows:
  .1 The requirements of SECTION 2 PWGSC NATIONAL CADD STANDARD will supersede these requirements, where warranted.
.2 During the Design Phase of the project each submission and review must be noted on the Notes block of the drawing title, but at the time of construction document preparation, all revision notes should be removed.

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

2.11.9 PRINTS

.1 Print with black lines on white paper.
.2 Blue prints are acceptable for document submissions at stages outlined in the TOR.
.3 Confirm with Departmental Representative the size of prints to be provided for review purposes.

2.11.10 BINDING

.1 Staple or otherwise bind prints into sets.
.2 Where presentations exceed 20 sheets, the drawings for each discipline may be bound separately for convenience and ease of handling.

2.11.11 LEGENDS

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

2.11.12 SCHEDULES

.1 Where schedules occupy entire sheets, locate them next to the plan sheets or at the back of each set of drawings for convenient reference.
    .1 See CGSB 33-GP-7 Architectural Drawing Practices for schedule arrangements.

2.11.13 NORTH POINTS

.1 On all plans include a north point.
.2 Orient all plans in the same direction for easy cross-referencing.
.3 Wherever possible, lay out plans so that the north point is at the top of the sheet.

2.11.14 DRAWING SYMBOLS

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

3 PROJECT ADMINISTRATION

3.1 GENERAL REQUIREMENTS FOR ALL PROJECTS

.1 The administration requirements outlined in this section are applicable to all PWGSC projects in Western Region, unless otherwise indicated in the TOR.
.2 "Project Team" refers to key representatives involved in this project.
.3 All team members must maintain a professional, cordial and collaborative relationship.

3.2 LANGUAGE

.1 Construction documents must be prepared in English.

3.3 MEDIA

.1 The Consultant shall not respond to any media inquiry.
.2 Direct all media requests to the Departmental Representative.

3.4 PROJECT MANAGEMENT

3.4.1 GENERAL

.1 Public Works and Government Services Canada administers the project on behalf of Canada and exercises continuing control over the project during all phases of development.
.2 This project is to be organized, managed and implemented in a collaborative manner.
.3 The PWGSC project management team, the Consultant, the Contractor and the User Department teams are to work cooperatively at every stage of the design and construction process in order to assure the creation of a successful and meaningful work of architecture.
.4 Under the leadership of the PWGSC Departmental Representative, all team members are responsible for establishing and maintaining a professional and cordial relationship.

3.4.2 NATIONAL PROJECT MANAGEMENT SYSTEM

.1 PWGSC uses the National Project Management System (NPMS) for management of its building projects in order to align with the Federal Government approvals processes. Refer to the PWGSC NPMS web site for more details.
.2 http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/index-eng.html
.3 This GP&S document speaks to services that are normally provided by the professional during the Project Delivery Phase of the NMPS.

3.4.3 DESIGN STAGE

.1 Pre-design Process
  .1 The purpose of this phase is to analyze all project requirements including codes, regulations, programming, sustainability, cost, time management and risk to demonstrate a full understanding of the project
  .2 The approved deliverable will become the formal project work plan and will be utilized throughout the project to guide the delivery.
.2 Schematic Design Process
  .1 The purpose of this phase is to explore three distinctly different design options and to analyze them against the project requirements.
  .2 The Schematic Design will be in sufficient detail to illustrate and communicate the project characteristics.
    .1 Provide a detailed review and analysis of the project requirements including all updates and amendments to ensure all requirements are fully integrated into the Schematic Design.

.2 Out of this process the Schematic Design will be accepted and authorization to proceed to Design Development will be based on the accepted Schematic Design.

.3 The *Departmental Representative*, in concert with others shall choose one option to be further developed.

.1 Although the *Consultant* is required to identify a preferred option, the *Departmental Representative* may select another option.

.2 The approved deliverable will become the formal project work plan and will be utilized throughout the project to guide the delivery.

3.4.4 IMPLEMENTATION STAGE

.1 Design Development Process

.1 The purpose of this phase is to further develop the design option selected for refinement at the Schematic Design stage.

.2 The Design Development documents consist of drawings and other documents to describe the scope, quality and cost of the project in sufficient detail to facilitate design approval, confirmation of code compliance, detailed planning of construction and project approval.

.3 This design will be used as the basis for preparation of construction documents.

.4 The approved deliverable will become the formal project work plan and will be utilized throughout the project to guide the delivery.

.2 Commissioning Process

.1 "Commissioning" is a quality assurance process, in which the functional requirements of the Owner/occupant and the operational requirements of facility management are tested, verified and proven to function as intended.

.2 Commissioning deliverables occur at various phases throughout the project as detailed in section 2.8.

.3 Commissioning shall be in accordance with the PWGSC Commissioning Manual CP.1 (2003).

.3 Construction Document Process

.1 The purpose of this phase is to translate design development documents into construction drawings and specifications, for use by the contractor to determine a cost for the work and to construct the building.

.4 Contract Procurement Process

.1 The purpose of this phase is to obtain and evaluate bids/proposals from qualified contractors to construct the project, as per the Construction Contract Documents and to award the construction contract according to government regulations.

.5 Construction Contract Administration Process

.1 The purpose of this phase is to implement the project in compliance with the Construction Contract Documents and to direct and monitor all necessary or requested changes to the scope of work during construction, commissioning and closeout.

3.4.5 CLOSEOUT STAGE

.1 Post Construction Process

.1 The purpose of this phase is to ensure the orderly completion and recording of all aspects of the work during the construction and liaise with the Public Works And Government Services Canada and other agencies as appropriate to close out the project.

3.4.6 ENGINEERING PROJECTS

.1 Refer to the project specific TOR where the stages for an Engineering Project differs slightly.

3.5 LINES OF COMMUNICATION

.1 In general, communications will be through the Departmental Representative, unless directed otherwise.
  .1 This includes formal contact between the Consultant, the Contractor, the PWGSC Project Team and the User Department.

.2 Direct communication between members of the PWGSC Project Team on routine matters may be required for resolution of technical issues.
  .1 However, this shall not alter project scope, budget or schedules, unless confirmed in writing by the Departmental Representative.

.3 During construction tender call, PWGSC will conduct all correspondence with bidders and award the contract.

3.6 MEETINGS

.1 The Departmental Representative will arrange meetings throughout the project, with representatives from:
  .1 The User Department;
  .2 PWGSC
  .3 The Consultant team; and
  .4 The Contractor (during the construction phase)

.2 Standing agenda items shall include:
  .1 Project Schedule,
  .2 Cost,
  .3 Risk,
  .4 Quality,
  .5 Health and safety

3.7 CONSULTANT RESPONSIBILITIES

.1 The "Consultant Team" includes the Consultant's staff, sub-consultants and specialists.
  .1 This team must maintain its expertise for the duration of the project.
  .2 The team must include qualified registered architectural and engineering professionals, with extensive relevant experience, capable of providing all required services.
  .3 Team members may be qualified to provide services in more than one discipline.
  .4 The Consultant may expand the team to include additional disciplines.

.2 The Consultant is responsible for:
  .1 Obtaining Departmental Representative acceptance for each project phase before proceeding to the next phase.
  .2 Accurately communicating design, budget, and scheduling issues to staff, sub-consultants and specialists.
  .3 Co-ordinating input for the Departmental Representative's Risk Management Plan
  .4 Co-ordinating the quality assurance process and ensuring that submissions of sub-consultants are complete and signed-off by reviewers;
  .5 During the design phases:
    .1 Attend meetings,
    .2 Record the issues and decisions,
    .3 Prepare and distribute minutes within two working days of the meeting,

.4 Ensure all meetings are green i.e. using electronic documents or double-sided hard copies and
.5 Ensure sub-consultants attend required meetings.
.6 During the construction phase:
.1 Attend meetings and provide site inspection services
.2 Ensure sub-consultants provide site inspection services and attend required meetings.

.3 The Consultant is responsible for:
.1 Coordinating and directing the work of all team activities, sub-consultants and specialists
.2 Preparing a design that meets project requirements.
.3 Obtaining approvals on behalf of the Departmental Representative from the User and other levels of government such as provincial and municipal governments
.1 The Consultant shall adjust the documentation to meet the requirements of these authorities.

3.8 PWGSC RESPONSIBILITIES

.1 Administration
.1 PWGSC administers the project and exercises continuing control over the project during all phases of development.
.2 The following administrative requirements apply during all phases of the project delivery.

.2 Reviews
.1 PWGSC will review the work at various stages and reserves the right to reject unsatisfactory work at any stage.
.2 If later reviews show that earlier acceptances must be withdrawn, the Consultant shall re-design and re-submit at no extra cost.

.3 Acceptance
.1 PWGSC acceptance of submissions from the Consultant simply indicates that, based on a general review, the material complies with governmental objectives and practices, and meets overall project objectives
.2 Acceptance does not relieve the Consultant of professional responsibility for the work and for compliance with the contract.

.4 PWGSC Project Management
.1 The Project Manager assigned to the project is the Departmental Representative.
.2 The Departmental Representative is directly responsible for:
.1 The progress and administration of the project, on behalf of PWGSC
.2 Day-to-day project management and is the Consultant's single point of contact for project direction.
.3 Providing authorizations to the Consultant on various tasks throughout the project.
.3 Unless directed otherwise by the Departmental Representative, the Consultant obtains all Federal approvals necessary for the work.

.5 PWGSC Professional & Technical Resources Team
.1 Provides professional advice and quality assurance reviews of consultant deliverables by Architectural and Engineering professional disciplines.
.2 Offers expert technical advice on related project issues, such as functional programming, options analysis, risk management, cost planning, scheduling, contract interpretation, specifications, terms of reference, commissioning, claims management, project delivery approach and project compliance.

.3 Participates regularly in design phases and may attend (during construction), contractor meetings and conduct field reviews on behalf of the Departmental Representative.
.4 Provides a Design Manager for the project, who will coordinate the services of the Professional & Technical Resources Team through the Departmental Representative;
.1 The Design Manager is the assembler and coordinator of the Resources Team of Architects, Engineers, Interior Designers, Project Planners, Cost Planners and Commissioning Specialists, all with specific areas of expertise.

.6 PWGSC Commissioning Specialist represents the Departmental Representative's interests in the commissioning process for buildings by:
.1 Providing technical advice on O&M matters, operational criteria and quality assurance on the commissioning process throughout the project life cycle;
.2 Coordinating and overseeing internal PWGSC commissioning activities during all project phases to ensure that O&M concerns are addressed;
.3 Working closely with the Consultant, the Consultant's Commissioning Manager, the Contractor, and the Departmental Representative for Commissioning activities and,
.4 Reviews all documentation and reported results relative to commissioning throughout the project delivery.

3.9 USER DEPARTMENT RESPONSIBILITES

.1 The User Department Project Leader
.1 Is accountable for the expenditure of public funds and delivery of the project in accordance with terms accepted by the Treasury Board
.2 Reports to senior User Department executive management
.3 Will play several critical roles for the successful implementation of the project, as follows:
.1 Coordinate the quality, timing and completeness of information and decisions relating to issues related to the functional performance of the facility;

3.10 REVIEW AND APPROVAL BY PROVINCIAL AND MUNICIPAL AUTHORITIES

.1 The federal government generally defers to provincial and municipal authorities for specific regulations, standards and inspections but in areas of conflict, the more stringent authority prevails.
.2 Municipal authority review
.1 The purpose of this review is information and awareness;
.2 Submissions will be reviewed at the completion of specific phases as outlined in the Required Services Section of the TOR.

3.11 BUILDING PERMITS AND OCCUPANCY PERMITS

.1 The Consultant will support the Contractor in applying for building permits by providing the required documentation.
.1 These documents will be submitted at phases as requested by the municipal authorities.
.2 The Consultant will negotiate and resolve building permit related issues.
.2 The Consultant shall support the Contractor in its application for an occupancy permit and coordinate the resolution of all outstanding issues relating to the permit.
.3 The Contractor shall pay for the permits on behalf of PWGSC.

3.12 TECHNICAL AND FUNCTIONAL REVIEWS

.1 This includes both COE reviews and User Department reviews.

.1 The Purpose of these reviews is technical and functional quality assurance;
.2 Submissions will be reviewed at the completion of specific phases as outlined in the Required Services Section of the TOR.

.2 HRSDC Reviews of building projects
.1 The purpose of these reviews is for fire protection, health and life safety;
.2 Submissions will be reviewed at the completion of specific phases as outlined in the Required Services Section of the TOR.

APPENDIX A CHECKLISTS

A.1 CHECKLIST FOR THE SUBMISSION OF CONSTRUCTION DOCUMENTS

A1.1 TITLE BLOCK

Project Title:		Date:
Project Location:		**Project Number:**
Consultant's Name:		**Contract Number:**
PWGSC PM:	**Review Stage:**	

A1.2 STANDARDS & GUIDELINES

ITEM		Checked by:	Progress Submission	Pre-Tender or Tender Ready Submission	Comments:
1. General The design meets the requirements of;					
.1	National Building Code - 2005				
.2	National Fire Code - 2005				
.3	National Plumbing Code - 2005				
.4	Canada Labour Code				
.5	NFPA 10 - Standard for Portable Fire Extinguishers - 2002				
.6	NFPA 13 - Standard for the Installation of Sprinkler Systems - 2007				
.7	NFPA 14 – Standard for the Installation of Standpipe and Hose Systems - 2003				
2. Treasury Board The design meets the requirements of;					
.1	Chapter 3-6: Fire Protection Standard for Correctional Institutions. http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=13580				
.2	Chapter 3-2: Fire Protection Standard for Design & Construction. http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=13581				
.3	Fire Protection Standard for Electronic Data Processing				

	Equipment. http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=13582				
	3. HRSDC Fire Protection Engineer Standards The design meets the requirements of;				
.1	Federal Fire Protection Standards. http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/index.shtml				
.2	FC-403 Standard for Sprinkler Systems. http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/403/page00.shtml				
.3	FC-311-M Standard for Record Storage. http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/311/page00.shtml				
	4. Labour Canada Standards The design meets the requirements of;				
.1	Canada Labour Code. http://laws.justice.gc.ca/en/L-2/				
.2	Canada Occupational Health and Safety Regulations. http://laws.justice.gc.ca/eng/SOR-86-304/index.html				
.3	Movable Storage Units Standard. http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/guidelines/mobile.shtml				
	5. ASHRAE Standards The design meets the requirements of;				
.1	ANSI/ASHRAE 55 – 2004 Thermal Environmental Conditions for Human Occupancy				
.2	ASHRAE 62.1 – 2007 – Ventilation for Acceptable Indoor Air Quality				
.3	ASHRAE Applications Handbook				
.4	ASHRAE Fundamentals Handbook				

6. PWGSC MD Standards The design meets the requirements of;				
.1 MD 15116 – Computer Room Air Conditioning Systems - 2006				
.2 MD 15128 – Minimum Guidelines for Laboratory Fume Hoods – March 2004				
.3 MD 15129 – Perchloric Acid Fume Hoods - 2006				
.4 MD 15161 – Guidelines for the control of Legionalla in mechanical systems				
.5 MD 250005 – Energy Monitoring and Control Systems Design Guidelines - 2009				

A1.3 SPECIFICATIONS – ALL DISCIPLINES

ITEM	Checked by:	Progress Submission	Pre-Tender or Tender Ready Submission	Comments:
1. General The Specifications meet the requirements of;				
.1 The NMS Users Guide. .				
.2 Masterformat 2004				
.3 The current edition of the NMS database				
.4 Deletion of "Related Sections" and "Section Includes" throughout.				
.5 PWGSC GCs for projects tendered through PWGSC				
.6 Consistent use of CCDC or other for privately tendered projects.				
.7 Non-proprietary Specifications.				
.8 Being completely edited with removal of all square choice brackets and Spec Notes.				
.9 Including all relevant Sections as evident by the by the scope of work indicated by the drawings.				
.10 Not referring to the Tender Submission (Contract B)				
.11 Use of command imperative style of language.				
.12 Formatting in either the NMS				

	1/3 - 2/3 page format or the Construction Specifications Canada full page format.				
.13	Each Section starting on a new page and the Project Number, Section Title, Section Number and Page Number show on the header of each page only.				
.14	Specification headers not including date or consultant's name.				
.15	Departmental Representative being used throughout instead of Engineer, PWGSC, Owner, Consultant or Architect. (That is; the contractual entity)				
.16	Non use of notations such as: "verify on site", "as instructed", "to match existing", "example", "equal to", "equivalent to" and "to be determined on site by".				
.17	Dimensions being provided in metric only.				
.18	Indicating the latest edition of all references noted in Part 1 of each Section and that un-used reference Standards are deleted.				
.19	No bolding of text.				
.20	Use of Western Regions standard payments procedures clause.				

A1.4 DRAWINGS GENERAL – ALL DISCIPLINES

ITEM		Checked by:	Progress Submission	Pre-Tender or Tender Ready Submission	Comments:
1. General The Drawings meet the requirements of;					
.1	PWGSC Western Region AutoCAD drafting standards.				
.2	Using the "toolkit" and the "drawing checker".				
.3	All dimensions in SI. No dual dimensioning has been used.				
.4	Providing a north arrow.				
.5	Providing a legend on all relevant sheets.				
.6	Indicating grid lines on all				

	sheets.				
.7	Using standard scales. (1:50, 1:100 etc.)				
.8	Cross referencing and detailing is consistent.				
.9	No Specifications on drawings.				
.10	All notes being written in the command imperative style of speech.				
.11	Not naming the “Contractor” or “sub trades” in the notes.				
.12	Numbering all rooms on all floor plans.				
.13	Using appropriate line weights to differentiate new versus existing versus demolition.				
.14	Using font sizes and types following PWGSC drafting standards.				
.15	Providing separate drawings for demolition and new work.				
.16	Drawing acceptance by the FPE of HRSDC.				

A1.5 DRAWINGS - DISCIPLINE SPECIFIC

ITEM		Checked by:	Progress Submission	Pre-Tender or Tender Ready Submission	Comments:
1. Architectural The Drawings meet the requirements of;					
.1	Providing a Building Code Analysis.				
.2	Indicating fire separations and firewalls and rating.				
.3	Providing a complete site plan with all related details.				
.4	Providing a fully detailed reflected ceiling plan showing lighting, diffusers, sprinkler heads, etc.				
.5	Wall sections being coordinated with the structural and other disciplines drawings.				
.6	Building elevations showing all mechanical and electrical ancillaries.				
.7	Sub surface drainage being shown on the foundation plans and coordinated with all other disciplines.				

.8	Accessibility conforming to CAN/CSA 651-04.				
.9	Coordination of door, finish, hardware schedules in conjunction with fire separations and other disciplines.				
.10	All conflict points identified by BIM have been resolved.				
2. Structural The Drawings meet the requirements of;					
.1	Ensuring that General Notes provide additional information that is NOT covered in Specifications.				
.2	Remove all information that is or should be covered by the Specifications.				
.3	Note loads used for design.				
.4	PWGSC policy of using general product descriptions, not proprietary product names followed.				
.5	Table of Abbreviations used provided.				
.6	Section bubbles properly cross referenced.				
.7	Coordination with all other disciplines.				
3. Mechanical The Drawings meet the requirements of;					
.1	Separate drawings for Plumbing, HVAC, Fire Suppression, etc.				
.2	Provision for humidification with a clean source of water and no standing water				
.3	Provision of separate HVAC zoning for each unique thermal zone.				
.4	Providing Ventilation to ASHRAE 62.1.				
.5	Meets all requirements of ASHRAE 62.1, Section 5.				
.6	All thermostats are wall mounted.				
.7	The building and systems and equipment meeting all requirements of Section 5 of ASHRAE 62.1.				
.8	Conformance to ASHRAE 55 for; .1 Operative				

	temperature .2 Air motion .3 Radiant Temperature Asymmetry .4 Draft .5 Vertical Temperature Difference .6 Floor Surface Temperature .7 Temperature Variations with Time .8 Cyclic Variations .9 Drifts and Ramps				
.9	Providing building cross-sections at all key locations showing clearances for the mechanical installation and access for maintenance.				
.10	Providing sufficient access to mechanical equipment for maintenance.				
.11	Providing mechanical schematics showing design pressure and temperatures as well as all instrumentation and control points labels.				
.12	Design complies with all referenced PWGSC MD Standards.				
.13	Equipment schedules on the drawings coordinate and agree with the Book Specifications.				
.14	Duct attenuation is designed to conform to the STC requirements shown on the architectural drawings.				
.15	Coordination with all other disciplines.				
4. Electrical The Drawings meet the requirements of;					
.1	Separate drawings for Lighting, Power, Fire Alarm System, Communication and Data, Security & CCTV etc.				
.2	Verification and acceptance of the Grounding condition for this project.				
.3	The Overcurrent and Short Circuit Study and confirming all components are fully coordinated.				
.4	The Arch-Flash Study and confirming all components are fully coordinated.				
.5	Providing Arch protection				

	warning signs and labeling.				
.6	Providing lighting Levels in accordance with the National Building Code and IESNA recommendations.				
.7	Not using Armored Cable. Using Armored Cable will be allowed only for jumping from one light fixture to the other in a distance up to 3m.				
.8	Providing identification for each circuit including: .1 Name .2 Voltage, .3 Phase, .4 Amps, .5 Circuit-s .6 Fed from Panel, Destination.				
.9	The Voltage Drop Calculation for each circuit and conformance to CEC requirements.				
.10	Providing phase load and total load for each panel and ensuring proper balance of the Electrical System.				
.11	Coordination with all other disciplines.				
	5. Civil The Drawings meet the requirements of;				
.1	The design criteria. (e.g. deign vehicle for surface structures, design period and other data for WM.WW, SW and other systems including data and calculations showing design requirements and provided capacities)				
.2	The reference standards. (e.g. minimum service connection pipe or minimum WM size, etc have been used for municipal works, name the local authority whose standards are used.)				
.3	Indicating existing sub-grade soil properties and strength that has been used for the design is indicated on drawings or in a report.				
.4	Indicating Bench Marks used for the Topographic Survey are shown with Northing, Easting and elevation data.				
.5	Indicating the Final				

	Geometric layout for existing and new infrastructures and facilities including centerline of all access roads and pipes. The data provided includes Northing and Easting of all points including start and end point and for all other points wherever there is change in direction, and all horizontal curve data				
.6	Providing typical X-sections for all structures, including type, thickness of various materials for pavement structures, and pipe diameter, material types and thickness and SDR values.				
.7	Providing design grades and slopes.				
.8	Providing details for all infrastructures and facilities indicating all works and type of materials and all geometrics and dimensions..				
.9	Coordination with all other disciplines.				

APPENDIX B SPECIFICATION TOC STANDARDS

B.1 GENERAL

B1.1 SPECIFICATIONS

.1 List all Divisions, Sections (by number and title) and number of pages.

B1.2 DRAWINGS

.1 List all Drawings by number and title.

B.2 SAMPLE OF TABLE OF CONTENTS

Project No: **Table of Contents** **Index**
R.xxxxxx **Page 1 of xx**

SPECIFICATIONS:

.3
.4
No. Pages
.5 Division 01 – GENERAL REQUIREMENTS

.6 01 11 00 – Summary of Work xx pages
.7 01 14 00 – Work Restrictions xx pages
.8 01 29 00 – Payment Procedures xx pages

.9 Division 02 – EXISTING CONDITIONS

.10 ETC.

.11

DRAWINGS:

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

APPENDIX C ADDENDUM FORMAT STANDARD

C.1 SAMPLE OF ADDENDUM FORMAT

C1.1 DRAWINGS

.1 Indicate drawing number and title, then list changes or indicate revision number and date, and re-issue drawing with addendum.

C1.2 SPECIFICATIONS

.1 Indicate section number and title.

.2 List all changes (i.e. delete, add or change) by article or paragraph

Project Title:	**Addendum No:**
Project Location:	**Project Number:**
Consultant's Name:	**Date:**

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

Drawings

1 A1 Architectural

Specifications

1 Section 01 00 10 - General Instructions

.1 Delete article (xx) entirely.

.2 Refer to paragraph (xx) and revise "xxx", to read "xxxx"..

2 Section 23 05 00 - Common Work Results - Mechanical

.1 Add new article (x.xx) as follows:

APPENDIX D DIGITAL TENDER DOCUMENTS STANDARDS

D.1 CONVENTION STANDARDS FOR TENDER DOCUMENTS

D1.1 USER MANUAL

.1 Refer to the User manual on directory structure and naming convention standards for construction tender documents on CD ROM.

.1 Issued by: Real Property Contracting Directorate, PWGSC,

.2 Version 1.0, May 2005.

D1.2 PREFACE

.1 The Government of Canada (GoC) has committed to move towards an electronic environment for the majority of the services it offers.

.2 This covers the advertisement and distribution of contract opportunities, including construction solicitations.

.3 As a result, it is now necessary to obtain a copy of construction drawings and specifications (in PDF format *without* password protection) on one or multiple CD-ROM to facilitate for the GoC the transfer of the construction drawings and specifications electronically to the Government Electronic Tendering System (GETS).

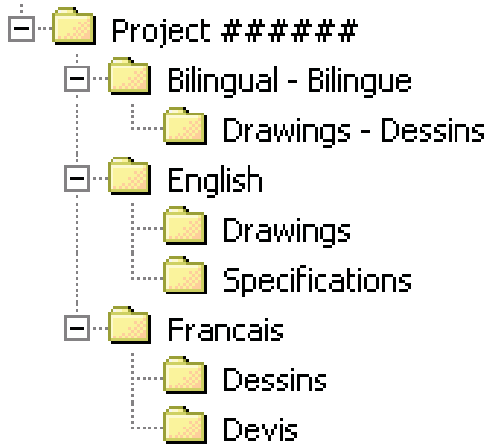
.4 There is therefore a need to adopt a common directory structure and file-naming convention to ensure that the information made available to contractors electronically and in hard (printed) copy is in accordance with the sequence adopted in the real property industries, both for design and construction.

.5 This manual defines the standard to be followed by both consultants and print shops at time of formatting and organizing the information, whether drawings and specifications are created by scanning print documents or saved as PDF files from the native software (AutoCAD, NMS Edit, MS-Word, etc…) in which these were created.

.6 It is important to note that the procedure described in this manual is not an indication that consultants are relieved from following the established standards for the production of drawings and specifications.

.7 The sole purpose of this manual is to provide a standard for the organization and naming of the electronic files that will be recorded on CD-ROM.

D1.3 DIRECTORY STRUCTURE



D1.4 1ST, 2ND AND 3RD TIER SUB-FOLDERS

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

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

.1 The "*Project* ######" folder is considered the 1st Tier of the Directory Structure where ###### represents each digit of the Project Number.

.2 The Project Number must always be used to name the 1st Tier folder and it is always required.

.3 Free text can be added following the Project Number, to include such things as a brief description or the project title;

.3 The "*Bilingual - Bilingue*", "*English*" and "*Français*" folders are considered the 2nd Tier of the Directory Structure. The folders of the 2nd Tier **cannot** be given any other names since GETS uses these names for validation purposes. At least one of the "*Bilingual - Bilingue*", "*English*" and "*Français*" folders is always required, and these must always have one of the applicable sub-folders of the 3rd Tier;

.4 The "*Drawings - Dessins*", "*Drawings*", "*Specifications*", "*Dessins*" and "*Devis*" folders are considered the 3rd Tier of the Directory Structure. The folders of the 3rd Tier **cannot** be given any other names since GETS also uses these names for validation purposes. There must be always at least one of the applicable 3rd Tier folder in each document.

.5 IMPORTANT NOTE:

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

D1.5 4TH TIER SUB-FOLDERS FOR DRAWINGS

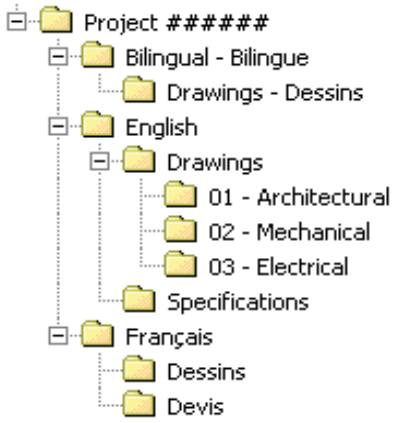
.1 The "*Drawings – Dessins*", "*Drawings*" and "*Dessins*" folders must have 4th Tier sub-folders created to reflect the various disciplines of the set of drawings.

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

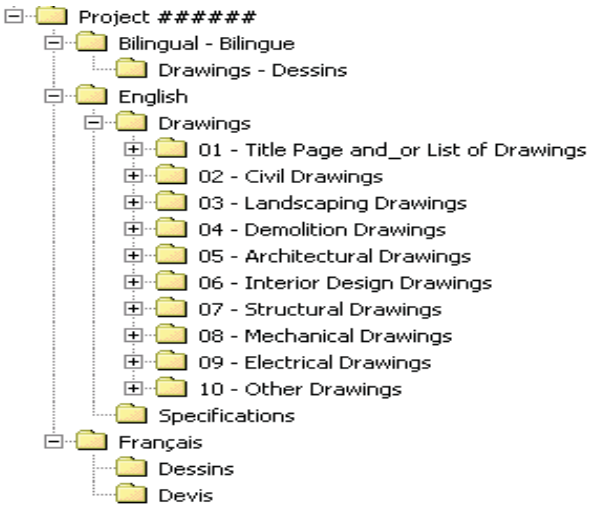
.3 Note:

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

.4 Examples of 4th Tier sub-folders for drawings:



or



D1.6 NAMING CONVENTION - 4TH TIER DRAWINGS

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

.1 For the "*Drawings*" and "*Dessins*" folders:

1 ## - Y, Where:

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

2 Y = The title of the folder

2 Example: 03 – Mechanical

.2 For the "*Drawings - Dessins*" folder:

1 ## - Y – Z, Where:

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

2 Y = The English title of the folder

3 Z = The French title of the folder

2 Example: 04 - Electrical – Électricité

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

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

.1 The alphanumerical sorting is done on an ascending order;

.2 The alphanumerical order of the sub-folders determines the order of appearance on the screen as well as the order of printing (as an example: all the drawing PDF files in the 01 sub-folder will be printed in alphanumerical order before the drawings in the 02 sub-folder etc…);

.3 Each drawing PDF file within each sub-folder will also be sorted alphanumerically. This will determine the order of appearance on the screen as well as the order of printing

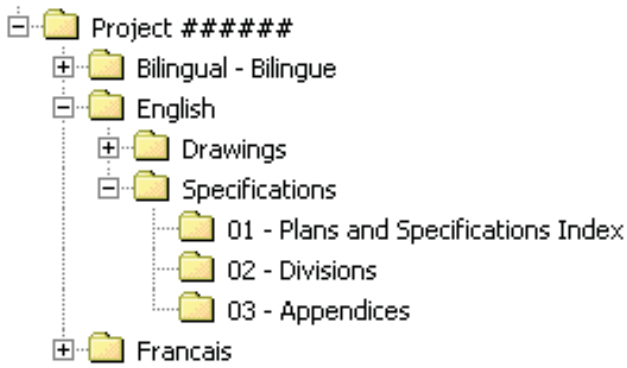
(i.e. Drawing A001 will be printed before Drawing A002, Drawing M02 before Drawing M03, etc…).

D1.7 4TH TIER SUB-FOLDERS FOR SPECIFICATIONS

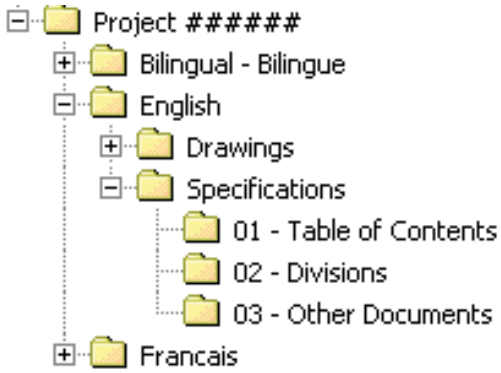
.1 The "*Specifications*" and "*Devis*" folders must have 4th Tier sub-folders created to reflect the various elements of the specifications.

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

.3 Examples of 4th Tier sub-folders for specifications:



or



D1.8 NAMING CONVENTION - 4TH TIER SPECIFICATIONS

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

.1 For the "*Specifications*" and "*Devis*" folders:

1 ## - Y, Where:

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

2 Y = The title of the folder

2 Example: 02 – Divisions

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

.3 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:

.4 The alphanumerical sorting is done on an ascending order;

.1 The alphanumerical order of the sub-folders determines the order of appearance on the screen as well as the order of printing (as an example: all the specifications PDF files in the 01 sub-folder will be printed, in alphanumerical order before the PDF files in the 02 sub-folder, etc…);

.2 Each specifications PDF file within each sub-folder will also be sorted alphanumerically.

1 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…).

D1.9 NAMING CONVENTION FOR PDF FILES

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

D1.10 DRAWINGS

.1 Each drawing must be a separate single page PDF file.

.2 The naming convention of each drawing must be:

.1 X### - Y, Where;

1 X = The letter or letters from the drawing title block ("*A*" for Architectural or "*ID*" for Interior Design for example) associated with the discipline,

2 ### = The drawing number from the drawing title block (one to three digits),

3 Y = The drawing name from the drawing title block (for bilingual drawings, the name in both English and French is to appear).

.2 Example; A001 - First Floor Details.

.3 Each drawing that will be located in the appropriate discipline 4th Tier sub-folders must be named with the same letter ("*A*" for Architectural Drawings for example) and be numbered.

.4 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).

.5 The following important points about drawings are to be noted:

.1 The drawing PDF files within each sub-folder are sorted alphanumerically for both displaying and printing. If there are more than 9 drawings in a particular discipline the numbering must use at least two numerical digits (i.e. A01 instead of A1) in order to avoid displaying drawing A10 between A1 and A2.

1 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);

.2 If drawing PDF files are included in the "*Bilingual - Bilingue*" folder, these cannot be included as well in the "*English*" and/or "*Français*" folders;

.3 If drawings not associated with a particular discipline are not numbered (Title Page or List of Drawings for example), these will be sorted alphabetically.

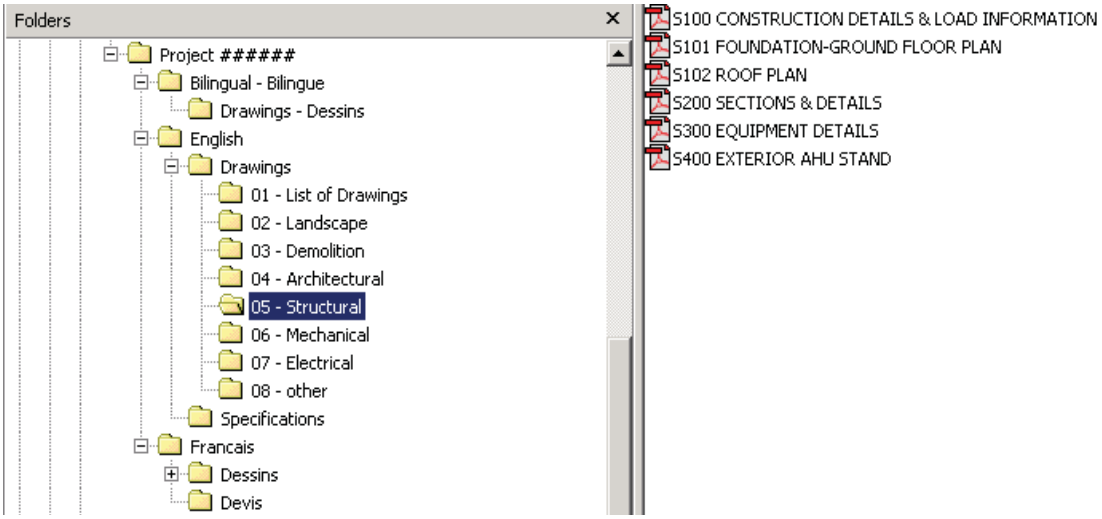
1 While this does not represent a problem if there is only one drawing in the sub-folder, it could disrupt the order when there are two or more drawings. If the alphabetical order of the drawings name does not represent the order on the

hard copy set, the drawings are to be named as per the following standard convention when converted in PDF format to ensure proper display and printing order.

1 ## - Y, Where:
  1 ## = A two digit number ranging from 01 to 99 (leading zeros must be included)
  2 Y = The name of the drawing
2 Example:
  1 01 - Title Page
  2 02 - List of Drawings

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

D1.11 EXAMPLE OF A 4TH TIER DRAWINGS SUBFOLDER'S CONTENT:



D1.12 SPECIFICATIONS

.1 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).

.2 The Plans and Specifications Index must also be a separate PDF file.

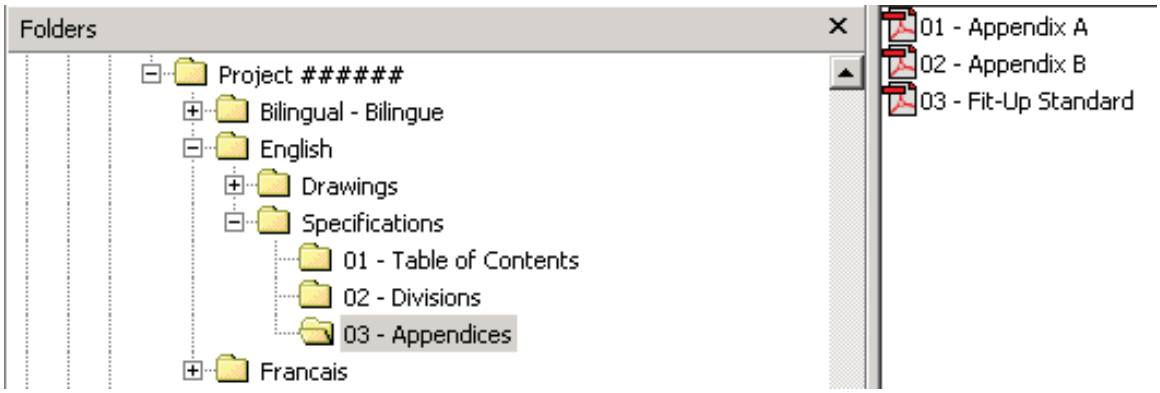
.3 If there are other documents that are part of the Specifications (e.g. Appendix or other) these are to be separate PDF files as well.

D1.13 DOCUMENTS OTHER THAN SPECIFICATIONS DIVISIONS

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

  .1 ## - Y, Where:
    1 ## = Two digit number ranging from 01 to 99 with leading zeros required
    2 Y = Name of the document
  .2 Example: 01 - Plans and Specifications Index

D1.14 EXAMPLE OF A SUB-FOLDER CONTENT (SUB-FOLDER OTHER THAN "*DIVISIONS*"):



D1.15 SPECIFICATIONS DIVISIONS

.1 The Specifications Divisions must be named as follows:

.1 Division ## - Y, Where:

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

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

.2 Example: Division 05 – Metals

.2 The following important point about specifications is to be noted:

.1 The Numbering of the Divisions cannot be altered from CSC/CSI MasterFormat™ even if some Divisions are not used in a given project.

1 For example, Division 05 will always remain Division 05 even if Division 04 is not used for a given project.

D1.16 EXAMPLE OF A "*DIVISIONS*" SUB-FOLDER CONTENT:

D1.17 CD-ROM LABEL

.1 Each CD-ROM is to be labelled with the following information:
  .1 Project Number;
  .2 Project Title;
  .3 Documents for Tender;
  .4 CD *X* of *X*.

.2 Example:
  .1 Project 123456;
  .2 Repair Alexandra Bridge;
  .3 Documents for Tender;
  .4 CD 1 of 1.

APPENDIX E PDF CREATION STANDARDS

E.1 CONVERTING CONSTRUCTION DRAWINGS INTO PDF

E1.1 REFERENCE GUIDE

.1 Refer to the basic reference guide on converting construction drawings into portable document format (PDF), Issued by Real Property Contracting Directorate. PWGSC, Version 1.0, May 2005.

E1.2 PREFACE

.1 Portable Document Format (PDF) is the standard format for documents that are posted on the Government Electronic Tendering System (GETS).

.2 There is therefore a need to obtain from architectural and engineering consultants an electronic copy of drawings and specifications in PDF for tendering Government of Canada (GoC) construction projects.

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

.4 The purpose of this document is to provide basic information on the conversion of Computer Aided Design and Drafting (CADD) drawings in PDF. Creating a PDF file from a CADD drawing is a relatively simple process once all the necessary configurations and settings are in place.

.1 It actually should not take any longer than it would take to create a plot file or to send a drawing to a printer.

.2 The information in this guide is not intended to cover all technical aspects of the conversion, which can be done using various methods, but rather to highlight important points about the process and file settings.

.3 The conversion of specifications is not covered in this basic reference guide since it does not require any special configuration or setting.

.5 The information provided in this basic reference guide is not an indication that consultants are relieved from following the established standards for the production of drawings and specifications.

.1 The sole purpose of this guide is to provide basic information on the PDF conversion process bearing in mind that additional detailed technical information is available from the various software manufacturers.

E1.3 PRINTER DRIVERS

.1 Adobe Acrobat provides two different printer drivers that are able to convert CADD drawing into PDF format, Acrobat PDF Writer and Acrobat Distiller.

.2 Before creating a PDF file from a CADD drawing, a choice must be made as to which one will be used.

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

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

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

E1.4 PRINTER CONFIGURATION

.1 Before converting a CADD drawing to PDF, an Acrobat printer configuration file for the PDF paper size needs to be created.

.2 This function can be done in the CADD software rather than using a custom paper size defined for the Acrobat distiller feature.

.3 The recommended method is to add a PostScript Adobe plotter in the CADD software and making the necessary setting in terms of media source and size, scale and orientation.

.4 The configuration can then be re-used to simplify the conversion process for future files that use the same page size.

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

E1.5 CREATING PDF FILES

.1 Once the printer configuration has been done in the CADD software, open Acrobat Distiller and make the necessary settings in the *preferences* and *job options* sub-menu.

- .1 Ensure that the page size match the sheet size selected in the CADD software to create the file.
- .2 Particular settings can be saved under different names for future use.

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

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

E1.6 PDF FILES SETTINGS

.1 Security

- .1 Adobe Acrobat contains security features that can de used to secure the files by restricting any changes to the files.
- .2 Since the files will be posted on MERX and will be used for printing copies, the files must not be password protected and must allow printing.

E1.7 DRAWING ORIENTATION

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

E1.8 FONT TYPE

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

E1.9 RESOLUTION

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

E1.10 SCALE

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

E1.11 SCANNING

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

E1.12 FINAL CHECKLIST

.1 When the drawing file has gone trough the PDF conversion, it is recommended to open it and verify the following:
  .1 That the sheet size displayed is what was intended to be created (the size is viewable in the lower left corner of the drawing);
  .2 That the orientation of the sheet is correct;
  .3 That the line types, line weights and fonts match the CADD drawing.
  .4 That the PDF file is in black and white;
  .5 That each drawing is a single PDF file;
  .6 That the PDF file is not password protected and printable.
.2 If all the items are verified, the PDF file is useable.

E1.13 ADDITIONAL INFORMATION

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

APPENDIX F DEFINITIONS

F.1 TERMINOLOGY

TERMS	DESCRIPTION
As-builts/Record Drawings	See Record Drawings
Base Building	Refers to the building shell, as opposed to the tenant fit-up. It includes finished floors, exterior walls, interior core, finished ceilings with lighting, and other building systems for the planned general use of the building. Generally, the work for the base building is separate from the work for tenant-fit-ups
Circulation	Space used, primarily by people, to move from one area to another. It includes major as well as secondary aisles.
Client	A term that refers to the client, the client department or user department
Co-location	Placing items together for better organization
Consultant	The word refers both to an individual consultant, or a consultant team. The consultant is generally selected by PWGSC using a Request for Proposal.
Contractor	The company, organization or firm who is responsible for the construction of the project
Consolidation	Reducing the number of co-located items by placing them in a common floor facility to eliminate duplication of space.
Constant dollar estimate	This is an estimate expressed in terms of the dollars of a particular base fiscal year.
Cost Specialist	Refers to the cost estimating, planning and control team or an individual performing these functions.
Current dollar estimate	Refer to: *budget year dollars*
Budget-year dollars	This is an estimate based on costs arising in each FY of the project schedule, which is escalated to account for inflation and other economic factors affecting the period covered by the estimate ***Budget year*** dollars is also be referred to as ***Nominal*** dollars or ***Current*** dollars
Departmental Representative	The person designated in the contract, or by written notice to the Consultant or Contractor, to act for PWGSC for the purposes of the contract. It can also be a person designated in writing by the Departmental Representative to act on his/her behalf. In most cases, the PWGSC Project Manager is the Departmental Representative
EMV	Expected monetary value of risk event (i.e. cost or saving to the project if risk event occurs)

Final Certificate of Completion	A document issued by the Project Manager after the final inspection by the Project Acceptance Board. The final payment to the Contractor by PWGSC is based on the final certificate of completion
Final Inspection	The inspection performed by the Project Acceptance Board after project completion and after correction of deficiencies identified during Interim Inspection
Fit-up for initial occupancy	The preparation of accommodation for initial occupancy, in accordance with the federal Fit-up Standards. This fit-up may include alternations to the base building and its building systems.
Fit-up of existing space for reuse, Refit	Work required to alter space previously occupied by one organization to meet the requirements of a different organization.
Fit-Up Cost Limits	The funding limits for the fit-up of office accommodation. The limits are based on the average cost per useable square meter, for fit-up elements in specific urban centres across Canada, and are updated from time to time. The limits do not include soft costs or items funded by clients or under base building costs.
Fit-Up Items	Components that are installed removed or relocated to prepare the space for occupancy. They include partition walls, doors, frames, hardware, counters and cabinetry, modifications to base building systems, etc. as detailed in the Fit-up standards. Some base building components are included in consultant scope of work, such as the flooring and the ceiling finishes or telecommunications spaces and related environmental controls.
Focus Group	Group sessions held to establish qualitative requirements. They are most effective at the strategic planning level. They are used primarily to translate the Client Department's mission statement into organizational requirements and to assess planning alternatives
Full-time equivalent.	It measures of labour utilization in the federal government which approximates the actual number of persons "employed" by the government for carrying out the unit of work
Functional space equation	Identifies space requirements (in usable m^2) by group along with summary of the total space required for all groups.
Gross Space	The total floor space
High risk	A project (or element of a project) may be assessed as high risk if one or more hazards exist in a significant way and, unless mitigated, would result in probable failure to achieve project objectives
Impact	The result of the occurrence of an event on the project either positive or negative (i.e. a schedule delay as a result of late delivery of a piece of equipment may have a high negative impact on a project; increased access to a construction site due to early departure of occupants in an office space may have positive

	impact on a project). The Impact of individual Risk Events can be qualified as low, medium, high or quantified in terms of time, cost (immediate cost or in-service cost (O&M)) or performance.
Interim Certificate of Completion	The certificates issued by Project manager following the Interim Inspection. Interim payment to the Contractor by PWGSC is based on the interim certificates. This payment takes place of a regular progress claim.
Interim Inspection	The inspection performed by the Project Acceptance Board after substantial completion of the project. A list of deficiencies is prepared, and subject to the Contractor's agreement to correct these, the Project Manager accepts the work and prepares the interim certificates
LEED®	Leadership in Energy & Environmental Design; an environmental rating system
Low risk	A project (or element of a project) should be assessed as low risk if hazards do not exist or have been reduced to the point where routine project management control should be capable of preventing any negative effect on the attainment of project objectives
Medium risk	A project (or element of a project) may be assessed as medium risk if some hazards exist but have been mitigated to the point that allocated resources and focused risk management planning should prevent significant negative effect on the attainment of project objectives
National Project Management System	The system used by PWGSC for management of its projects. It replaces the earlier Project Delivery System (PDS).
PI Forms	Product Information forms; used in commissioning documentation
Probability	The likelihood that an event will occur (i.e. Low, Medium, High)
Project Acceptance Board	A team assembled by the Project Manager to perform interim and final inspections of the Client Department's improvements.
PV Forms	Performance Verification forms; used in commissioning documentation
Record drawings	Drawings used to record field deviations, dimensional data, and changes or deviations from the 'Construction Document-Issued for Construction'. They indicate the work as 'actually' installed. They are also called as-builts
Rentable Space	Usable space plus space occupied by columns, convectors, elevator lobbies and washrooms. It also includes some common base building areas such as telephone and janitorial closets.
Request for Proposal	The document used for requesting consultant services. It includes the Terms of Reference as well as other contracting documents

Risk management	The art and science of identifying, analysing, and responding to risk factors throughout the life of a project and in the best interests of its objectives
Risk Event	A discrete occurrence that may affect the project for better or worse (i.e. late delivery of a piece of equipment is a "risk event" that may cause a schedule delay)
Scheduler	Refers to the Time Scheduler; also referred to as Time Specialist
Space Equation	A spreadsheet that reflects the Client's organizational structure, functional requirements, and proposed planning alternatives. It is used to determine the total usable area required to accommodate the following: Open and enclosed workstations/worksettings; Support space; Special purpose space circulation factor; Building loss factor; Total population; and Total space required; and Summary by group
Space Optimization	Maximizing the utilization of space.
Special Purpose Spaces	Non-standard spaces required to accommodate activities that are essential to departmental programs. This space is often not suitable for conversion to office accommodation because of its special requirements. Examples include: laboratories, health units or clinics, meeting or training complexes which serve outside groups, processing space, departmental libraries, gymnasiums, warehouses, file or storage areas not allowed by the PWGSC Fit-Up Standards, trade shops, mailrooms, computer training rooms, cash offices and similar spaces requiring special service and security features and hearing rooms.
Support Space	Space for typical office support functions not included in workstation or circulation space but necessary for office operation. The Fit-Up Standards identify specific sizes and ratios for kitchenette / recycling centre / lunchroom / resource areas, shared equipment spaces, meeting rooms, quiet / touch down rooms, printer stations, reception / mail drop / waiting / display areas and coat / storage closets. Limited allowances for "Other" support spaces including non-dedicated workstations, storage rooms, LAN rooms, breakout rooms, interview rooms, training rooms, reading rooms etc. are also identified in the Fit-Up Standards.
Terms of Reference	A document prepared by PWGSC when requesting Consultant services, which forms part of the RFP and is also included in the Consultant Agreement with PWGSC.
Universal Footprint	One standard module which can be multiplied to accommodate

	all office functions including workstations, support space and special purpose space
Usable space, "Walk-on" Space	The space, in M^2, that is actually usable by the occupant. Measurement calculations do not include columns and convectors, building service areas and accessory areas.
Worksettings	Common work areas that support both collaboration and privacy. They include: teaming areas, non-dedicated workstations, privacy nooks, resource areas and multipurpose areas.
Workstations	An enclosed or open area dedicated for the use of individual employees.

F.2 ACRONYMS

ACRONYM	DESCRIPTION
A&E	Architecture & Engineering
AHJ	Authorities Having Jurisdiction
AMP	Asset Management Report
ASAE	American Society of Agricultural Engineers
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
ASPE	American Society of Plumbing Engineers
BCC	Building components and connectivity
BCR	Building Condition Report
BMM	Building Maintenance Manual
CAD	Computer aided drawing
CCDC	Canadian Construction Document Committee
CBIP	Commercial building incentive program
COE	PWGSC Centre of Expertise
EMCS	Energy Monitoring & Control System
EPA	Effective Project Approval
FHBRO	Federal Heritage Building Restoration Office
FOBS	Federal Office Building Standards (PWGSC)
FTE	Full-time equivalent
HCP	Heritage Conservation Program
HRSDC	Human Resources and Skills Development Canada
IT/MM	Information Technology/Multi-media
MMS	Maintenance management system
NBC	National Building Code
NCA	National Capital Area;
NCR	National Capital Region;
NFBC	National Farm Building Code
NGMA	National Greenhouse Manufacturers' Association
NMS	The National Master Specification used by PWGSC

NPMS	National Project Management System
OAA	Ontario Association of Architects
O&M	Operation and Maintenance
P&S	General Procedures and Standards
PA	Project administration
PI	Product Information
PD	Project Description
PM	Project Manager
PV	Performance verification
PWGSC	Public Works and Government Services Canada
RAIC	Royal Architectural Institute of Canada
RAS	Requirements and Standards
RS	Required Services
RSR	Resident site services
RPCD	Real Property Contracting Directorate
TOR	Terms of Reference

APPENDIX F

Government of Canada / Gouvernement du Canada

SRCL# 2014-1111 0870.

Contract Number / Numéro du contrat

Security Classification / Classification de sécurité
Undas

SECURITY REQUIREMENTS CHECK LIST (SRCL)
LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine: RCMP

2. Branch or Directorate / Direction générale ou Direction: K Division HQ, Edmonton, AB

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

Detachment Replacement Project Desmarais, AB. This project is on the approved K Division Major Capital Program. A consultant is sought to develop tender ready plans and specifications for a replacement detachment at Desmarais. Work will include access to un-sanitized plans and full awareness of RCMP security and construction standards. Consultant will further act as project manager for the RCMP overseeing general contractor during construction and warranty phase of project.

5. a) Will the supplier require access to Controlled Goods? / Le fournisseur aura-t-il accès à des marchandises contrôlées? — [✓] No / Non [ ] 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? — [✓] No / Non [ ] 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) — [ ] No / Non [✓] 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. — [✓] No / Non [ ] 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? — [✓] No / Non [ ] 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 [✓]	NATO / OTAN [ ]	Foreign / Étranger [ ]

7. b) Release restrictions / Restrictions relatives à la diffusion

Canada	NATO / OTAN	Foreign / Étranger
No release restrictions / Aucune restriction relative à la diffusion [✓]	All NATO countries / Tous les pays de l'OTAN [ ]	No release restrictions / Aucune restriction relative à la diffusion [ ]
Not releasable / À ne pas diffuser [ ]		
Restricted to: / Limité à : [ ]	Restricted to: / Limité à : [ ]	Restricted to: / Limité à : [ ]
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

Canada	NATO	Foreign / Étranger
PROTECTED A / PROTÉGÉ A [ ]	NATO UNCLASSIFIED / NATO NON CLASSIFIÉ [ ]	PROTECTED A / PROTÉGÉ A [ ]
PROTECTED B / PROTÉGÉ B [✓]	NATO RESTRICTED / NATO DIFFUSION RESTREINTE [ ]	PROTECTED B / PROTÉGÉ B [ ]
PROTECTED C / PROTÉGÉ C [ ]	NATO CONFIDENTIAL / NATO CONFIDENTIEL [ ]	PROTECTED C / PROTÉGÉ C [ ]
CONFIDENTIAL / CONFIDENTIEL [ ]	NATO SECRET / NATO SECRET [ ]	CONFIDENTIAL / CONFIDENTIEL [ ]
SECRET / SECRET [ ]	COSMIC TOP SECRET / COSMIC TRÈS SECRET [ ]	SECRET / SECRET [ ]
TOP SECRET / TRÈS SECRET [ ]		TOP SECRET / TRÈS SECRET [ ]
TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) [ ]		TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) [ ]

Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat

Security Classification / Classification de sécurité
Unclas

PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets? — [✓] No / Non [ ] Yes / Oui
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS?
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? — [✓] No / Non [ ] Yes / Oui
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate?

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

[✓] RELIABILITY STATUS / COTE DE FIABILITÉ	[ ] CONFIDENTIAL / CONFIDENTIEL	[ ] SECRET / SECRET	[ ] TOP SECRET / TRÈS SECRET
[ ] TOP SECRET– SIGINT / TRÈS SECRET – SIGINT	[ ] NATO CONFIDENTIAL / NATO CONFIDENTIEL	[ ] NATO SECRET / NATO SECRET	[ ] COSMIC TOP SECRET / COSMIC TRÈS SECRET
[ ] SITE ACCESS / ACCÈS AUX EMPLACEMENTS			

Special comments / Commentaires spéciaux : RRS - consultants & Design Team required clearance to access & work in plants.

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? — [✓] No / Non [ ] Yes / Oui
Du personnel sans autorisation securitaire peut-il se voir confier des parties du travail?
If Yes, will unscreened personnel be escorted? — [✓] No / Non [ ] Yes / Oui
Dans l'affirmative, le personnel en question sera-t-il escorté?

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? — [ ] No / Non [✓] Yes / Oui
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS?

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

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? — [ ] No / Non [✓] Yes / Oui
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ?

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? — [ ] No / Non [✓] Yes / Oui
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?

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

Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat
Security Classification / Classification de sécurité Unclas

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 / CONFIDENTIEL	SECRET	TOP SECRET / TRÈS SECRET	NATO RESTRICTED / NATO DIFFUSION RESTREINTE	NATO CONFIDENTIAL / NATO CONFIDENTIEL	NATO SECRET	COSMIC TOP SECRET / COSMIC TRÈS SECRET	PROTECTED / PROTÉGÉ A	PROTECTED / PROTÉGÉ B	PROTECTED / PROTÉGÉ C	CONFIDENTIAL / CONFIDENTIEL	SECRET	TOP SECRET / 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, classifier 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, classifier le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).

Appendix "G"– Security Clearance Guidelines and Documents

This Annex has been included to provide Bidders with RCMP's Security Clearance Guidelines and identify some of the documents which must be completed by persons who do not currently hold a valid RCMP Reliability Status Clearance issued by RCMP's Departmental Security Unit, and/or Personnel Security Unit.

Only the successful Consultant receiving a Contract as a result of this solicitation will be required to either review, or complete the following documents:

1. RCMP Security Clearance Requirements (Law Enforcement Checks) – Guidelines

2. Contractor Consultant Information Sheet

3. TBS 330-23E – Personnel Screening Consent and Authorization Form
    a. TBS 330-23E – Residence (Additional Information) Form
    b. Sample Document of Completed TBS 330-23E – Personnel Screening Consent and Authorization Form

4. TBS 330-60E – Security Screening Form
    a. Sample Document of Completed TBS 330-60E – Security Screening Form

5. Security/Reliability Interview Pre-Interview Questionnaire

    ** It is the Prime Consultant's responsibility to ensure all necessary forms are accurately completed, and submitted to the RCMP on a timely basis, following Contract Award.

SUBMISSION REQUIREMENTS AND EVALUATION

SRE 1 General Information
SRE 2 Proposal Requirements
SRE 3 Phase One Submission Requirements and Evaluation
SRE 4 Phase Two Submission Requirements and Evaluation
SRE 5 Price of Services
SRE 6 Total Score
SRE 7 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 R1110T General Instructions to Proponents (GI3).

1.2 Calculation of Total Score

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

Phase One Rating x 30%	=	Phase One Score (Points)
Phase Two Technical Rating x 60%	=	Technical Score (Points)
Phase Two Price Rating x 10%	=	Price Score (Points)
Total Score	=	Max. 100 Points

SRE 2 PROPOSAL REQUIREMENTS

2.1 Requirement for Proposal Format (for phases one and two)

The following proposal format information should be implemented when preparing the Phase One and Phase Two proposals.

- Phase One - Submit one (1) bound original plus three (3) bound copies of the proposal
- Phase Two - 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 spreadsheets, organization charts etc. will be counted as two pages.
- The order of the proposals should follow the order established in the Request for Proposal SRE section

2.2 Phase One 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 twenty (20) 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 - Associated Information

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 RCMP Evaluation Board members for evaluation.

2.3 Phase Two Specific Requirements for Proposal Format

The maximum number of pages (including text and graphics) to be submitted for the Rated Requirements under SRE 4.2 is thirty (30) pages.

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

- Covering letter
- Consultant Team Verification
- Front page of the RFP
- Front page of revision(s) to the RFP
- Price Proposal Form (Appendix C)

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

SRE 3 PHASE ONE SUBMISSION REQUIREMENTS AND EVALUATION

Intent: The intent of Phase One evaluation activities is to verify that the submissions meet the mandatory screening requirements and to evaluate and rate the proposed teams.

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 Alberta.

3.1.2 Consultant Team Identification

During Phase One only the prime consultant and key sub-consultants and specialists are identified. During Phase Two other sub-consultants or specialists may be identified. Those sub-consultants identified at Phase Two are those considered to play a lesser role in the entire project context.

The consultant team to be identified at this time must include the following:

Proponent (prime consultant) - Architect

Key Sub-consultants / Specialists:
Mechanical Engineer;
Electrical Engineer;
Structural Engineer;
Civil Engineer; and
Landscaping Architect

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 R1110T General Instructions to Proponents, GI9 Limitation of Submissions).

Proof of licensing for the Prime Consultant and all Sub-consultants must be provided prior to the award of a contract.

Proponents will be required to carry over the consultant team identified in Phase One to Phase Two.

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 - Associated Information

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

3.1.5

Listing experience without providing any supporting data to describe where and how such experience was obtained will result in the experience not being included for evaluation purposes. If any of the requirements under this section is omitted from the Bid, it will be set aside without further consideration and the Bid will be considered to be non-responsive. In the case of any Mandatory Criteria, a lack of supporting information will render the Bid non-responsive and will be set aside without further consideration.

The Proponent must make clear references to the candidates' curriculum vitae (CV) or résumé for each stated claim in the Proponents response (where applicable). Complete details demonstrating how a Proponent meets each Evaluation Criteria must be provided, including reference to where, when and how experience was obtained and how it relates to each requirement.

3.2 RATED REQUIREMENTS

The evaluation criteria for the Phase One proposal addresses only the previous achievements and experiences of the proposed Consultant Team. No material is to be prepared or presented on the subject project itself. The Phase One proposal provides the opportunity for proponents to present their past work in the context of the proposed project. It is at this time that interested firms submit to PWGSC a history of their accomplishments in order to establish the capabilities of their teams and lead designers as well as other key team members.

3.2.1 Past Achievements of Proponent on Projects

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

Select a **maximum** of 2 projects undertaken within the last 8 years to the completion of the construction implementation phase that have similarities to a police detachment or a facility containing detention spaces. Joint venture submissions are not to exceed the maximum number of projects. Only the first 2 projects listed in sequence will receive consideration and any others will receive none as though not included.

Allocation of Points:

1. An explanation on how each listed past project is comparable and relevant to the current project requirement.

2. A brief description of the intent of each project including a discussion of design philosophy and approach to meet the intent, design challenges, and resolutions to those challenges.

3. An explanation of any variance in budget between the original project budget, the contract award price, and final construction cost, and how the variance was managed.

4. An explanation of any variance in project schedule control and management between the initial schedule at project initiation and final completion date, and how the variance was managed.

5. The names of key personnel responsible for project delivery and their roles.

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 Past Achievements of Key Sub-consultants, Discipline Leads and/or Specialists on Projects

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

Select a **maximum** of 2 projects undertaken within the last 8 years per key sub consultant or specialist to the construction completion stage, that have similarities to a police detachment or a facility containing detention spaces. Only the first 2 projects listed in sequence (per key sub-consultant or specialist) will receive consideration and any others will receive none as though not included.

Allocation of Points:

1. An explanation on how each listed past project is comparable and relevant to the current project requirement.

2. A brief description of the intent of each project including a discussion of design philosophy and approach to meet the intent, design challenges, and resolutions to those challenges.

3. An explanation of any variance in budget between the original project budget, the contract award price, and final construction cost, and how the variance was managed.

4. An explanation of any variance in project schedule control and management between the initial schedule at project initiation and final completion date, and how the variance was managed.

5. The names of key personnel responsible for project delivery and their roles.

3.2.3 Client References on Past Projects:

The Bidder should identify client references for each project described in 3.2.1

Allocation of Points:

Points will be awarded for the quality of each review with the identified client references, and allocated as follows:

1. Quality of client reference for past projects described in 3.2.1 for Budget Management.

2. Quality of client reference for past projects described in 3.2.1 for Schedule Management.

3. Quality of client reference for past projects described in 3.2.1 related to the Bidders Communication and Collaborative team-work efforts with the client.

4. Quality of client reference for past projects described in 3.2.1 for Client Satisfaction.

5. Client reference information provided including, but not limited to: names, address, phone number, email address.

3.2.4 Past Achievements of Key Personnel on Projects

Describe the experience and performance of key personnel to be assigned to this project regardless of their past association with the current proponent firm. This is the opportunity to emphasize the strengths of the individuals on the team and how that will apply to the reference project, and to recognize their past responsibilities, commitments and achievements.

Allocation of Points:

1. Brief CV's of a maximum of two (2) senior project personnel of the Prime Consultant's staff who will be assigned to this project.

2. Brief CV's of a maximum of two (2) project personnel of each Sub-Consultant's staff or discipline leads who will be assigned to this project.

3. Professional Accreditation, including licensing info of each team member.

4. Relevant project experience, expertise, competence, number of years of experience of each team member.

3.3 EVALUATION AND RATING

Past experience of the Proponent and the consultant team will be evaluated at the Phase One submission stage and the scores for this evaluation will be carried over to the Phase Two submission.

Phase One proposals which are responsive will be reviewed, evaluated and rated by a RCMP Evaluation Board in accordance with the following:

Criterion	Weight Factor	Rating	Weighted Rating
Past Achievements of Proponent	2.0	0 - 10	0 - 20
Achievements of Key Sub-consultants, Discipline Leads / Specialists	2.0	0 - 10	0 - 20
Client Reference on Past Projects	3.0	0 - 10	0 - 30
Past Achievements of Key Personnel on Projects	3.0	0 - 10	0 - 30
Phase One Rating	10.0		0 - 100

Proponents **must** achieve a minimum individual criterion pass mark of 60% in Phase one and a minimum Combined Technical Score of 60% in Phase one to be considered further.

No further consideration will be given to proponents not achieving the minimum pass marks in Phase one.

The Phase One rating which is assigned to each responsive proposal in accordance with the procedure outlined in the General Instructions to Proponents is the total weighted rating assigned to the Phase One proposal in accordance with the above table. The Phase One rating is recorded for subsequent inclusion as a percentage of the total score to be established following the evaluation and rating of Phase Two proposals.

Generic Evaluation Table

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

	INADEQUATE	**WEAK**	**ADEQUATE**	**FULLY SATISFACTORY**	**STRONG**
0 point	**2 points**	**4 points**	**6 points**	**8 points**	**10 points**
Did not submit information which could be evaluated	Lacks complete or almost complete understanding of the requirements.	Has some understanding of the requirements but lacks adequate understanding in some areas of the requirements.	Demonstrates a good understanding of the requirements.	Demonstrates a very good understanding of the requirements.	Demonstrates an excellent understanding of the requirements.
	Weaknesses cannot be corrected	Generally doubtful that weaknesses can be corrected	Weaknesses can be corrected	No significant weaknesses	No apparent weaknesses
	Proponent do not possess qualifications and experience	Proponent lacks qualifications and experience	Proponent has an acceptable level of qualifications and experience	Proponent is qualified and experienced	Proponent is highly qualified and experienced

	Team proposed is not likely able to meet requirements	Team does not cover all components or overall experience is weak	Team covers most components and will likely meet requirements	Team covers all components - some members have worked successfully together	Strong team - has worked successfully together on comparable projects
	Sample projects not related to this requirement	Sample projects generally not related to this requirement	Sample projects generally related to this requirement	Sample projects directly related to this requirement	Leads in sample projects directly related to this requirement
	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results

SRE 4 PHASE TWO SUBMISSION REQUIREMENTS AND EVALUATION

Intent: The intent of Phase Two evaluation activity is to verify that the submissions meet the mandatory screening requirements, to evaluate and rate the proposals and to recommend contract award to the Proponent with the highest total score.

4.1 MANDATORY REQUIREMENTS

Only those submissions from proponents that have met the following requirements will be evaluated and rated by a RCMP Evaluation Board:

4.1.1 Having submitted a responsive Phase One proposal

4.1.2 Consultant Team Verification submittal of a statement indicating the Consultant Team identified in Phase One is being carried over to Phase Two.

4.2 RATED REQUIREMENTS

Intent: The evaluation criteria for the Phase Two proposal addresses the Consultant Team's "understanding of the project" i.e. technical, schedule and estimate requirements, "scope of services" "management of services" and "design philosophy/approach" based on the requirements described in the Project Brief. Past achievements and experience of the Proponent and Key Sub-Consultants are evaluated in Phase One and will not be re-evaluated in Phase Two. The Phase Two Proposal gives the proponents the opportunity to describe what they intend to offer RCMP in terms of their understanding of the project, scope of services and management of the project.

The following requirements will be evaluated and rated by a RCMP Evaluation Board. The price proposal of each Proponent may or may not be opened.

4.2.1 Understanding of the Project:

The proponent should demonstrate understanding of the goals of the current project requirement, the functional/technical requirements, the constraints and the issues that will shape the end product. Ensure your response speaks in specific terms to this project.

Allocation of Points:

1. Clearly identify the Functional and Technical Requirements, demonstrating a clear understanding of the current project requirement.

2. Clearly identify the significant issues, challenges and constraints related to the current project requirement.

3. Review the Project Schedule, as presented in Annex "A" – Statement of Work, and clearly identify& assess risk management elements that may affect the current project requirement.

4. Review the cost information identified throughout the RFP, and clearly identify & assess risk management elements that may affect the current project requirement budget.

4.2.2 Scope of Services:

The proponent should demonstrate capability to perform the services and meet project challenges.

Allocation of Points:

1. Scope of Services – Provide a detailed list of anticipated services required to fulfill the obligations of this current project requirement.

2. Work Plan – Provide an example of a detailed breakdown of work, tasks, and deliverables anticipated for this current project requirement.

3. Project Schedule – Provide an example of a detailed schedule for this project showing major milestones and critical path elements.

4. Risk Management Strategy – Clearly identify, and provide a Risk Management Strategy that relates to the current project requirement in a holistic manner.

4.2.3 Management of Services:

The Proponent should provide their intended approach to working directly with the RCMP and their team management structure and organization to support this approach.

Allocation of Points:

1. Identify the approach to working with the RCMP within the restraints of meeting all security related requirements and constructing these types of facilities.

2. Provide organization charts to demonstrate the Team's structure, including responsibilities and reporting relationships of the Consultant, Sub-Consultant/ Discipline leads; identify the roles, responsibilities and assignments of key personnel on the project, and clearly indicate what backup support will be provided within each discipline.

   ***If the Bidder proposes to provide multi-disciplinary services which might otherwise be performed by a Sub-Consultant, this should be indicated here. Include Joint Venture plan, if applicable.*

3. Clearly articulate the expected quality control techniques to be utilized by all disciplines along with a defined peer review structure and process.

4. Clearly articulate the expected cost control techniques to be utilized by all disciplines.

5. As lessons learned from completed proje**ct**s may identify poor communications as one of the reasons for ongoing issues in a project; clearly articulate your team's approach to ensuring appropriate communications in this project and how your strategy will bolster your plan to address the challenges of this specific project.

4.2.4 Design Methodology / Approach

The proponent should elaborate on specific aspects of the project considered to be major challenges and illustrate your firm's design approach/methodology to address these challenges. 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 specific project.

Allocation of Points:

1. Provide a Design Methodology, Philosophy or Approach to address the challenges within this current project requirement that your team has identified in previous sections of your proposal.

2. Provide past innovative and creative solutions utilized on a projects of this type, especially those that demonstrate a holistic approach.

4.3 EVALUATION AND RATING

4.3.1 Technical Rating

Phase Two proposals that are responsive (i.e. which meet all the mandatory requirements set out in the RFP) will be reviewed, evaluated and rated by a RCMP Evaluation Board. In the first instance, price envelopes will remain sealed and only the technical components of the Phase Two proposal will be evaluated in accordance with the following to establish Technical Ratings:

Criterion	Weight Factor	Rating	Weighted Rating
Understanding of the Project	2.9	0 - 10	0 - 29
Scope of Services	2.6	0 - 10	0 - 26
Management of Services	3.3	0 - 10	0 - 33
Design Methodology/Approach	1.2	0 - 10	0 - 12
Phase Two Technical Rating	10.0		0 - 100

Generic Evaluation Table
RCMP 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 found in the above section 3.3 Evaluation and Rating.

4.3.2 Combined Technical Rating

The Phase One Rating and Phase Two Technical Rating will be combined to establish a Combined Technical Score:

Combined Rating	Possible Range	% of Total Score	Score (Points)
Phase One Rating	0 - 100	30	0 – 30
Phase Two Technical Rating	0 - 100	60	0 – 60
Combined Technical Score		90	0 – 90

To be considered further, proponents **must** achieve a minimum individual criterion pass mark of 60% in both Phase one and two and a minimum Combined Technical Score of 60% or fifty-four (54) points out of the ninety (90) points available in both Phase one and two as specified above.

No further consideration will be given to proponents not achieving the pass mark of fifty-four (54) points.

SRE 5 PRICE OF SERVICES

All price proposal envelopes corresponding to responsive proposals which have achieved the minimum individual criterion pass mark of 60% in both Phase one and two and the overall pass mark of fifty-four (54) points in both Phase one and two will be opened upon completion of the technical evaluation. An average price is determined by adding all the price proposals together and dividing the total by the number of price proposals being opened.

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

The remaining price proposals are rated as follows:

A. The lowest price proposal receives a Price Rating of 100
B. The second, third, fourth and fifth lowest prices receive Price Ratings of 80, 60, 40, and 20 respectively. All other 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 6 TOTAL SCORE

Total Scores will be established in accordance with the following:

Rating	Possible Range	% of Total Score	Score (Points)
Phase One Rating	0 - 100	30	0 - 30
Phase Two Technical Rating	0 - 100	60	0 - 60
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 7 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 R1110T General Instructions to Proponents, GI16 Submission of Proposal. Proponents may choose to introduce their submissions with a cover letter.

PHASE ONE:

- Team Identification - see typical format in Appendix A
- Declaration/Certifications Form - completed and signed - form provided in Appendix B
- Proposal - one (1) original plus three (3)
- Integrity Provisions - Associated Information - list of directors / owners

PHASE TWO:

- Verification of Team - confirmed Phase One team identification information
- Proposal - one (1) original plus three (3)
- 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

Statement of Work

1.1 TITLE: Architectural & Engineering Services – New Police Facilities – Wabasca AB

The RCMP requires the services of Architectural and Engineering professionals to provide the services for the design and contract administration, construction, delivery and set-up of a detachment facility to meet identified program requirements in Wabasca, Alberta.

The consultant team will be required to assess the site for placement of the new detachment and storage garage, submit options along with a recommended option for consideration and acceptance by the RCMP.

There is an operational requirement for a new RCMP detachment facility to be constructed in the community of Wabasca, Alberta. Wabasca is approximately 325 km north of Edmonton. The anticipated size of the facility is approximately 1172 M2 of finished space including a detached storage garage building. This new facility will replace existing policing facilities that no longer meet the operational requirements for the provision of policing services to the communities of which the detachment serves.

1.2 INTRODUCTION

The RCMP requires the services of Architectural and Engineering professionals to provide the services for the design and contract administration, construction, delivery and set-up of a detachment facility to meet identified program requirements in Wabasca, Alberta. The project scope also includes the design and construction of a detached storage garage to provide operational support to the detachment.

1.3 CONSTRAINTS AND CHALLENGES

1.3.1 Security clearances will be required by personnel working on this project.

1.3.2 Budget control and management is of significant importance in the completion of this project. Utilization of innovative design to reduce the overall cost of the project is critical and design options provided by the consultant team will be challenged to ensure economies and efficiencies are identified.

1.3.3 These facilities will need to be designed and developed to be sustainable demonstrating that the detachment will be capable of surpassing the baseline established by the National Energy Code for Buildings 1997, by a minimum of 40%.

1.4 PROJECT INFORMATION

1.4.1 Project Title: Architectural and Engineering Design Services – New Government of Canada Building, Wabasca, AB.

1.4.2 Project Location: Wabasca-Desmarais, Alberta

1.4.3 Scope: Design to meet the requirements of the functional programs, applicable codes, and contract administration for the design of RCMP detachment facilities.

<u>Work to include:</u>

1.4.4.1 New design options to meet functional requirements

1.4.4.2 Completion of Tender Documents.

1.4.4.3 Project Administration

1.4.4.4 Post Construction – Warranty Services

2 PROJECT OBJECTIVES

2.1 PROJECT DELIVERY APPROACH

2.1.1 The tendering of this requirement will be an open tender on the Government Electronic Tendering System, administered by the Public Works Government Services Canada (PWGSC).

2.2 OBJECTIVES

2.2.1 Objective One: Functional Performance

2.2.1.1 Provide a design that will allow for varying functional requirements and meet the specific spatial values for the new facility in the community of Wabasca, Alberta.

2.2.1.2 Achieve:

2.2.1.2.1 A design that provides functional, responsive and efficient workspace in keeping with the functional programs, the RCMP and Treasury Board standards.

2.2.1.2.2 Healthy working environments that fully support optimum work productivity.

2.2.1.2.3 Easy to use and adaptable systems and technologies to support requirements with capacity for growth and change.

2.2.1.2.4 Effective and efficient office landscape furniture layout plan fully coordinated with the Mechanical and Electrical disciplines.

2.2.1.2.5 Effective and continuous physical security for the occupants in the conduct of their daily business.

2.2.1.2.6 A facility that is designed in a manner that will allow for simple future expansion to the administration and detention portions of the facility.

2.2.2. Objective Two: Design Quality and Character

2.2.2.1 Provide facilities that will effectively and appropriately serve the RCMP and its operations for an expected life span of 30 years before major refit.

2.2.2.2 Achieve:

2.2.2.2.1 Design excellence, use of quality materials and precise execution respecting the location and climate where these facilities will be located.

2.2.2.2.2 Quality and construction methods shall be robust and able to withstand the location where it will operate and should reflect the expectations defined in CSA Standard S478-95, “Guidelines on Durability in

Buildings (Design)." The final product shall be designed to have a medium life of 25 to 49 years per the standard.

2.2.2.2.3 A design that will reflect the importance and the nature of the functions it serves and fits within the surrounding environment.

2.2.2.2.4 A fully integrated design.

2.2.3 Objective Three: Building Performance

2.2.3.1 Provide a building and systems that will enable long-term efficient and cost effective life cycle performance.

2.2.3.2 Achieve:

2.2.3.2.1 A building that embodies sustainable design and application principles and is implemented in an environmentally responsible manner.

2.2.3.2.2 Healthy and safe environments that meet or exceed all codes for fire, health, and life safety.

2.2.3.2.3 A building that fully integrates all components and systems (architectural, structural, mechanical, electrical, civil, landscape, security, furniture design).

2.2.3.2.4 Fabric and systems that are of a high quality; designed in response to sound building science, life cycle cost effectiveness, ease of maintenance with accessible parts for servicing and constructed with the best workmanship available.

2.2.3.2.5 Mechanical systems that can be accessed and easily maintained and repaired and/or replaced in the building life cycle, as required.

2.2.3.2.6 A detachment building that will be designed to exceed the baseline requirements of the National Energy Code for Buildings (1997), by a minimum of 40%"

2.2.4 Objective Four: Project Delivery

2.2.4.1 Deliver the project utilizing best practices in support of the RCMP's needs, respecting the approved scope, expected quality, budget and schedule.

2.2.4.2 Achieve:

2.2.4.2 .1 A cohesive functional partnership and open communication between all members of the project delivery team and stakeholders throughout all phases of the project life.

2.2.4.2 .2 An integrated and focused Consultant team with an in-depth understanding and collective 'buy-in' of the project requirements, scope, budget and scheduling objectives, working constructively to ensure a collaborative and cooperative team approach with knowledgeable and timely input and contribution by all project team

members, including representatives from the RCMP.

2.2.4.2 .3 Rigorous quality assurance reviews during the design and construction phases. As part of the design reviews include documented peer reviews.

2.2.4.2 .4 A rigorous quality management plan in order to respond and correct, in a timely and effective manner, all issues as they occur.

2.2.4.2 .5 An experienced and well-seasoned Project Management professional that shall be responsible for the production and delivery of all documents, and shall ensure that there is a continuity of key personnel working as an integrated dedicated team for the full duration of the project.

2.2.4.2 .6 Professional conduct in all phases of the project, employing best practices for budget, schedule, quality and scope management.

2.2.4.2 .7 A continuous risk identification and management program employing effective methodologies to mitigate risk items as they arise and to ensure construction safety is monitored and claims avoidance is an ongoing consideration.

2.2.4.2 .8 Continuous and comprehensive documentation of the project at all stages of the project implementation,

2.3 SCOPE OF WORK

2.3.1 Overview

2.3.1.1 *Phase I* – Review the site, seeking options for placement of the new detachment and provide for consideration to the RCMP along with a recommended option to locate the detachment and storage garage on available land space. Review the current functional program, and provide 3 concepts for consideration by the RCMP for the provision of a design for the detachment facility, ensuring optimal use of space and consideration for future growth.

Phase II – Design and completion of Tender Documents based upon approved recommendations from Phase I.

Phase III – Contract Administration including Commissioning and warranty.

2.3.2 Architectural, Interior Design

2.3.2.1 Functional Programs have been completed, identifying detailed space requirements, and will be available to the successful proponent. The functional program will require review by all stakeholders to confirm requirements. Services to include all professional expertise required to fully complete the design and construction administration of this project.

Consultant Services will also include office furniture layouts including workstations etc.; to include all furniture, fixtures and equipment.

Develop the site to ensure proper optimization of building footprint to site size ratio, ensuring that the parking required and site requirements identified are accommodated.

A space analysis showing all spaces required will be provided to the successful bidder.

2.3.3 Civil Engineering

2.3.3.1 All applicable civil elements to deliver this project. Elements include but not limited to connection to municipal utilities, site grading, site access and parking and storm water run-off and collection systems. A geo-technical investigation of the proposed site has been completed and will be available to the successful proponent.

2.3.4 Structural Engineering

2.3.4.1 All applicable structural elements for the project design. A geo-technical investigation of the proposed site has been completed and will be available to the successful proponent.

2.3.5 Mechanical Engineering

2.3.5.1 All applicable mechanical systems for the operation of a detachment facility and detached garage building, including connection to required utilities.

2.3.6 Electrical Engineering

2.3.6.1 All applicable electrical systems for the operation of a detachment facility and detached garage building, including connection to required utilities.

2.3.7 Landscape Architecture

2.3.7.1 All applicable elements for the development of the landscape of the site with specific attention placed in having the landscape blend into the surrounding environment.

2.3.8 Building Components and Connectivity

This project includes implementation of the Building Components and Connectivity (BCC) program. The objective of the BCC program is to meet the operational requirements of the end-users to allow immediate occupancy of the space. Building connectivity means the physical, electronic and other systems that connect buildings and the workstations in them.

2.3.8.1 BCC Components does not include the following:

- Office equipment related to administrative functions such as: computers, printers, fax machines, television sets, DVDs, converters, phone sets or radios.

2.3.8.2 BCC Connectivity includes the following building-specific list (but not limited to):

- Cabling,
- CATV,
- Network,
- Telephony,

- Police Radio System Antennae/Whips,
- Multimedia (TV, Smartboards),

2.3.8.4 Scope of BCC for this Project

2.3.8.4.1 For this project, BCC is divided into functional groups as follows:

A) Information Services,

B) Security,

C) Furniture/Equipment.

2.3.8.4.2 The responsibility for contracting for BCC will be in two parts as follows;

Information Services and Security Devices will be supplied and installed separately by the RCMP,

Furniture and Equipment will NOT be contracted as part of the project.

2.3.8.4..3 It will be the Consultant's responsibility to ensure full coordination to accommodate all BCC implementation with the building construction project and provide the related infrastructure and systems requirements.

2.4 PROJECT BUDGET

2.4.1 Indicative Cost Estimate for construction for the Wabasca Detachment is $11,000,000. The values include construction cost and construction contingencies and escalation. This budget is based on a Class "D" estimate.

2.5 PROJECT DELIVERY APPROACH

2.5.1 The construction tender activity will use a traditional, design - single tender - build approach. A consultant will be retained by the RCMP and report directly to the RCMP Departmental Representative to co-ordinate all services related to Schematic Design, Design Development, Construction documents, tendering and Construction administration. Contractors will be retained by the RCMP and report directly to the RCMP Project Authority to co-ordinate all services related to construction.

2.5.2 All work to be managed by the RCMP.

2.6 DESIGN QUALITY

2.6.1 The Prime Consultant is responsible for monitoring and confirming quality throughout the life of the project. As part of the design quality assurance process the Prime Consultant will be responsible for coordinating peer reviews for each disciple. Peer reviews must be completed by all disciplines and documented with follow up responses and included in each design submission.

2.7 PROJECT TEAM

2.7.1 The prime consultant (proponent) and his/her personnel identified in the submission, including sub-consultants and specialists comprise the integrated consultant design team (consultant team). The consultant team will be required to maintain its expertise for the duration of the project.

2.7.2 The prime consultant shall be responsible to co-ordinate and direct all consultant team activities.

2.7.3 The consultant team shall be comprised of qualified professional and technical expertise with extensive relevant experience, and shall be capable of providing the services identified in the Required Services (RS) section of this Statement of Work.

2.7.3.1 All members of the consultant team shall be eligible to work in the Province of Alberta.

2.7.3.2 Members of the consultant team may have the necessary qualifications and expertise to provide services in more than one discipline or specialty.

2.7.3.3 Proponents are permitted to expand their consultant team to include additional disciplines at their own discretion.

2.7.4 Expertise and relevant experience requirements for this project are as follows:

2.7.4.1 Administrative

- Project Management

2.7.4.2 Regulatory Analysis, Planning, Design, and Development

- Building Code
- Municipal Zoning
- Occupational Health and Safety
- Fire and Life Safety

2.7.4.3 Program Analysis, Planning, Design, and Development

- Enriched front end planning

2.7.4.4 Site Analysis, Planning, Design, and Development

- Site Planning
- Landscape Architecture
- Civil Engineering / Municipal Engineering (infrastructure)

2.7.4.5 Building Analysis, Planning, Design, and Development

<u>Architecture and Specialties:</u>

- General Architecture

- Interior Design
- Sustainable Design
- Codes and life safety
- Building envelope
- Signage and Way-finding
- Security
- Engineering:
- Structural
- Seismic
- Mechanical
- Heating Ventilation Air Conditioning (HVAC)
- Plumbing
- Fire protection
- Indoor / outdoor air quality design and control
- Building automation / energy management control systems
- Electrical
- Power
- Lighting
- Information technology and communications
- Civil
- Geotechnical
- Commissioning

2.7.4.6 Budget, Schedule and Risk Analysis, Planning, Design, and Development

- Cost planning, life cycle costing, estimating and control
- Time Planning, Scheduling, and Control
- Risk Management

2.8 PROJECT SCHEDULE

2.8.1 Schedule

Wabasca Detachment:

Award Consultant Contract	April 25, 2016
Present Concept Design Options	June 15, 2016
Finalize Options for Floor Plan	July 15, 2016
Schematic Design	Sept 1, 2016
Design Development	Dec 1, 2016
50% Contract Documents	Feb 28, 2017
99% Contract Documents	April 21, 2017
Final Tender Documents	March 21, 2017
Issued Construction Tender	Aug 18, 2017
Award Construction Contract	Sept 17, 2017
Construction Completion	July 2019
Building Occupancy	Sept 2019

2.9 INVOICING

2.9.1 The Consultant is permitted to invoice as per GC5 – Terms of Payment. Each invoice should be accompanied by an accounting of expenses to the date of the invoice.

2.9.2 All invoices shall be sent to the Project Authority for his review and processing.

2.9.3 The Consultant's last invoice shall be marked "Final". This will result in closing of the contract and deletion of any further opportunity to invoice.

2.10 EXISTING DOCUMENTATION

2.10.1 Copies of all pertinent documentation will be made available to the Consultant.

2.10.2 The successful Consultant will be provided with the following background documents;

2.10.2.1 Exemplary drawings of recently completed detachment projects in Alberta.

2.10.2.2 Legal survey information of the existing site.

2.10.2.3 Phase I Environmental Assessment of land.

2.10.2.4 Geotechnical report performed prior to land sale.

2.10.3 Disclaimer

2.10.3.1 Reference information will be available in the language it is written.

2.10.3.2 The documentation may be unreliable and is offered "as is" for use by the Consultant.

3 CONSULTANT SERVICE REQUIREMENTS

3.1 CONSULTANT SERVICE REQUIREMENTS

3.1.1 The Consultant will be responsible for providing and coordinating the full professional Architectural and Engineering services required, from the Pre- Design Services Stage to the completion of the Post Warranty Stage of the project. A summary of professional expertise and relevant specialty experience requirements for this project include, but are not limited to the following:

3.1.1.1 Architectural and Engineering Services

3.1.1.2 Budget and Schedule Management Services

3.1.2 Summary Scope of Services

3.1.2.1 Pre- Design Services to include review of the programs and building site along with topographical and geo-technical information for the new detachment and provide a report of any issues which require redress.

3.1.2.2 Prepare a final Design Development Report based on the approved **Schematic Design, complete with outline specifications, including peer review reports** and Class "C" estimate.

3.1.2.3 Conduct peer reviews and submit reports throughout design.

3.1.2.4 Prepare a fully coordinated set of construction drawings based on the approved Design Development Report, ready for tendering purposes and Class "A" cost estimate.

3.1.2.5 Prepare specifications using National Master Specification (NMS) program including Division1.

3.1.2.6 Provide assistance during the tendering process including preparation of addenda and review tender results.

3.1.2.7 Provide identified contract administration services.

3.1.2.8 Recommend cost effective "Green Construction Materials", Methods and Practices that can be incorporated into the project without significant impact on the project budget.

3.1.2.9 Identify Commissioning activities through standard Testing, Adjusting and Balancing protocols, monitor these processes and document results. There is not a requirement to follow standardized commissioning protocols as per ASHRAE 202-2013 for these projects.

3.1.2.10 Prepare Maintenance Manuals including maintenance schedule, as-built drawings and specifications.

3.1.2.11 Provide warranty services.

3.2 CONSULTANT TEAM RESPONSIBILITIES

3.2.1 Prime Consultant

3.2.1.1 The Prime Consultant is completely responsible for providing and coordinating the work of all professional disciplines (Architectural and Engineering Consultant

Services) required, from the Pre-design Stage to the completion of the Post Construction Stage of the project.

3.2.2 **Consultant Team**

3.2.2.1 The Prime Consultant and their personnel including Sub-Consultants comprise the Consultant Design Team (Consultant Team).

3.2.2.2 The Consultant Team will be required to maintain its expertise for the duration of the project.

3.3 GENERAL SERVICE REQUIREMENTS

3.3.1 Overview

3.3.1.1 The RCMP will act as the Project Authority and Public Works Government Services Canada will act as the Contracting Authority during all phases of design and construction of the project.

3.3.1.2 The Consultant team will be required to deliver integrated professional services, in accordance with the requirements set forth in this statement of work. The services will be administered in distinct stages, as follows:

3.3.1.2.1 Pre-Design Building Assessment and Project Requirements Confirmation

3.3.1.2.2 Design Development

3.3.1.2.3 Construction Documents

3.3.1.2.4 Tender Call, Bid Evaluation and Construction Contract Award.

3.3.1.2.5 Construction and Contract Administration

3.3.1.2.6 Post Construction Services

3.3.1.3 The outline of deliverables and processes, as presented in this statement of work, are intended as a general outline only. It is not exhaustive and does not preclude alternative or supplementary approaches as may be suggested by the Consultant for consideration by the Project Authority.

3.3.2 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all the requirements of the statement of work:

3.3.2.1 Standard of Care

3.3.2.2 Budget and Schedule Management Services

3.3.2.3 Project Information, Decisions, Approaches & Approvals

3.3.2.4 Change in Services

3.3.2.5 Code, By-Laws, Licenses, Permit Reviews

3.3.2.6 Provision of Staff and Sub-Consultant Services

3.3.2.7 Commissioning

3.3.2.7.1 Identify Commissioning activities, which outline the systematic approach to testing, adjusting, balancing and verifying the systems' performance in accordance with the design intent and related testing and verification forms.

3.4 PROJECT ADMINISTRATION REQUIREMENTS

3.4.1 Lines of Communication

3.4.1.1 Unless otherwise directed by the Project Authority, the Consultant shall communicate with the Project Authority only.

3.4.1.2 During construction tender call, the Contracting Authority conducts all correspondence and makes the contract award.

3.4.2 General Deliverables

3.4.2.1 Where deliverables and submissions include summaries, reports, drawings, plans, specifications and schedules, six (6) original hard copies and one (1) copy in electronic format shall be provided to the Project Authority, unless otherwise specified.

3.4.2.2 Electronic format shall mean

Deliverables

a)	Written reports and studies	MS Word or PDF
b)	Spreadsheets and budgets	Excel or PDF
c)	Schedules	Microsoft Project or other acceptable product
d)	Drawings	Auto CADD and PDF
e)	Specifications	NMS MS Word and PDF
f)	Monthly Reports	MS Word, Excel or PDF

3.4.3 Acceptance of Consultant Deliverables

3.4.3.1 While the RCMP acknowledges the Consultant's obligations to meet project requirements, the project delivery process entitles the RCMP to review the work. The RCMP reserves the right to reject undesirable or unsatisfactory work. The Consultant must obtain the Project Authority's acceptance during each of the project stages.

3.4.3.2 Acceptance indicates that, based on a general review of submitted materials, the material is considered to comply with governmental and departmental objectives and practices and that overall project objectives should be satisfied. The acceptance does not relieve the Consultant of professional responsibility for the work and compliance with the terms and conditions of the contract.

3.4.3.3 The RCMP acceptance does not prohibit rejection of work which is determined to be unsatisfactory at later stages of review. If budgetary or technical investigation reveals that earlier acceptance should be withdrawn, the Consultant is responsible for redesigning work and resubmitting for acceptance at the Consultant's cost.

3.4.4 **Design Meetings**

3.4.4.1 The Consultant shall arrange meetings generally throughout the design and tendering stages of the project, for all members of the project team. Sub-consultants participation will be at the discretion of the prime consultant, dependent on issues that require resolution. Project meetings will normally occur monthly, alternating between in-person meetings and conference calls, unless project requirements dictate otherwise.

3.4.4.2 Meetings will be held at the offices of the Prime Consultant and via teleconference call on an alternate basis, or wherever is deemed to be the most beneficial to meet requirements of the project.

3.4.4.3 The Consultant shall attend the meetings, record the issues and decisions and prepare and distribute minutes within 96 hours of the meeting.

3.4.4.4 On occasion, there may be urgent problem solving meetings. The Consultant shall be available to attend such meetings.

3.4.5 **Security Requirements**

3.4.5.1 The Consultant Team will be required to seek security clearances for some or all personnel working on this project.

3.4.5.2 The Consultant Team including the Sub-consultants will be required to sign non-disclosure documents for RCMP protected material, if applicable.

3.4.5.3 The Consultant shall distribute project documents such as drawings, specifications, reports, only to the design team members and only as required to perform the work.

3.5 ANALYSIS OF PROJECT REQUIREMENTS

3.5.1 **INTENT**

3.5.1.1 This stage is intended for the Consultant to review and report on all aspects of the project requirements. The Consultant Team will review and analyse all available program information, consult with the RCMP and deliver a comprehensive Pre-Design Report. This approved deliverable will become the formal project work plan and will be utilized throughout the project to guide the delivery.

3.5.2 **SCOPE AND ACTIVITIES**

3.5.2.1 Analyse the project requirements/program including any amendments

3.5.2.2 Analyse the building design, security requirements and confirm design standards.

3.5.2.3 Review all other available existing material related to the project including requirements identified in the Project Brief

3.5.2.4 Identify all additional information that will be needed to deliver the project,

3.5.2.5 Identify and verify all authorities having jurisdiction over the project and codes, regulations and standards that apply.

3.5.3 **DELIVERABLES**

3.5.3.1 Prepare and submit an Analysis of Project Requirements for review and approval by the Project Authority. Revise as required by the Project Authority. Resubmit for acceptance.

3.5.3.2 The above noted Report will consolidate the Scope and Activities identified above and will be utilized as the benchmark project control document to monitor progress of the project. The report will be used as a basis for monthly reporting of progress and will require supplements and modifications to reflect changes in project parameters as may be identified and accepted throughout the project life cycle.

3.6 SCHEMATIC DESIGN (DESIGN CONCEPT)

3.6.1 **INTENT**

3.6.1.1 The Consultant must obtain written authorization from the Project Authority before proceeding with Schematic Design.

3.6.1.2 The Consultant team will explore three distinctly different design concepts presented in sketch format (single line, produced to scale), fully integrated and supported by three or more distinctly different engineering solutions for the structure, mechanical, electrical systems, along with massing models, site slides and photographs, energy analysis and life cycle cost analysis, analytical data and calculations and sufficient narrative to allow comparison, analysis against project requirements, budget, and selection of a design direction for preparation of a final design concept.

3.6.1.3 The Schematic Design will be in sufficient detail to illustrate and communicate the project characteristics. Provide a detailed review and analysis of the project requirements including all updates and amendments to ensure all requirements are fully integrated into the Schematic Design. Out of this process the Schematic Design will be accepted and authorization to proceed to Design Development will be based on the accepted Schematic Design.

3.6.1.4 The RCMP Project Authority, in concert with project stakeholders shall choose one option to be further developed. Note: Although the Consultant is required to identify a preferred option, the RCMP Project Authority may select another option.

3.6.2 **SCOPE AND ACTIVITIES:**

3.6.2.1 Review, validate and update the details of the Functional Program requirements, including space data sheets,

3.6.2.2 Develop sustainable design options,

3.6.2.3 Prepare a minimum of three (3) Schematic Design options for the Detachment.

3.6.2.4 Analyse each option with regard to the project goals including cost and schedule,

3.6.2.5 Undertake a budget, schedule and risk analysis and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost,

3.6.2.6 Present / submit Schematic Design options for review and approval to committees, review groups and authorities having jurisdiction as identified in the Project Administration (PA) section,

3.6.2.7 Provide and /or coordinate all project requirements,

3.6.2.8 Coordinate all services with the Project Authority.

3.6.3 **DELIVERABLES**

3.6.3.1 Schematic (concept) design documents illustrate the functional relationships of the project elements as well as the project's scale and character, based on the final version of the functional program, the schedule, and the budget.

3.6.3.2 Prepare and submit, for review and approval by the RCMP Project Authority, an integrated Stage Two Project Report, Schematic (Concept) Design. Revise as required by the Project Authority. Resubmit for acceptance.

3.7 DESIGN DEVELOPMENT

3.7.1 **INTENT**

3.7.1.1 This stage will further develop the design option selected for refinement at the Schematic Design stage. The Design Development documents consist of drawings and other documents to describe the scope, quality and cost of the project in sufficient detail to facilitate design approval, confirmation of code compliance, detailed planning of construction and project approval. This design will be used as the basis for preparation of construction documents.

3.7.2 **SCOPE AND ACTIVITIES:**

3.7.2.1 Obtain written approval from Project Authority to proceed to Design Development Stage,

3.7.2.2 Review, validate and update details of program requirements and base building BCC: Information Services, Security, Furniture and Equipment with the RCMP,

3.7.2.3 Update Functional Program room data sheets as required,

3.7.2.4 Coordinate services as required with BCC project for Information Services, Security, Furniture and Equipment,

3.7.2.5 Develop the sustainable design options; provide an overview of the status of measurement of the proposed building performance against the National Energy Code of Canada for buildings 2012.

3.7.2.6 If any alterations are required, analyse the impact on all project components, and resubmit for approval if required,

3.7.2.7 Expand and clarify the Schematic Design intent for each design discipline,

3.7.2.8 Present/submit design and materials to be used for review and approval to the project team, review groups and authorities having jurisdiction as identified in section Project Administration,

3.7.2.9 Provide and/or coordinate all information for all project disciplines,

3.7.2.10 Undertake a budget, schedule and risk analysis review and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost,

3.7.2.11 Coordinate services with the Project Authority,

3.7.2.12 Continue to review all applicable statutes, regulations, codes and by-laws in relation to the design of the project.

3.7.2.13 Site design development.

3.7.3 General Requirements

3.7.3.1 The objectives of the Design Development stage are to review the design layout as further outlined below.

3.7.4 Responsibilities of the RCMP

3.7.4.1 The RCMP shall:

3.7.4.1.1 Participate in meetings as representative for all stakeholders.

3.7.4.1.2 Review and provide a report on the Consultant's Design Development Report.

3.7.4.1.3 Review revisions and consultants rebuttal to the RCMP quality assurance report.

3.7.4.1.4 Review and accept the final Design Development Report.

3.7.4.1.5 Authorize the Consultant to proceed to Construction Documents

3.7.5 Responsibilities of the Consultant Team

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

3.7.5.1.1 Administrative:

A) Attend all information exchange/ team meetings. Participation by the various disciplines will be on an as required basis.

B) Respond to comments provided by the RCMP as part of its review of the Design Development Report.

3.7.5.1.2 Regulatory:

A) Review, develop and prepare:

- Detailed Building code analysis
- Detailed Fire and life safety strategy, including consultation with the RCMP's Fire Marshall
- Detailed Standards analysis
- Detailed Canada Labour Code Part II analysis

3.7.5.1.3 Building Design

A) Refine and prepare detailed:

- Design drawings, including floor plans, exterior elevations, building sections, wall sections, special details etc.
- Substructure plans, including foundations, framing, etc.
- Shell, including superstructure, exterior enclosure, roofing, etc.
- Services, including plumbing, HVAC, fire protection, electrical, telecommunications, etc.
- Commissioning activities plan.
- Determination of cost effective green construction materials, methods and practices that can be incorporated into the project without significant impact on the project budget.

1.7.5.1.4 General Deliverables

A) Design Development Report Structure and Content

B) Drawings and other media to communicate the entire site and building project for all disciplines showing all elements and services in a level of detail necessary to make all design decisions and to substantively estimate the cost of the project,

C) Provide a list of draft specification sections of all National Master Specification (NMS) sections to be used. Submit outline specifications for all systems and principle components and equipment. Provide in the outline specifications manufacturers' literature about principal equipment and system components proposed for use in the project,

D) Development of Furniture layouts and location on plans,

E) Finishes and colour schemes,

F) Site/building renderings, 3D visualization,

G) Updated sustainable design opportunities, strategies, updated budgets

H) Update to Risk Assessment Report,

I) Fire Marshall's Report including requirements, strategies or interventions for protection of the building and its occupants,

J) Outline Commissioning Plan,

K) Updated detailed schedule including deliverable requirements to be provided by the Client; Information Services, Security, to be integrated into the building,

L) Class ‘C’ Estimate including estimated annual cash flows,

M) Update life cycle cost analysis;

N) Project Log tracking all approved major decisions including those affecting changes to project scope, budget and schedule,

3.8 CONSTRUCTION DOCUMENT SERVICES

3.8.1 General Requirements

3.8.1.1 The objective of the Construction Document Stage is to prepare tender ready drawings and specifications, setting forth in detail all the requirements for the construction of the project along with a final (Class A) cost estimate.

3.8.1.2 The Consultant must obtain written authorization from the Project Authority before proceeding with Construction Documents.

3.8.2 Responsibilities of the RCMP

3.8.2.1 The RCMP shall:

3.8.2.1.1 Review and comment on consultant submissions.

3.8.2.1.2 Respond to questions from the Consultant Team as required.

3.8.2.1.3 Review revisions and consultant rebuttal to the RCMP quality assurance report.

3.8.2.1.4 Review and accept the final Construction Document progress at 50% and 99%. Formally accept documents ready for Tender.

3.8.3 Responsibilities of the Consultant Team

3.8.3.1 The Consultant Team Scope and activities shall include but are not limited to the following:

3.8.3.1.1 Regulatory:

A) Complete

- Detailed building code analysis
- Detailed fire and life safety strategy
- Detailed standard analysis
- Detailed Canada Labour Code Part II analysis

3.8.3.1.2 Scope and Activities

A) Obtain acceptance for submissions (50%, 99% and Final)

B) Confirm format of drawings and specifications

C) Submit drawings and specifications at the required stages (50%, 99% and Final)

D) Each discipline shall conduct peer reviews for submissions (50%, 99% and Final) and submit peer review report identifying comments and responses.

E) Provide written response to all review comments and incorporate them into the Construction Documents.

F) Advise as to the progress of cost estimates and submit updated cost estimates as the project develops

G) Update project schedule

H) Prepare a Class "B" estimate at the 50% submission and a final Class "A" estimate with the 99% submission.

I) Review and approve material, construction processes and specifications to meet sustainable development.

3.8.4 General Deliverables

3.8.4.1 Deliverables identified are typical for most projects, but must be customized by the Consultant for specific requirements of the project

3.8.4.2 Completeness of work should reflect the stage of submission.

3.8.4.3 Aspects to be included (but not limited to) are identified below for each submission stage.

3.8.5 50% Submission Stage Deliverables

3.8.5.1 Comment applicable to all ASME disciplines:

3.8.5.1.1 Submit updated cost estimates (Class "B")

3.8.5.1.2 Submit updated project implementation schedule

3.8.5.1.3 Submit written peer review reports.

3.8.5.1.4 Submit written response to the RCMP on review comments made at Design Development Stage

3.8.5.1.5 Submit drawings and specification to the RCMP, and RCMP Fire Marshall for their review.

3.8.5.1.6 Specifications

A) 50% edited with all pertinent sections including sections on Structural, Mechanical and Electrical components.

B) Confirm review of General Conditions of Contract and coordinate with Division 1.

C) Commissioning Activities outline and specification

D) Provide a list of the required component verification sheets, and system test procedures required for this project.

3.8.5.1.7 Architectural

A) Cover sheet with list of drawings

B) Site Plan

C) Roof Plan

D) Floor Plans

E) Reflected ceiling Plans

F) Exterior and Interior Elevations

G) Building and Wall Sections

H) Large Scale Detail Drawings

I) Door Schedule

J) Hardware Schedule

K) Room finish schedule

L) Millwork details

M) Furniture and Equipment layouts (for Reference)

3.8.5.1.8 Structural

A) Foundation Details

B) Roof Plans

C) Floor Plans

D) General Notes including

- Design code used
- Design loads
- Strength and grades of concrete, masonry, steel and/or other materials

E) Structural elements

F) Welding requirements

G) Schedule for steel beams, lintels, etc.

H) Co-ordination with Architectural, Mechanical and Electrical drawings.

3.8.5.1.9 Mechanical

A) Roof Plan

B) Floor Plans

C) Development of mechanical systems

D) Identify mechanical equipment in the different areas

E) Show major duct-work and piping.

F) Identify mechanical components either on schedule shown on drawings, or in specification.

G) Complete diffuser locations

H) Complete control specification to a 33% stage.

I) Testing, Adjusting and Balancing Plan

J) Co-ordination with Architectural, Civil, Structural and Electrical drawings.

3.8.5.1.10 Electrical

A) Roof Plan

B) Floor Plans

C) Lighting layout, showing switching information, fixture types

D) Power and system layout showing panel locations

E) Electrical room equipment layout

F) Communication system layout

G) Light fixture cuts

H) Single line diagrams

I) Co-ordination with Architectural, Structural, Mechanical and furniture layout drawings

3.8.5.1.11 Civil

A) Site Plan

B) Grading Plan

C) Building Service Plan

D) Grading Plan Sections

E) Details

3.8.5.1.12 Landscape

A) Planting Plan

B) Irrigation Plan if applicable

3.8.6 99% Submission Deliverables

3.8.6.1 Comments applicable to al ASME Disciplines:

3.8.6.1.1 Submit written response to RCMP review comments made at 50% stage

3.8.6.1.2 Submit written peer review reports.

3.8.6.1.3 All working drawings and specifications -fully completed and coordinated with AMES drawings and with the Specs

3.8.6.1.4 Submit the completed commissioning plan include maintenance schedule.

3.8.6.1.5 Submit one copy of update Cost Plan, Class “A” (+/- 5%) project cost estimate

3.8.6.1.6 Submit one copy of updated project schedule

3.8.6.1.7 Submit drawings and spec to RCMP and RCMP Fire Marshall for approval.

3.8.6.1.8 Specifications:

A) 99% edited specifications

3.8.6.2 Architectural and Interior Design

3.8.6.2.1 Complete set of coordinated construction drawings suitable for tender call, including all details of building envelope, interiors and elemental finishing schedule, along with complete BCC scope.

3.8.6.2.2 Provide final code review

3.8.6.2.3 One copy of the complete colour schedules, including textures, sheens, super graphics, colour chips and material samples.

3.8.6.2.4 Complete coordination with Structural, Mechanical and Electrical drawings to provide 99% completion.

3.8.6.3 Structural

3.8.6.3.1 Complete set of coordinated construction drawings, including details, sections, plans and schedules.

3.8.6.3.2 Information on drawings must fully comply with code, standards and statement of work.

3.8.6.4 Mechanical

3.8.6.4.1 Complete set of coordinated construction drawings suitable for tender call, including mechanical layout of mechanical rooms, fire protection system, and ventilation system. Heating and plumbing systems, air conditioning systems and control specifications.

3.8.6.4.2 Complete coordination with other disciplines to achieve 99% completion.

3.8.6.5 Electrical

3.8.6.5.1 Complete set of coordinated construction drawings suitable for tender call, including lighting, power, communications, fire alarm, security and control specifications.

3.8.6.5.2 Complete coordination with other disciplines to provide 99% completion.

3.8.6.6 Civil

3.8.6.6.1 Complete set of coordinated construction drawings suitable for tender call including excavation, grading, building services, storm water removal, parking and paving specifications, etc.

3.8.6.6.2 Complete coordination with other disciplines to achieve 99% completion.

3.8.6.7 Landscape

3.8.6.7.1 Complete set of coordinated construction drawings suitable for tender call including planting and irrigation specifications.

3.8.6.7.2 Complete coordination with other disciplines to achieve 99% completion.

3.8.7 100% Submission Stage - Final Tender Documents

Applies to all ASME disciplines.

3.8.7.1 All drawings and specifications, 100% reviewed and coordinated for tender call

3.8.7.2 All specification sections and an index of specifications. The specifications shall consist of typed and edited NMS sections.

3.8.7.3 Submit updated project implementation schedule.

3.8.7.4 Incorporate RCMP comments made at the 99% stage.

3.8.7.5 Revised Class “A” level cost estimate, if required

3.8.7.6 Submit electronic format (.pdf) drawings and specifications for tendering purposes as well as set(s) of hardcopy, as requested by the Project Authority.

3.8.7.7 Submit and obtain formal acceptance on plans and specifications required by the Inspection Authorities before tender call.

3.9 SUBMISSIONS, REVIEW AND APPROVAL PROCESS

3.9.1 Submissions:

3.9.1.1 Provide all required submissions, either to, or as directed by the Project Manager.

3.9.1.2 Provide required sets of Construction Drawings and Specifications to the Project Authority for review at the 50%, 99% submission stages.

3.9.1.4 The purpose of review and approval process is to ensure compliance with the project program, adherence to good design practice and technical quality assurance.

3.9.1.5 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all the requirements of the project brief.

3.9.1.5.1 RCMP Design Review

3.9.1.5.2 Peer Design Review

3.9.1.5.3 Other Authorities having Jurisdiction Review.

4 TENDERING SERVICES

4.1 GENERAL REQUIREMENTS

4.1.1 The RCMP will undertake the public tendering of the Project

4.1.2 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all the requirements of the project brief:

4.1.2.1 Document Interpretation

4.1.2.2 Addenda

5 CONSTRUCTION ADMINISTRATION SERVICES

5.1 GENERAL

5.1.1 The Consultant shall perform the following services in accordance with the terms and conditions of the Agreement and all the requirements of the project brief:

The consultant shall supply to the successful contractor, one set of “Issued for Construction” drawings, that will include all addenda issued during the tendering phase and have been signed and sealed by all disciplines.

5.1.1.1 Construction Safety Reviews

5.1.1.2 Project Schedule monitoring and advisement

5.1.1.3 Monthly construction progress and quality assurance reports
5.1.1.4 Shop Drawing Reviews
5.1.1.5 Issuance of Site Instructions
5.1.1.6 Periodic Inspections
5.1.1.7 Development of Construction Change documents
5.1.1.8 Interim Inspection
5.1.1.9 Final inspection
5.1.1.10 Building Occupation
5.1.1.11 Record (As-built) Drawings and Specification
5.1.1.12 Warranty Inspection

5.1.2 Deliverables

It is expected that there will be a minimum of 20 on-site construction project meetings It may be deemed necessary, due to the location of the project site to arrange teleconference calls with all project stakeholders prior to the regular scheduled construction site meetings to review project status and work through challenges and issues prior to arriving on the construction site.

5.2.2 The Consultant shall include in the contract documents the requirement for the Contractor to attend the meetings and conference calls. The **"consultant"** shall record the issues and decisions of all construction site meetings and teleconferences and prepare and distribute minutes to all the attendees within (3) three working days of the same meeting.

5.2.3 The Prime Consultant and their proposed Sub/Specialist Consultants, should be personally available to attend the design and construction meetings when the specific discipline is required and respond to inquiries within three (3) working days of the Project Authority's request, in the locality of the place of the work, from the date of the award of the Consultant's contract, until final inspection and turnover.

5.2.4 Review previous minutes for errors in fact, omissions or other discrepancies and ensure that previous records are accepted by all parties and that their acceptance is recorded.

5.2.5 Construction meetings will normally be held at the specific project site.

5.2.6 The Consultant shall attend meetings and conference calls, cooperate and coordinate with the Contractor, who shall record the issues and decisions and prepare and distribute minutes within 72 hours of the meeting.

5.2.7 The Consultant shall include in the contract documents, for provision by the Contractor, requirements for a meeting room of sufficient size, appropriate furniture and equipment, to hold Project Meetings.

5.3 COMMISSIONING

5.3.1 Establish Design Criteria, functional and operational requirements, if not already established in the RFP or Project Brief. Full Commissioning is not required for this facility. The intent is to design, check and verify that all building systems are functioning to the design specifications.

5.3.2 Prepare a preliminary Commissioning Activities plan.

5.3.3 Direct and monitor the testing adjusting and balancing processes to ensure compliance with the statement of work and the approved commissioning plan.

5.3.4 Plan the performance verification (PV) activities, processes and their output, including development of project-specific:

5.3.4.1 Installation / Start-up Check Lists

5.3.4.2 Product Information (PI) Report Forms and Performance Verification (PV) Report Forms, and

5.3.4.3 Design data to PI and PV report forms

5.3.5 Prepare a Training plan.

5.3.6 Identify Contractor and subcontractor PV and testing responsibilities,

5.3.7 Review shop drawings and product data and accompanying Product Information (PI) as completed by the Contractor,

5.3.8 Ensure that all systems have been properly verified, balanced etc. in compliance with the Performance Specifications and Commissioning Plan, prior to occupancy.

5.3.9 Submit three (3) hard copies and one (1) electronic copy of the completed Maintenance Manuals and Maintenance Schedule to the Project Authority.

5.3.10 Ensure that all required training and operating system demonstrations have been properly conducted and completed. Video tape is required.

5.3.11 Identify and verify the rectification of all outstanding deficiencies,

5.3.12 Assist in the resolution of all issues relating to commissioning,

5.3.13 Prepare "as-built" documentation (plans and specifications) as described elsewhere in the RFP or Statement of Work,

5.3.14 Recommend acceptance of the completed project,

6 POST CONSTRUCTION SERVICES

6.1 GENERAL

6.1.1 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all requirements of this RFP

6.1.2 Ten-Month Warranty Inspection and final Warranty Inspection.