

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

**Bid Receiving Public Works & Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada
1713 Bedford Row
Halifax, N.S./Halifax,(N.E.)
B3J 1T3
Halifax
Bid Fax: (902) 496-5016**

Request For Supply Arrangement - Demande pour un arrangement en matière d'approvisionnement

Offer to: Department of Public Works and Government Services

We hereby offer to provide to Canada, as represented by the Minister of Public Works and Government Services, in accordance with the terms and conditions set out herein or attached hereto, the goods, services, and construction detailed herein and on any attached sheets.

Offre au: Ministère des Travaux publics et des Services
gouvernementaux

Nous offrons par la présente de fournir au Canada, représenté par le ministre des Travaux publics et des Services gouvernementaux, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici et sur toute feuille ci-jointe.

Comments - Commentaires

THIS DOCUMENT CONTAINS A SECURITY
REQUIREMENT / DOCUMENT CONTIENT DES
EXIGENCES RELATIVES À LA SÉCURITÉ

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

Issuing Office - Bureau de distribution

Atlantic Region Acquisitions/Région de l'Atlantique
Acquisitions
1713 Bedford Row
Halifax, N.S./Halifax, (N.E.)
B3J 3C9
Halifax
Nova Scot

Title - Sujet SA - ARCHITECTURE AND ID	
Solicitation No. - N° de l'invitation E0225-152290/A	Date 2015-05-14
Client Reference No. - N° de référence du client E0225-15-2290	GETS Ref. No. - N° de réf. de SEAG PW-\$PWA-115-5229
File No. - N° de dossier PWA-5-74017 (115)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-06-25	Time Zone Fuseau horaire Atlantic Daylight Saving Time ADT
Delivery Required - Livraison exigée See Herein	
Address Enquiries to: - Adresser toutes questions à: Allen (PWA), Tanya	Buyer Id - Id de l'acheteur pwa115
Telephone No. - N° de téléphone (902)496-5142 ()	FAX No. - N° de FAX (902)496-5016
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA 1713 BEDFORD ROW HALIFAX NOVA SCOTIA B3J3C9 Canada	
Security - Sécurité This request for a Supply Arrangement does not include provisions for security. Cette Demande pour un arrangement ne comprend pas des dispositions en matière de sécurité.	

Instructions: See Herein

Instructions: Voir aux présentes

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

Solicitation No. - N° de l'invitation

E0225-152290/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

pwa115

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

E0225-15-2290

File No. - N° du dossier

PWA-5-74017

CCC No./N° CCC - FMS No/ N° VME

TABLE OF CONTENTS

PART 1 – GENERAL INFORMATION	3
1.1 INTRODUCTION	3
1.2 SUMMARY	3
1.3 SECURITY REQUIREMENTS	4
1.4 DEBRIEFINGS.....	4
1.5 KEY TERMS.....	5
PART 2 – SUPPLIER INSTRUCTIONS	6
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS.....	6
2.2 SUBMISSION OF ARRANGEMENTS	6
2.3 FORMER PUBLIC SERVANT - NOTIFICATION	6
2.4 FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - NOTIFICATION.....	6
2.5 ENQUIRIES - REQUEST FOR SUPPLY ARRANGEMENTS	7
2.6 APPLICABLE LAWS.....	7
PART 3 – ARRANGEMENT PREPARATION INSTRUCTIONS.....	8
3.1 ARRANGEMENT PREPARATION INSTRUCTIONS.....	8
PART 4 – EVALUATION PROCEDURES AND BASIS OF SELECTION	10
4.1 EVALUATION PROCEDURES	10
4.2 BASIS OF SELECTION	10
PART 5 - CERTIFICATIONS	11
5.1 CERTIFICATIONS PRECEDENT TO ISSUANCE OF A SUPPLY ARRANGEMENT	11
ATTACHMENT 1 ARRANGEMENT EVALUATION PROCEDURES.....	12
BASIS OF SELECTION	12
MANDATORY REQUIREMENTS (M).....	13
RATED REQUIREMENTS (R).....	15
SERVICE STREAM QUALIFICATION.....	16
GENERIC EVALUATION TABLE.....	20
ATTACHMENT 2 – SUPPLIER INFORMATION	21
PART 6 – SUPPLY ARRANGEMENT AND RESULTING CONTRACT CLAUSES	23
A. SUPPLY ARRANGEMENT	24
A6.1 ARRANGEMENT.....	24
A6.2 SECURITY REQUIREMENTS	24
A6.3 STANDARD CLAUSES AND CONDITIONS.....	24
A6.4 TERM OF SUPPLY ARRANGEMENT	25
A6.5 AUTHORITIES	25
A6.6 IDENTIFIED USERS.....	26
A6.7 ON-GOING OPPORTUNITY FOR QUALIFICATION.....	26
A6.8 PRIORITY OF DOCUMENTS	26
A6.9 CERTIFICATIONS.....	26
A6.10 APPLICABLE LAWS.....	26
A6.11 INSURANCE	26
B. BID SOLICITATION.....	27

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

B6.1	BID SOLICITATION DOCUMENTS.....	27
B6.2	BID SOLICITATION PROCESS.....	28
C.	RESULTING CONTRACT CLAUSES.....	32
C6.1	GENERAL	32
ANNEX A	- REQUIREMENT	33
1.0	TYPICAL SERVICES.....	33
2.0	PROJECT BRIEF / TERMS OF REFERENCE/REQUIRED SERVICES.....	34
ANNEX B	ROTATIONAL LISTS.....	69
ANNEX C	SECURITY REQUIREMENTS CHECK LIST	70
ANNEX D	DOING BUSINESS	71

PART 1 – GENERAL INFORMATION

1.1 Introduction

The Request for Supply Arrangements (RFSA) is divided into six parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Supplier Instructions: provides the instructions applicable to the clauses and conditions of the RFSA;
- Part 3 Arrangement Preparation Instructions: provides suppliers with instructions on how to prepare the arrangement to address the evaluation criteria specified;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria which must be addressed in the arrangement and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided; and
- Part 6 6A, Supply Arrangement, 6B, Bid Solicitation, and 6C, Resulting Contract Clauses:
 - 6A, includes the Supply Arrangement (SA) with the applicable clauses and conditions;
 - 6B, includes the instructions for the bid solicitation process within the scope of the SA;
 - 6C, includes general information for the conditions which will apply to any contract entered into pursuant to the SA.

The Annexes include the Requirement, the Basis of Payment and any other annexes.

1.2 Summary

Public Works and Government Services Canada requires the provision of Architecture and Interior Design services for projects in the following locations in Atlantic Canada: Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland and Labrador. Any locations subject to any of the Comprehensive Land Claim Agreements are excluded from the Supply Arrangement.

This Architecture and Interior Design Supply Arrangement includes six (6) Service Streams overall.

- A1: Architecture - Very Low Complexity / Risk
- A2: Architecture – Low Complexity / Risk
- A3: Architecture - Medium Complexity / Risk
- A4: Architecture – High Complexity / Risk
- ID1 Interior Design – Lower Complexity / Risk
- ID2 Interior Design – Higher Complexity / Risk

Suppliers must identify the geographic area(s) in which they propose to provide services. Suppliers are also requested to indicate at least one to a maximum of three Service Stream(s) for which they wish to qualify. Suppliers are only required to submit one arrangement regardless of their number of proposed Service Streams. Suppliers may propose a maximum of three out of six streams of service. Suppliers may choose one or more geographic regions.

There is no maximum to the number of Supply Arrangements that may be issued as result of this RFSA.

The Supply Arrangements will remain valid for a period of seven years or until such time as Canada no longer considers it advantageous to use them. The period for awarding contracts under the Supply Arrangement begins on the start date of the Supply Arrangement.

There are security requirements associated with this requirement. For additional information, consult Part 1 - General Information, and Part 6A - Supply Arrangement. For more information on personnel and organization security screening or security clauses, suppliers should refer to the [Industrial Security Program \(ISP\)](http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html) of Public Works and Government Services Canada (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>) website.

As per the Integrity Provisions under section 01 of Standard Instructions [2008](#), suppliers must provide a list of all owners and/or Directors and other associated information as required. Refer to section [4.21](#) of the Supply Manual for additional information on the Integrity Provisions.

Suppliers must provide a list of names, and other related information as stipulated, pursuant to section 01 of Standard Instructions 2008.

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

1.3 Security Requirements

Suppliers are informed that there is a strong possibility that some solicitations against the Supply Arrangement might require that the consultants and their personnel possess a Facility Security Clearance (FSC) at the SECRET level issued by the Canadian Industrial Security Directorate (CISD) of Public Works and Government Services Canada (PWGSC).

Should the successful suppliers not have the level of security indicated above, PWGSC shall sponsor the successful suppliers so CISD can initiate procedures for security clearance. CISD, by letter, shall forward documentation to the successful suppliers for completion.

Suppliers desiring sponsorship should so indicate in their covering letter with their proposal.

Successful supplier(s) issued a Supply Arrangement as a result of this RFSA, not possessing the required security clearance at time of a solicitation, will be bypassed in the selection process as detailed in Part 6B. For all bid solicitations against this supply arrangement (RFSA Part 6C) that contain a security requirement, it will be mandatory to meet the security requirements at the time of bid closing.

Suppliers are informed that there is a possibility that solicitations for certain government departments (e.g. RCMP and Correctional Services Canada (CSC)) will require their personnel to undergo additional security measures, including but not limited to a security standard screening process.

Note: There are multiple levels of personnel security screening associated with these solicitations.

1.4 Debriefings

Suppliers may request a debriefing on the results of the request for supply arrangements process. Suppliers should make the request to the Supply Arrangement Authority within 15 working days of receipt of the results of the request for supply arrangements process. The debriefing may be in writing, by telephone or in person.

1.5 Key Terms

"Supplier" (RFSA stage)

the person or entity (or, in the case of a joint venture, the persons or entities) submitting an arrangement. It does not include the parent, subsidiaries or other affiliates of the Supplier, or its subcontractors.

"Supplier"(SA stage)

means the person or entity whose name appears on the Supply Arrangement and who has become a pre-qualified supplier and been issued a Supply Arrangement;

"Supply Arrangement"

means the written arrangement between Canada and the Supplier, these general conditions, any referenced clauses and conditions, and any other document specified or referred to as forming part of the Supply Arrangement;

"Supply Arrangement Authority"

means the person designated as such in the Supply Arrangement, or by notice to the Supplier, to act as the representative of Canada in the management of the Supply Arrangement.

"Request for Supply Arrangement"

a procurement tool established by PWGSC for use by clients that allows buyers to solicit bids from a pool of pre-qualified suppliers for specific requirements. The intent is to establish a framework to permit expeditious processing of individual bid solicitations which result in legally binding contracts for the goods and services described in those bid solicitations
Supply Arrangement

"Bid Solicitation"

an invitation, verbal or written, to suppliers to submit a bid, quotation or offer.

"Responsive bid"

A bid, tender, proposal or quotation that meets all the mandatory requirements stipulated in the solicitation document.

PART 2 – SUPPLIER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for Supply Arrangements (RFSA) by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](#) (SACC) issued by Public Works and Government Services Canada.

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

Suppliers who submit an arrangement agree to be bound by the instructions, clauses and conditions of the RFSA and accept the clauses and conditions of the Supply Arrangement and resulting contract(s).

The 2008 (2014-09-25) Standard Instructions - Request for Supply Arrangements - Goods or Services, are incorporated by reference into and form part of the RFSA.

Subsection 5.4 of 2008, Standard Instructions - Request for Supply Arrangements - Goods or Services, is amended as follows:

Delete: 60 days
Insert: 120 days.

2.2 Submission of Arrangements

Arrangements must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page one of the Request for Supply Arrangements.

Due to the nature of the Request for Supply Arrangements, transmission of arrangements by facsimile to PWGSC will not be accepted.

2.3 Former Public Servant - Notification

Service contracts awarded to former public servants in receipt of a pension or a lump sum payment must bear the closest public scrutiny and reflect fairness in the spending of public funds. Therefore, the bid solicitation will require that you provide information that, were you to be the successful bidder, your status with respect to being a former public servant in receipt of a pension or a lump sum payment, will be required to report this information on the departmental websites as part of the published proactive disclosure reports generated in accordance with Treasury Board policies and directives on contracts with former public servants, [Contracting Policy Notice 2012-2](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

2.4 Federal Contractors Program for Employment Equity - Notification

The Federal Contractors Program (FCP) for employment equity requires that some contractors make a formal commitment to Employment and Social Development Canada (ESDC) - Labour to implement employment equity. In the event that this Supply Arrangement would lead to a contract subject to the Federal Contractors Program (FCP) for employment equity, the bid solicitation and resulting contract templates would include such specific requirements. Further information on the Federal Contractors Program (FCP) for employment equity can be found on [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

2.5 Enquiries - Request for Supply Arrangements

All enquiries must be submitted in writing to the Supply Arrangement Authority no later than seven (7) calendar days before the Request for Supply Arrangements (RFSA) closing date. Enquiries received after that time may not be answered.

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

2.6 Applicable Laws

The Supply Arrangement (SA) and any contract awarded under the SA must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia.

Suppliers may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of the arrangement, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the suppliers.

PART 3 – ARRANGEMENT PREPARATION INSTRUCTIONS

3.1 Arrangement Preparation Instructions

Canada requests that suppliers provide the arrangement in separately bound sections as follows:

Section I: Technical Arrangement (six hard copies – one **unbound** original and five bound copies) plus one electronic copy.

Section II: Certifications (one hard copy)

If there is a discrepancy between the wording of the electronic copy and the hard copy, the wording of the hard copy will have priority over the wording of the electronic copy.

The maximum number of pages (including text and graphics) to be submitted is as follows. The definition of a page is 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.

RFSA Section	Number of Pages	Maximum (Range: dependent on number of service stream(s) identified)
R1 Team Approach/Management of Services	4 pages	4
<ul style="list-style-type: none">There is only one R1 section per Arrangement.R1 is a maximum of 4 pages regardless of the number of proposed service streamsThe limit includes the one page curriculum vitae of the identified key contact		
R2 Past Experience of the Firm	3 pages/service stream	3 to 9
<ul style="list-style-type: none">Each project is limited to one page per service stream.It is acceptable to use the same project in multiple service streams.The page limit remains at one page per project per service stream. Please provide the one page project description per stream, even if it is a duplicate.		
R3 Key Personnel Past Experience	3 pages/service stream	3 to 9
<ul style="list-style-type: none">Each individual is limited to one page per service stream.It is acceptable to use the same individual in multiple service streams.The page limit remains at one page per individual per service stream. Please provide one c.v. per stream even if it is a duplicate.		
Arrangement: Maximum number of pages		TOTAL 10 to 22
<ul style="list-style-type: none">The maximum number of pages is dependent on the number of service streams identified.Pages that extend beyond the page limitations and any other attachments will be extracted from the arrangement and they will not be evaluated.		

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

- Covering letter
- Certifications requested in Part 5
- Front Page of the Request for Supply Arrangement document
- Front Page of the Revision(s) to the Request for Supply Arrangement document
- Mandatory Items M1 to M4
- Table of contents
- Attachment 2

Canada requests that suppliers follow the below format instructions when preparing their arrangement

- use 8.5 x 11 inch (216 mm x 279 mm) paper;
- use a numbering system that corresponds to that of the Request for Supply Arrangements.
- Minimum font size – 11 point Times or equal
- Minimum margins -12 mm left, right, top and bottom
- Double-side submissions are preferred

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

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

Section I: Technical Arrangement

Suppliers must identify in their arrangement their Service Stream(s) and the geographical region(s).

In the technical arrangement, suppliers should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Certifications

Suppliers must submit the certifications required under Part 5.

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

PART 4 – EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Arrangements will be assessed in accordance with the entire requirement of the Request for Supply Arrangements.
- (b) An evaluation team composed of representatives of Canada will evaluate the arrangements.

4.1.1 Technical Evaluation

The mandatory and point rated technical evaluations are included in Attachment 1.

4.2 Basis of Selection

The Basis of Selection is included in Attachment 1.

PART 5 - CERTIFICATIONS

Suppliers must provide the required certifications and associated information to be issued a supply arrangement (SA).

The certifications provided by suppliers to Canada are subject to verification by Canada at all times. Canada will declare an arrangement non-responsive, or will declare a contractor in default in carrying out any of its obligations under any resulting contracts, if any certification made by the Supplier is found to be untrue whether made knowingly or unknowingly during the arrangement evaluation period, or during the period of any supply arrangement arising from this RFSA and any resulting contracts.

The Supply Arrangement Authority will have the right to ask for additional information to verify the Supplier's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Supply Arrangement Authority may render the arrangement non-responsive, or constitute a default under the Contract.

5.1 Certifications Precedent to Issuance of a Supply Arrangement

The certifications listed below should be completed and submitted with the arrangement, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Supply Arrangement Authority will inform the Supplier of a time frame within which to provide the information. Failure to comply with the request of the Supply Arrangement Authority and to provide the certifications within the time frame provided will render the arrangement non-responsive.

5.1.1 Integrity Provisions - Associated Information

By submitting an arrangement, the Supplier certifies that the Supplier and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Arrangement of Standard Instructions [2008](#). The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

5.1.2 Additional Certifications Precedent to Issuance of a Supply Arrangement

5.1.2.1 Status and Availability of Resources

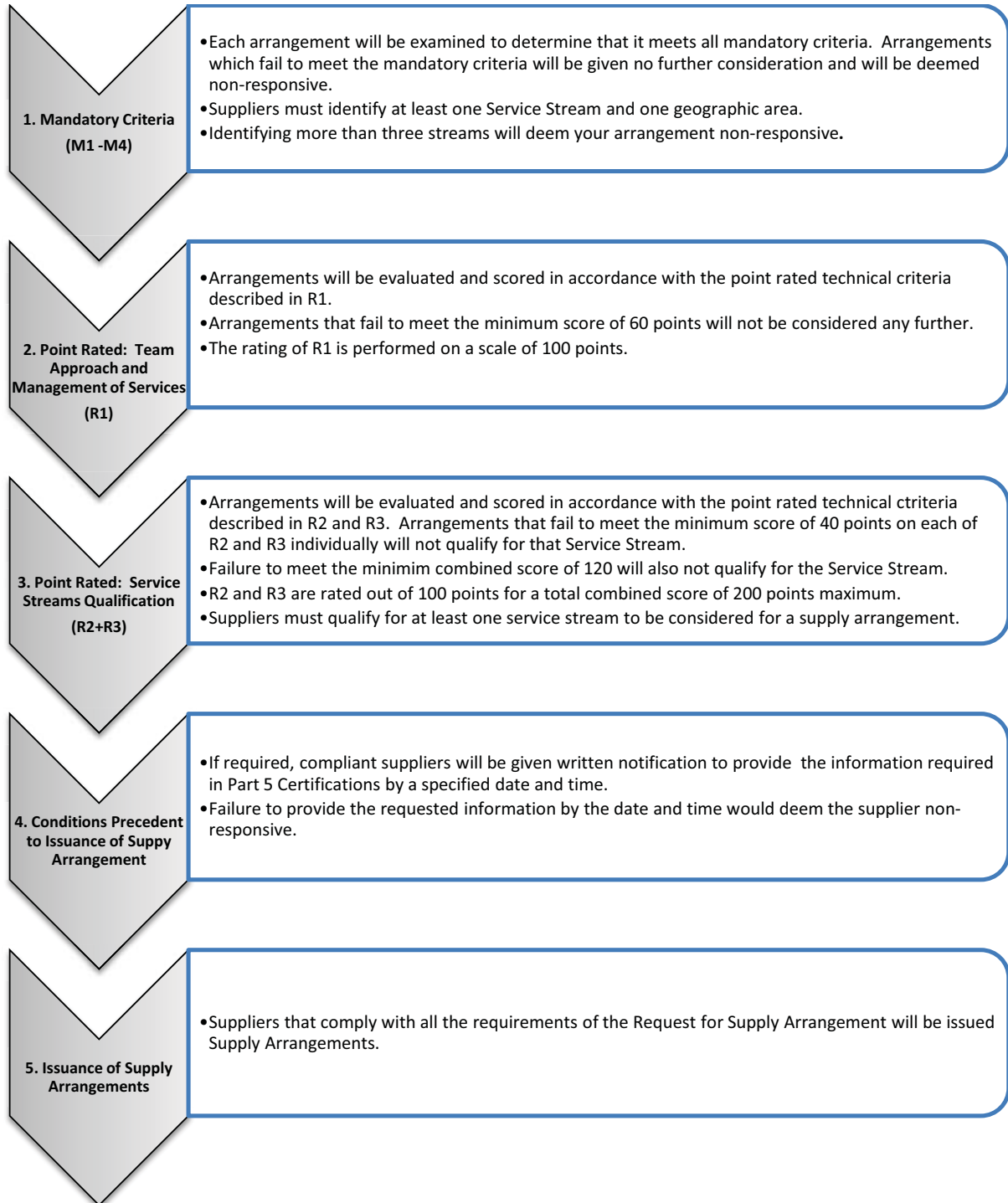
SACC Manual clause [S3005T](#) (2008-12-12) Status and Availability of Resources.

5.1.2.2 Education and Experience

SACC Manual clause [S1010T](#) (2008-12-12) Education and Experience

ATTACHMENT 1 ARRANGEMENT EVALUATION PROCEDURES

Basis of Selection



Mandatory Requirements (M)

M1	Identify Geographic Region(s). Minimum 1 Failure to identify a region will deem your arrangement non-responsive.
Clearly indicate for which of the following provinces you wish to provide services: Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland & Labrador.	

M2	Identify Service Stream(s) – Minimum 1 Maximum 3 Identifying more than three service streams will deem your arrangement non-responsive.
A1	Architecture
Very Low Complexity / Risk	<ul style="list-style-type: none"> • routine and straightforward projects • often < \$750 K construction value anticipated • anticipated short construction time (e.g. often six months or less) • little to no risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or low risk of a complex program, scheduling or phasing requirement • sample project types may include: shed, warehouse, storage, maintenance building, general purpose office building; low value upgrades, renovations or system replacements; studies or investigations • possibly single discipline projects
A2	Architecture
Low Complexity / Risk	<ul style="list-style-type: none"> • relatively straightforward projects • often \$750 K - \$1.5 million construction value • anticipated relatively short construction time (e.g. often between six and twelve months) • low risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or a complex program, scheduling or phasing requirement • sample projects may include: specialized storage facilities, manufacturing or processing facilities, general purpose office building, simpler projects involving policing facilities; or renovations to same • likely more than one discipline projects
A3	Architecture
Medium Complexity / Risk	<ul style="list-style-type: none"> • often \$1.5 – \$4.0 million construction value • anticipated construction time often greater than twelve months • moderate risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or a complex program, scheduling or phasing requirement • sample projects may include: special maintenance garage, emergency operations center, general purpose office space with some special purpose space, policing facilities, minimum security detention facilities; or renovations to same • likely a multi-disciplinary project
A4	Architecture
High Complexity / Risk	<ul style="list-style-type: none"> • highest complexity / risk category for projects delivered via this Supply Arrangement • often greater than \$4 million construction value • high risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or a complex program, scheduling or phasing requirement • sample projects may include: laboratory or science facilities, medium or maximum security detention center, policing facilities, general purpose office space with special purpose space; or renovations to same • most likely a multi-disciplinary project

ID1	Interior Design
Lower Complexity / Risk:	<ul style="list-style-type: none"> • smaller scale tenant fit-up, re-fit or space optimization – with mostly general purpose office space – in leased or crown-owned facilities • smaller scale interiors only projects, e.g.: programming, space layouts; selecting new or upgraded finishes, materials, or millwork; base building common area improvements (e.g.: lobbies, washrooms); furniture recommendations, furniture layouts and/or furniture specifications and/or workstation prototypes • lower risk of a complex program, scheduling or phasing requirement
ID2	Interior Design
Higher Complexity / Risk:	<ul style="list-style-type: none"> • larger scale tenant fit-up, re-fit, or space optimization – with some special purpose space, or other known complexities / unresolved issues – in leased or crown-owned facilities • larger scale interiors only projects, e.g.: programming, space layouts; selecting new or upgraded finishes, materials, or millwork; base building common area improvements (e.g.: lobbies, washrooms); furniture recommendations, furniture layouts and/or furniture specifications and/or workstation prototypes • higher risk of a complex program, scheduling or phasing requirement

M3	Licensing Requirements
	Applicable to suppliers applying for Architectural service streams A1, A2, A3, and A4
	<p>The supplier must be an architect, licensed in the province of Nova Scotia and/or New Brunswick and/or Prince Edward Island and/or Newfoundland and Labrador, able to provide the necessary professional services to the full extent that may be required by provincial law.</p> <p>If the supplier is licensed to practice in only one of the four provinces and indicates they can provide services in more than one province, then that supplier must be eligible and willing to become licensed in the province in which they are not licensed.</p>

M4	Licensing Requirements
	Applicable to suppliers applying for Interior Design ID1 and ID2
	<p>The supplier must be a member of the registered class or equal class of membership of the regulating provincial Interior Design Association in the province of Nova Scotia and/or New Brunswick.</p> <p>If the supplier is a member in only one of the four provinces and indicates they can provide services in more than one province, suppliers must be registered members, or be eligible and willing to become registered members in any province in which they are indicating that they can provide services where such Provincial Design Association exist (currently Nova Scotia or New Brunswick; or Newfoundland & Labrador and/or Prince Edward Island should they form a regulating Provincial Design Association, with either a Practice or Title Act, during the supply arrangement).</p>

Rated Requirements (R)

Arrangements meeting the mandatory requirements will be evaluated in accordance with the following criteria.

The clarity of the writing will form part of the evaluation (use of language, document structure, conciseness and completeness of the response).

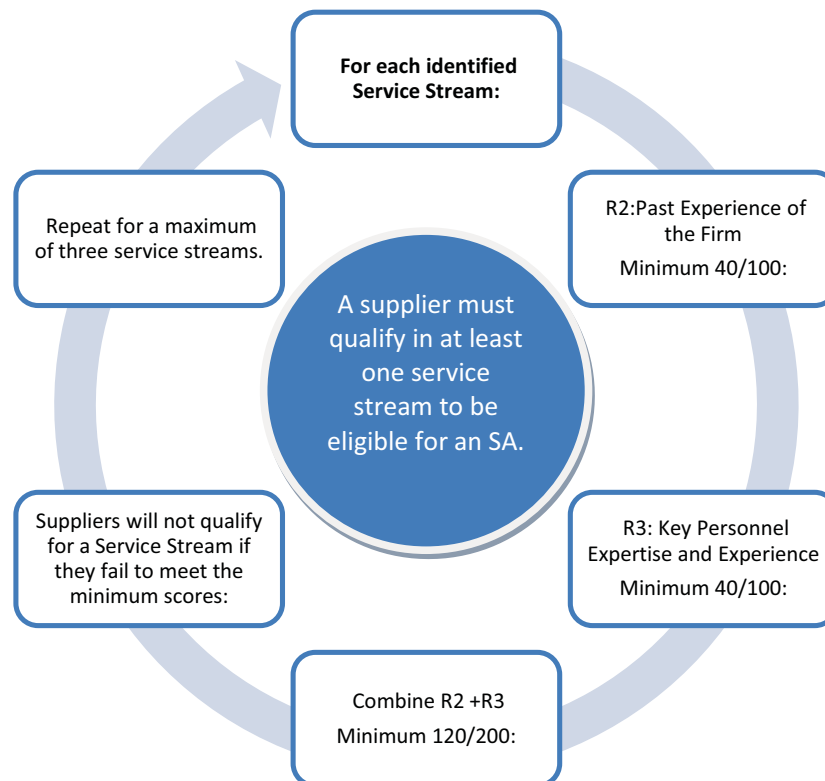
Higher consideration will be given to the appropriate significant involvement of senior personnel in key positions.

R1	Team Approach / Management of Services
Maximum 100 points	
Minimum 60 points	
Failure to meet the minimum score will deem the supplier non-responsive.	
<p>The supplier must demonstrate how the team will be organized and managed in its approach and methodology in the delivery of the Required Services on a typical project (demonstrating, for example, means of ensuring continuous and consistent control, effective communication, and production efficiency). See Annex A, requirement for an example of the types of Required Services that may be requested on a project.</p>	
<p>The supplier may provide background on their firm, its stability and longevity in order to substantiate the below criteria.</p>	
<p>The supplier should ensure that the narrative provided to address R1 covers the above-noted areas with respect to their internal team and structure, but also with respect to their management of potential sub-consultant teams during multi-disciplinary projects, to the extent that this is pertinent, given the Service Streams for which they are applying.</p>	
a. Identify a Supply Arrangement Primary Contact; and define the roles and responsibilities of Primary Contact; and provide a one page curriculum vitae (cv) for Primary Contact	15 points
b. Assignment of the resources and availability of back-up personnel	20 points
c. Management and organization (reporting structure) proposed for typical projects	10 points
d. Quality control techniques to be utilized by the supplier on each project	40 points
e. Demonstration of how the team intends to meet the 'Project Response Time Requirements'	15 points

Service Stream Qualification

Suppliers that meet the minimum score in R1 will proceed to the qualification process of their identified Service Stream(s).

Suppliers must demonstrate an acceptable level of expertise and experience in the Service Stream for which they wish to qualify.



R2	Past Experience of the Firm						
Maximum 100 pts	Minimum 40 pts						
<p>Demonstrate that the firm has recently completed, within the past 10 years, a range of projects, similar in size and complexity to the Service Stream identified.</p> <p>Projects should demonstrate participation at all stages of the design/construction process (preliminary, concept, detailed design and tendering and construction). An example of the Required Services that may be required on a specific project is provided in Annex A.</p> <p>Project descriptions are limited to one page per project; pages exceeding this limitation will not be reviewed. If more than three projects are submitted, only the first three projects, in the order of appearance /received /presented, will be reviewed.</p> <p>For each project provide the following client information - name, address, phone and email of client contact at working level. If deemed necessary, references may be contacted to verify project details.</p> <p>For projects which were carried in joint venture, indicate the responsibilities of each of the involved firms, being specific regarding the roles and experience of the Supplier.</p> <table><tr><td data-bbox="253 940 1218 1060">a. Provide a brief description of three (3) relevant projects. For each project indicate the project title, supplier roles/responsibilities, names of key personnel responsible for project delivery and the dates the services were provided and how this project is comparable/relevant to the requested service stream.</td><td data-bbox="1218 940 1425 1060">20 points</td></tr><tr><td data-bbox="253 1115 1218 1262">b. Scope of services rendered, project objectives and description, constraints and deliverables; budget and schedule control and management, design philosophy and challenges overcome. Suppliers should describe their experience in relation to architecture and interior design, but also in relation to their role as prime consultant leading a multidisciplinary team, where applicable.</td><td data-bbox="1218 1115 1425 1262">40 points</td></tr><tr><td data-bbox="253 1289 1218 1352">c. Describe the accomplishments, achievements and experience either as a prime consultant or in a sub-consultant capacity on projects.</td><td data-bbox="1218 1289 1425 1352">40 points</td></tr></table>		a. Provide a brief description of three (3) relevant projects. For each project indicate the project title, supplier roles/responsibilities, names of key personnel responsible for project delivery and the dates the services were provided and how this project is comparable/relevant to the requested service stream.	20 points	b. Scope of services rendered, project objectives and description, constraints and deliverables; budget and schedule control and management, design philosophy and challenges overcome. Suppliers should describe their experience in relation to architecture and interior design, but also in relation to their role as prime consultant leading a multidisciplinary team, where applicable.	40 points	c. Describe the accomplishments, achievements and experience either as a prime consultant or in a sub-consultant capacity on projects.	40 points
a. Provide a brief description of three (3) relevant projects. For each project indicate the project title, supplier roles/responsibilities, names of key personnel responsible for project delivery and the dates the services were provided and how this project is comparable/relevant to the requested service stream.	20 points						
b. Scope of services rendered, project objectives and description, constraints and deliverables; budget and schedule control and management, design philosophy and challenges overcome. Suppliers should describe their experience in relation to architecture and interior design, but also in relation to their role as prime consultant leading a multidisciplinary team, where applicable.	40 points						
c. Describe the accomplishments, achievements and experience either as a prime consultant or in a sub-consultant capacity on projects.	40 points						

R3	Key Personnel Expertise and Experience	
	Maximum 100 points	Minimum 40 points
<p>The supplier should demonstrate that they have key personnel with the capability, capacity and expertise in the identified Service Stream. Please demonstrate expertise/experience in accordance with the following:</p>		
Service Stream	Key Personnel Minimum Years of Experience as a licensed Architect or registered Interior Designer	
A1, ID1	6 years	
A2, A3, A4 and ID2	10 years	
<p>A maximum of three key personnel may be proposed per identified Service Stream. The curriculum vitae (cv) are limited to one page per person per Service Stream. Suppliers may propose the same individual on multiple Service Streams; however, they are still limited to one per page per Service Stream. Pages that exceed this one page per person per service stream limitation will not be reviewed.</p>		
a. Each cv should clearly indicate the years of experience the key personnel has on pertinent projects in the Service Stream identified. Also indicate the professional accreditation of the key personnel and their membership in provincial professional associations.	40 points	
b. Identify the personnel's total years of experience, the number of years with the firm and their role on past projects.	40 points	
c. Accomplishments/achievements/awards	20 points	

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

Evaluation Summary

Criterion	Sub-criterion	Weight Factor	Rating 0,2,4,6,8 or 10	Weighted Score
R1: Team Approach / Management of Services	a	1.5	0-10	0-15
	b	2	0-10	0-20
	c	1	0-10	0-10
	d	4	0-10	0-40
	e	1.5	0-10	0-15
To be considered further, suppliers must achieve a minimum R1 Rating of 60 points out of the 100 points available.				
R2 Past Experience of the Firm	a	2	0-10	0-20
	b	4	0-10	0-40
	c	4	0-10	0-40
R3 Key Personnel Expertise and Experience	a	4	0-10	0-40
	b	4	0-10	0-40
	c	2	0-10	0-20
To qualify for a Service Stream the supplier must achieve a minimum rating on each R2 and R3 of 40 points out of the 100 points available and a minimum of 120 out of the 200 points available on the combined Rating (R2+R3).				

Generic Evaluation Table

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

	INADEQUATE	WEAK	ADEQUATE	FULLY SATISFACTORY	STRONG
0 points	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
	Supplier does not possess the qualifications and experience	Supplier lacks qualifications and experience	Supplier has an acceptable level of qualifications and experience	Supplier is qualified and experienced	Supplier 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 the 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 capacity to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

ATTACHMENT 2 – SUPPLIER INFORMATION

The supplier is requested to complete the following Attachment and include it with their arrangement.

Name of Supplier					
M1	Identify Geographic Region(s). Minimum 1				
<input type="checkbox"/> Nova Scotia	<input type="checkbox"/> New Brunswick	<input type="checkbox"/> Prince Edward Island	<input type="checkbox"/> Newfoundland & Labrador		
M2	Identify Service Stream(s) Minimum 1 Maximum 3				
<input type="checkbox"/> A1	<input type="checkbox"/> A2	<input type="checkbox"/> A3	<input type="checkbox"/> A4	<input type="checkbox"/> ID1	<input type="checkbox"/> ID2
M3	Licensing Requirements for Architectural service streams A1, A2, A3, and A4				
Suppliers are requested to indicate their current license(s) held and how they intend to meet the pertinent provincial licensing requirements in their proposed geographical areas. In the space below, either provide this information or indicate where this information is located within their proposal.					
M4	Licensing Requirements for Interior Design service streams ID1 and ID2				
Suppliers are requested to indicate their current membership(s) held and how they intend to meet the pertinent provincial membership requirements in their proposed geographical areas. In the space below, either provide this information or indicate where this information is located within their proposal.					
Street Address:			Mailing Address:		

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

Telephone Number:	Fax Number:
Procurement Business Number:	
Type of Organization:	
<input type="checkbox"/> Corporation	<input type="checkbox"/> Joint Venture
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Partnership
During the proposal evaluation period, PWGSC contact will be with the following person:	
Name:	
Telephone Number:	
E-mail:	
In any resultant SA, PWGSC should send solicitations to the following e-mail:	
E-mail:	

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

PART 6 – SUPPLY ARRANGEMENT AND RESULTING CONTRACT CLAUSES

A. SUPPLY ARRANGEMENT

A6.1 Arrangement

The Supply Arrangement covers the Work described in the Requirement at Annex A.

A6.2 Security Requirements

The following security requirements (SRCL and related clauses provided by ISP) apply and form part of the Supply Arrangement.

1. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid Facility Security Clearance at the level of SECRET, issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).
2. The Contractor/Offeror personnel requiring access to sensitive work site(s) must EACH hold a valid personnel security screening at the level of RELIABILITY or SECRET, as required, granted or approved by CISD/PWGSC.
3. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.
4. The Contractor/Offeror must comply with the provisions of the:
 - (a) Security Requirements Check List and security guide (if applicable), attached at Annex C
 - (b) Industrial Security Manual (Latest Edition).

NOTE: There are multiple levels of personnel security screenings associated with this file. In this instance, a Security Classification Guide must be added to the SRCL clarifying these screenings. The Security Classification Guide is normally generated by the organization's project authority and/or security authority.

A6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Supply Arrangement and resulting contract(s) 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.

A6.3.1 General Conditions

2020 (2014-09-25) General Conditions - Supply Arrangement - Goods or Services, apply to and form part of the Supply Arrangement.

A6.3.2 Supply Arrangement Reporting

The Supplier must compile and maintain records on its provision of goods, services or both to the federal government under contracts resulting from the Supply Arrangement. This data must include all purchases, including those paid for by a Government of Canada Acquisition Card.

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

If some data is not available, the reason must be indicated. If no goods or services are provided during a given period, the Supplier must still provide a "NIL" report.

The data must be submitted on a quarterly basis to the Supply Arrangement Authority.

The quarterly reporting periods are defined as follows:

1st quarter: April 1 to June 30;
2nd quarter: July 1 to September 30;
3rd quarter: October 1 to December 31;
4th quarter: January 1 to March 31.

The data must be submitted to the Supply Arrangement Authority no later than 30 calendar days after the end of the reporting period.

A6.4 Term of Supply Arrangement

6.4.1 Period of the Supply Arrangement

The period for awarding contracts under the Supply Arrangement is seven years from the date of supply arrangement.

A6.5 Authorities

6.5.1 Supply Arrangement Authority

The Supply Arrangement Authority is:

Tanya Allen
Supply Specialist
Public Works and Government Services Canada
Atlantic Region, Acquisitions
1713 Bedford Row
P.O. Box 2247
Halifax, NS B3J 3C9

E-mail address: tanya.allen@pwgsc-tpsgc.gc.ca
Telephone: 902-496-5142
Facsimile: 902-496-5016

The Supply Arrangement Authority is responsible for the issuance of the Supply Arrangement, its administration and its revision, if applicable.

6.5.2 Supplier's Representative

Name: _____
Title: _____
Address: _____

Email: _____
Telephone: _____

A6.6 Identified Users

The Identified User is: Architectural and Engineering Resources, Professional and Technical Services, Public Works Government Services Canada, Atlantic Region.

A6.7 On-going Opportunity for Qualification

A Notice will be posted once a year on the Government Electronic Tendering Service (GETS) to allow new suppliers to become qualified. Existing qualified suppliers, who have been issued a supply arrangement, will not be required to submit a new arrangement but may refresh their arrangement to modify their Service Streams.

A6.8 Priority of Documents

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

- (a) the articles of the Supply Arrangement;
- (b) the general conditions 2020 (2014-09-25), General Conditions - Supply Arrangement - Goods or Services
- (c) Annex A, Requirement;
- (d) Annex B, Supplier List;
- (e) Annex C, Security Requirements Check List
- (f) Annex D, Doing Business
- (g) the Supplier's arrangement dated _____

A6.9 Certifications

6.9.1 Compliance

The continuous compliance with the certifications provided by the Supplier in its arrangement and the ongoing cooperation in providing associated information are conditions of issuance of the Supply Arrangement (SA). Certifications are subject to verification by Canada during the entire period of the SA and of any resulting contract that would continue beyond the period of the SA. If the Supplier does not comply with any certification, fails to provide the associated information, or if it is determined that any certification made by the Supplier in the arrangement is untrue, whether made knowingly or unknowingly, Canada has the right to terminate any resulting contract for default and suspend or cancel the Supply Arrangement.

A6.10 Applicable Laws

The Supply Arrangement (SA) and any contract resulting from the SA must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia.

A6.11 Insurance

SACC Manual Clause R1250D (2012-07-16) General Condition (GC) 9 - Indemnification and Insurance

B. BID SOLICITATION

B6.1 Bid Solicitation Documents

The bid solicitation will contain as a minimum the following:

- (a) security requirements;
- (b) a complete description of the Work to be performed;
- (c) R1410T, General Instructions (GI) – Architectural and/or Engineering Services – Request for Proposal Subsection 4 and 5 of Section G11 Integrity Provisions – Proposal, is amended as follows:

Subsections 04 and 05 of Section 01, Integrity Provisions – Proposal, of the General Instruction (GI) – Architectural and/or Engineering Services – Request for Proposal R1410T incorporated by reference above are deleted in their entirety and replaced with the following:

4. Bidders who are incorporated or who are a sole proprietorship, including those bidding as a joint venture, have already provided a list of names of all individuals who are directors of the Bidder, or the name of the owner, at the time of submitting an arrangement under the Request for Supply Arrangement (RFSA). These bidders must diligently inform Canada in writing of any changes affecting the list of directors during this procurement process as well as during the contract period.

5. Canada may, at any time, request that a bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form - PWGSC-TPSGC 229) for any or all individuals mentioned above within a specified time frame. Failure to provide such consent forms and associated information within the time frame provided, or failure to cooperate to the verification process, will result in the bid being declared non-responsive.

- (d) bid preparation instructions;
- (e) instructions for the submission of bids (address for submission of bids, bid closing date and time);
- (f) evaluation procedures and basis of selection;
- (g) certifications;

Federal Contractors Program (FCP) for Employment Equity - Notification

- SACC Manual [A3005T](#), [A3010T](#) for service requirements when specific individuals will be proposed for the work;

5.1.1 Integrity Provisions - Associated Information

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Proposal of General instruction – Architectural and/or Engineering Services- Request for Proposal R1410T. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

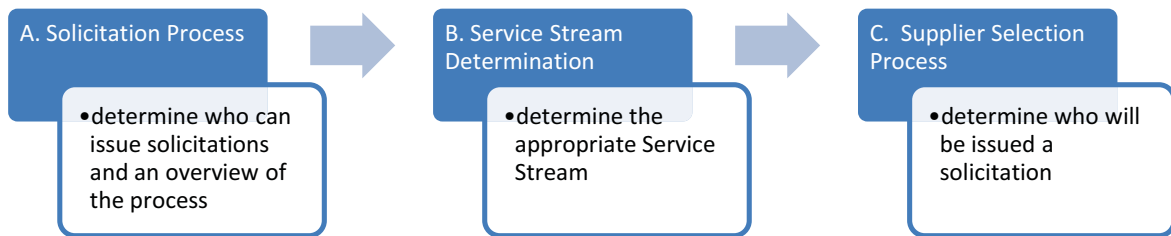
- (i) conditions of the resulting contract.

B6.2 Bid Solicitation Process

6.2.1 Proposals will be solicited for specific requirements within the scope of the Supply Arrangement (SA) from suppliers who have been issued a SA.

The following explains how government personnel will utilize this SA.

6.2.2 Selection Process:



A. Solicitation Process

- Proposals will be solicited for specific requirements within the scope of the Supply Arrangement from suppliers who have been issued a SA.
- The responsibility for the bid solicitation process and award of contracts will depend on the estimated fees of the proposed service (Identified User versus PWGSC Acquisitions)
- Specific Security Requirements will be identified at the time of solicitation and will be mandatory upon bid closing
- Bid Response time will vary depending on the complexity of the project.
- The evaluation procedures and basis of selection for each requirement will be unique to each bid solicitation issued.
- Treasury Board Approval will be required in the event the recommended contractor for award is a Former Public Servant (FPS) as identified under the policy and the contract value is \$25,000 and over (applicable taxes included) for non-competitive requirements and \$100,000 and over (applicable taxes included) for competitive requirements.
- Solicitations will not be issued for deliveries within a Comprehensive Land Claims Settlement Area (CLCSA). All requirements requiring deliveries in a CLCSA are to be submitted to PWGSC for individual processing.

Identified Users
(Part6A, 6. Identified Users)

<\$75,000

- Invited suppliers will be requested via e-mail for a technical/financial proposal
- Bids by email are permitted
- Identified users will sign and approve the contract
- Identified Users must determine whether they have the delegation of authority in order to proceed with any of the following thresholds. If Identified Users do not have delegation of authority to proceed, the requirement must be submitted to PWGSC Contracting Authority for processing.
- Forms, PWGSC-TPSGC 9400-3 and PWGSC-TPSGC 9400-4, will be used as the first pages of the bid solicitation document and the resulting contract document, respectively. These forms are available on the Electronic Forms Catalogue Website, http://publiservice-app.tpsgc-pwgsc.gc.ca/forms/text/search_for_forms-e.html.

PWGSC Acquisitions
>\$75,000 to <\$1M

- A Notice of proposed procurement (NPP) will be posted on GETS
- Invited suppliers will be requested via e-mail for a technical/financial proposal
- Bids are to be sent to the Bid Receiving Unit identified on the front page of the solicitation

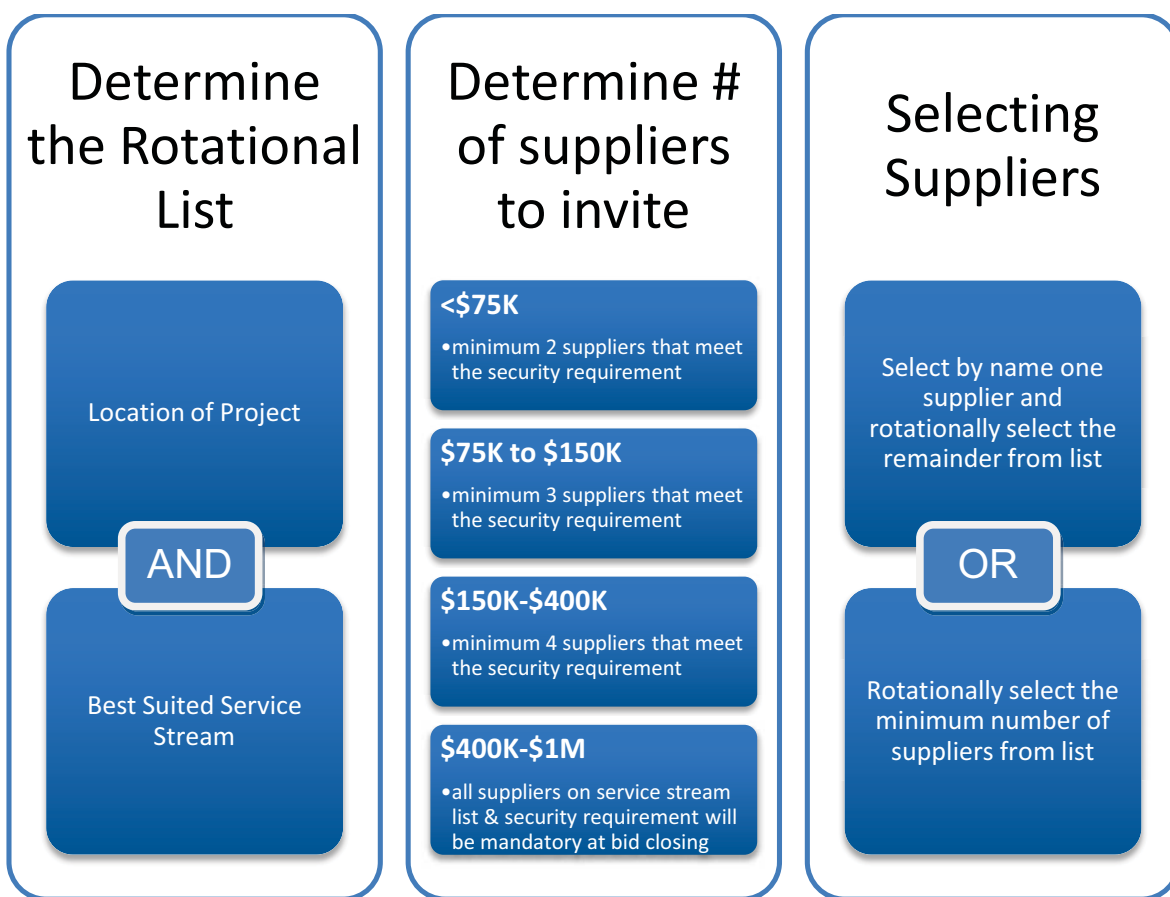
B. Service Stream Determination

- PWGSC will use the service stream that best suits the project.
- The estimated construction or project costs will not be the only determining factor. PWGSC technical project personnel will assess a proposed project's scope, complexity, risk, estimated construction or project costs to determine the service stream.
- This is the first step in determining the rotational list to use in Annex B.

A1 Architectural 1	A2 Architectural 2	A3 Architectural 3	A4 Architectural 4	Interior Design	
				ID1 Interior Design 1	ID2 Interior Design 2
often < \$750 K construction value anticipated	often \$750 K - \$1.5 million construction value	often \$1.5 - \$4.0 million construction value	highest complexity / risk category for projects delivered via this Supply Arrangement	smaller scale tenant fit-up, re-fit or space optimization – with mostly general purpose office space – in leased or crown-owned facilities	larger scale tenant fit-up, re-fit, or space optimization – with some special purpose space, or other known complexities / unresolved issues – in leased or crown-owned facilities
anticipated short construction time (e.g. often six months or less)	anticipated relatively short construction time (e.g. often between six and twelve months)	anticipated construction time often greater than twelve months	often greater than \$4 million construction value	smaller scale interiors only projects, e.g.: programming, space layouts; selecting new or upgraded finishes, materials, or millwork; base building common area improvements (e.g.: lobbies, washrooms); furniture recommendations; furniture layouts and/or furniture specifications and/or workstation prototypes	larger scale interiors only projects, e.g.: programming, space layouts; selecting new or upgraded finishes, materials, or millwork; base building common area improvements (e.g.: lobbies, washrooms); furniture recommendations; furniture layouts and/or furniture specifications and/or workstation prototypes
little to no risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or low risk of a complex program, scheduling or phasing requirement	low risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or a complex program, scheduling or phasing requirement	moderate risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or a complex program, scheduling or phasing requirement	high risk of sensitivity (e.g. environmental or media profile or heritage building or high security) or a complex program, scheduling or phasing requirement	lower risk of a complex program, scheduling or phasing requirement	higher risk of a complex program, scheduling or phasing requirement
sample project types may include: shed, warehouse, storage, maintenance building, general purpose office building; low value upgrades, renovations or system replacements; studies or investigations	sample projects may include: specialized storage facilities, manufacturing or processing facilities, general purpose office building, simpler projects involving policing facilities; or renovations to same	sample projects may include: special maintenance garage, emergency operations center, general purpose office space with some special purpose space, policing facilities, minimum security detention facilities; or renovations to same	sample projects may include: laboratory or science facilities, medium or maximum security detention center, policing facilities, general purpose office space with special purpose space; or renovations to same		
possibly single discipline projects	likely more than one discipline projects	likely a multi-disciplinary project	most likely a multi-disciplinary project		

C Supplier Selection Process

- The geographical location of the project will be determined by the physical location of the work, not the location of the government department or PWGSC office requesting the services.
- The **estimated consultant fees** will determine the supplier selection process to be used
- Should there not be enough suppliers in any one service stream to meet the minimum selection criteria the process will be expanded to include suppliers in the next highest service stream within the same discipline.
- Should there not be enough suppliers to meet the minimum selection criteria the selection process will be expanded to include all geographical areas.



C. RESULTING CONTRACT CLAUSES

C6.1 General

The conditions of any contract awarded under the Supply Arrangement will be in accordance with the resulting contract clauses of the template used for the bid solicitation.

For any contract to be awarded using the templates in the Annexes:

- (a) For requirements less than 100K, the below listed general conditions will apply to the resulting contract;
 - R1210D (2015-04-01), General Conditions (GC) 1 - General Provisions
 - R1215D (2014-06-26), General Conditions (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
 - R1650D (2015-02-25), General Condition (GC) 9 - Indemnification and Insurance
- (b) For requirements greater than \$100K, the below listed general conditions will apply to the resulting contract.
 - R1210D (2015-04-01), General Condition (GC) 1 - General Provisions
 - 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 (2015-02-25), General Condition (GC) 9 - Indemnification and Insurance

Note: The latest versions of the template and terms and conditions will be used at time of bid solicitation.

ANNEX A - REQUIREMENT

1.0 Typical services

Typical services which may be sought under each of the Service Streams may include, but are not limited to:

1) Architecture (A) Service Streams

- A1 Architecture - Very Low Complexity / Risk
- A2 Architecture – Low Complexity / Risk
- A3 Architecture - Medium Complexity / Risk
- A4 Architecture – High Complexity / Risk

Sample Projects and Services:

- Pre-planning and Feasibility Studies
- Building Condition Reports
- Various other studies and/or reports
- Long-term Accommodation Plans
- Master planning exercises for campuses of buildings
- Functional Programming
- Site Selection processes
- Concept Design
- Design Development
- Construction Documents (working drawings and specifications)
- Services during Bidding, Construction, and Post-Construction
- New Building Construction
- Renovations
- Building or System Upgrades
- Mid-life Re-fits
- Testing, Inspection, and Analysis Services
- As-measured drawings
- Commissioning
- Full Project Services, including Coordination, Contracting with & Management of Sub-Consultant Teams and their deliverables & documents

2) Interior Design (ID) Service Streams

- ID1 Interior Design – Lower Complexity / Risk
- ID2 Interior Design – Higher Complexity / Risk

Sample Projects and Services:

- Pre-planning and Feasibility Studies
- Various other studies and/or reports
- Long-term Accommodation Plans
- Workplace 2.0 (or future) Fit-up Standard Analysis
- Functional Programs
- Space Relationship / Bubble Diagrams / Block Planning
- Space Planning
- Furniture and Equipment (F & E) inventory and evaluation

-
- F & E recommendations (e.g.: free-standing, systems furniture, height adjustability, and size)
 - F & E configuration and layouts (including workstation prototype design)
 - Custom furniture and millwork design
 - Concept Design, Design Development, Construction Documents, Services during Bidding, Construction, and Post-Construction for Interior Building Renovations and Tenant Fit-up and Re-fit Projects
 - Commissioning, Project Coordination, Management of Sub-Consultant Teams and their deliverables & documents

When projects arise via this Supply Arrangement which require multi-disciplinary teams, it is expected that the Supply Arrangement holder, acting as the prime consultant, (either the Architectural (A1, A2, A3 and A4) or Interior Design firm (ID1 and ID2), whichever is appropriate for the solicitation at hand), will be expected to contract with, manage and coordinate the efforts of the required sub-consultants. Services from the Supply Arrangement holder, or prime consultant, in this role will include:

- Contracting with, Directing, Monitoring, and Managing of qualified typical sub-consultants and their efforts (e.g. Structural, Mechanical, Electrical, Cost Planning) on routine multi-disciplinary projects.
- When required, Contracting with, Directing, Monitoring, and Managing of specialty sub-consultants and their efforts (e.g.: Civil, Municipal, &/or Geotechnical Engineers, Landscape Architects, Wind & Snow Studies Consultants, LEED Consultants, Acoustical Consultants, Building Code Consultants, Fire Protection Engineers, Building Envelope Specialists, Security Consultants, Airport Specialists, Food Service / Kitchen Consultants, Specifications Writers, Hardware Specialist, Value Engineering Consultants, Construction Managers, Project Managers, Scheduling Specialists, Building Condition Report specialists, Commissioning Specialists, and any other specialists appropriate to a given solicitation)
- Quality Control, Coordination of Project Documentation and Deliverables, and Conflict Resolution for the multi-disciplinary team.

2.0 Project Brief / Terms of Reference/Required Services

To follow is an example of a Project Brief/Terms of Reference/Required Services that may be required for the proposed service(s) detailed above. The actual Required Service(s) (RS) requested will be detailed in the bid solicitation document and will vary depending on the scope of the project. It may include all RSs, a single RS or a combination of RSs.

General Project Objectives

- GPO 1 Project Objectives
- GPO 2 Issues

Description of Services

- PA 1 Project Administration

REQUIRED SERVICES (RS)

- RS 1 Pre-Design Services
- RS 2 Schematic Design
- RS 3 Design Development
- RS 4 Construction Documents
- RS 5 Tender Call, Bid Evaluation & Construction Contract Award
- RS 6 Construction & Contract Administration & Post Construction Warranty Review
- RS 7 Risk Management
- RS 8 Estimating and Cost Planning
- RS 9 Commissioning
- RS 10 Additional Services

GPO 1 PROJECT OBJECTIVES

Each RFP will elaborate on the specific objectives for individual projects; however, the following broader government objectives will apply to all solicitations:

GPO 1.1 Design Principles - General

- ♦ PWGSC expects the Consultant to maintain a high standard of architectural design, based upon recognized contemporary design principles. All design elements, planning, architectural, and engineering, must be fully coordinated, and consistent in adherence to good design principles.

- ♦ The level of quality is to be consistent with other Government of Canada Buildings.
- ♦ The projects are to be implemented in a sustainable environmentally responsible manner.
- ♦ Quality of materials and construction methods shall be commensurate with the type of building and the budget. Avoid experimental materials. Take into account the total life-cycling of the building.
- ♦ Operating costs must be kept to a minimum and reflect the projected operating costs in the cost plan. This is to be achieved by compliance with the Energy Budget, selection of equipment, requiring the minimum of operating personnel, and building finishes for easy maintenance, etc.
- ♦ Design for maximum flexibility in immediate and future use of space. Where possible, devise a building grid with column spacing, fenestration and service runs suited to flexible interior space arrangements.

GPO 1.2 Sustainable Development

The Canadian Federal Government has begun a series of initiatives to ensure that sustainable development principles are built into the policy of all federal organizations. Sustainable development goals will be outlined in each solicitation.

GPO 1.3 Code Compliance

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

GPO 1.4 Risk Management

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

GPO 1.5 Health and Safety

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

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

3. The Consultant will be required to develop site specific Health and Safety Plans for their personnel while working on projects awarded under the Supply Arrangement. Prior to commencement of Work, develop written Health and Safety Plan specific to the Work. Implement, maintain, and enforce Plan for entire duration of Work and until final demobilization from site.

Health and Safety Plan shall include the following components:

- 1 List of health risks and safety hazards identified by hazard assessment.
 - 2 Control measures used to mitigate risks and hazards identified.
 - 3 On-site Contingency and Emergency Response Plan as specified below.
 - 4 On-site Communication Plan as specified below.
- On-site Contingency and Emergency Response Plan shall include:
- 1 Operational procedures, evacuation measures and communication process to be implemented in the event of an emergency.
 - 2 Evacuation Plan: prior to entering the Work Site confirm escape routes, marshalling areas, and location of fire fighting equipment.
 - 3 Emergency Contacts: name and telephone number of officials from:
 - 1 Departmental Representative.
 - 2 Pertinent Federal and Provincial Departments and Authorities having jurisdiction.
 - 3 Local emergency resource organizations.

4 Harmonize Plan with Facility's Emergency Response and Evacuation Plan. Departmental Representative will provide pertinent data including name of PWGSC and Facility Management contacts.

On-site Communication Plan:

- 1 Procedures for sharing of work related safety information to subconsultants, including emergency and evacuation measures.
 - 2 List of critical work activities to be communicated with Facility Manager which have a risk of endangering health and safety of Facility users.
- Address all activities of the Work including those of subconsultants.
- Review Health and Safety Plan regularly during the Work. Update as conditions warrant to address emerging risks and hazards, such as whenever a new subconsultant arrives at Work Site.
- Departmental Representative will respond in writing, where deficiencies or concerns are noted and may request re-submission of the Plan with correction of deficiencies or concerns.

GPO 1.6 PWGSC Standards and Procedures

For standards relating to the service provisions required, please refer to the most up to date guidelines for creating Plans and Specifications (in the Atlantic Region). They can be found at:

<http://www.tpsgc-pwgsc.gc.ca/cdao-cadd-atlantique-atlantic/atl-cdao-cadd-intro-eng.html>
and

<http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/editeurs-publishers-eng.html>

GPO 2 ISSUES

GPO 2.1 Major Cost Issues

Issue: Budget Limitations

Effective cost estimating and cost control is of prime importance and shall be provided by professional quantity surveyors. The class C and Class B cost estimates shall be submitted in elemental cost analysis format.

The standard of acceptance for this format is the current issue of the elemental cost analysis format issued by the Canadian Institute of Quantity Surveyors.

The class A cost estimate shall be submitted in trade cost breakdown format. Cost estimates shall have a summary plus full back-up showing items of work, quantities, unit prices and amounts.

GPO 2.2 Major Time Issues

Issue: "out of service time frame"

It is imperative that the out of service time frame for the various projects as a result of construction be minimized as much as possible. Program operations and time frames will govern the particular allotted time frame for construction through the identified solicitation.

GPO 2.3 Major Operational Issues

Issue: Adjacent Programs

Sustainability of adjacent programs is mandatory and therefore design decisions must be sensitive to that requirement. Additional factors recognized as affecting adjacent programs are the following: reliability of systems and equipment, redundancy to ensure continued operation, and prolonged commissioning issues.

PROJECT ADMINISTRATION

PA 1 INTENT

The following administrative requirements apply during all phases of project delivery and will be stipulated in each solicitation.

PA 1.1 COORDINATION WITH PWGSC

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

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

Public Works and Government Services Canada administers the project and exercises continuing control over the Consultant's work during all phases of development. Unless directed otherwise by the Departmental

Representative, the Consultant obtains all Federal requirements and approvals necessary for the work. The consultant shall:

- A. Carry out services in accordance with approved documents and directions given by the Departmental Representative.
- B. Prior to starting any project, obtain the Departmental Representative's approval of sub-consultant(s). Upon receipt from the Departmental Representative of written confirmation that the proposed sub-consultant(s) are acceptable.
- C. Ensure all communications carry the PWGSC's Project Title, Project Number and File Number.
- D. Advise the Departmental Representative of any changes, that may affect schedule or budget or are inconsistent with instructions or written approvals previously given. The consultant shall detail the extent and reasons for the changes and obtain written approval before proceeding.

PA 1.2 COORDINATION WITH SUB-CONSULTANTS

The consultant shall:

- A. Throughout all stages of the Project, coordinate and assume responsibility for the work of any sub-consultants and specialists retained by the consultant or provided by PWGSC.
- B. Ensure clear, accurate and ongoing communication of concept, budget, and scheduling issues (including changes) as they relate to the responsibilities of all sub-consultants and specialists from initial base building reviews to post construction reports.
- C. Ensure Sub-Consultants provide adequate site inspection services and attend all required meetings.

PA 1.3 Lines of Communication

Correspond only with the Departmental Representative at the times and in the manner dictated by the Departmental Representative. The consultant shall not communicate with the client department unless so authorized in writing by the Departmental Representative.

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

PA 1.4 Media

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

PA 1.5 Meetings

The Departmental Representative shall arrange meetings every 2 weeks, or as agreed relative to project scope and phase of work, for all members of project team, including representatives from:

- Client Department
- Public Works and Government Services Canada
- Consultants

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

PA 1.6 Project Response Time

- It is a requirement that the prime consultant and their proposed sub-consultants should be personally available to attend meetings **within a maximum of 48 hours**, in the locality of the place of the work and to respond to inquiries **within a maximum of 24 hours** of the Departmental Representative's request, from the date of the award of the consultant call-up until final inspection and turnover.
- The consultant must demonstrate the availability of adequate resources to deliver the scope of services.

PA 1.7 Submissions, Reviews and Approvals

Work in progress may be reviewed by the Departmental Representative as well as; but not limited to, the following..

PWGSC in-house services

- Submission Format: drawings and specifications
- Submission Schedule: Submissions are reviewed at a time to be arranged with 10 days notice when completed work has been forwarded to the Departmental Representative.
- Expected Turnaround Time: 2 weeks
- Number of Submissions: until approval has been received

Design review committee - client

- Submission Format: reports, drawings and specifications, and oral presentations
 - Submission Schedule: Submissions are reviewed at a time to be arranged with **10** days notice
 - Expected Turnaround Time: 2 weeks
 - Number of Submissions: until approval has been received
- #### HRSDC Labour Canada - Fire Protection
- Submission Format: drawings and specifications
 - Submission Schedule: Submissions are reviewed at a time to be arranged with 10 days notice
 - Expected Turnaround Time: 1 month
 - Number of Submissions: until approval has been received.

Chart of Reviews and Approvals		PWGSC		Client		Labour Canada	
		R	A	R	A	R	A
RS1 Pre-Design Services							
Project Scope of Services Report			x		x		
Class 'D' Estimate			x		x		
RS2 Schematic Design							
Design Options		x		x		x	
Recommended Design Option			x		x		x
Class 'C' Estimate(s)			x		x		
RS3 Design Development							
Design Development Documents			x		x		x
Class 'B' Estimate(s)			x		x		
RS4 Construction Documents / Tender Call							
33% Construction Drawings			x	x		x	
66% Construction Drawings and Specs			x	x		x	
99% Construction Drawings and Specs			x		x	x	

Class 'A' Estimate(s)									
Final Tender Documents									
R = Review	A = Approval								

CHECKLIST FOR THE SUBMISSION OF CONSTRUCTION DOCUMENTS

Instructions: The Prime Consultant is to submit this completed and signed checklist at each required review stage.

A1.1 TITLE BLOCK

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

A1.2 STANDARDS & GUIDELINES

ITEM	Checked by:	Comments:
1. General The design meets the requirements of the most current;		
.1 National Building Code		

.2 National Fire Code		
.3 National Plumbing Code		
.4 Canada Labour Code		
.5 NFPA 10 - Standard for Portable Fire Extinguishers		
.6 NFPA 13 - Standard for the Installation of Sprinkler Systems		
.7 NFPA 14 – Standard for the Installation of Standpipe and Hose Systems		
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 most current requirements of;		
.1 ANSI/ASHRAE 55 – Thermal Environmental Conditions for Human Occupancy		
.2 ASHRAE 62.1 – 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		
.2 MD 15128 – Minimum Guidelines for Laboratory Fume Hoods		
.3 MD 15129 – Perchloric Acid Fume Hoods		
.4 MD 15161 – Guidelines for the control of Legionella in mechanical systems		
.5 MD 250005 – Energy Monitoring and Control Systems Design Guidelines		

A1.3 SPECIFICATIONS – ALL DISCIPLINES

ITEM	Checked by:	Comments:
1. General The Specifications meet the requirements of;		
.1 The NMS Users Guide.		
.2 Masterformat		
.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:	Comments:
1. General The Drawings meet the requirements of;		
.1 PWGSC Atlantic 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 (TOP 10 FOR EACH)

ITEM	Check ed by:	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 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 The building and systems and equipment meeting all requirements of Section 5 of ASHRAE 62.1.		
.6 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		
.7 Providing building cross-		

	sections at all key locations showing clearances for the mechanical installation and access for maintenance.		
.8	Providing sufficient access to mechanical equipment for maintenance.		
.9	Providing mechanical schematics showing design pressure and temperatures as well as all instrumentation and control points labels.		
.10	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. design vehicle for surface		

	structures, design period and other data for WM.VW, 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.		

A1.6 CONSULTANT'S DECLARATION

66% Submission:

The consultant confirms the following:

- 1) The consultant has reviewed the checklist in conjunction with the requirements contained in the consultant's contract.
- 2) The consultant has completed a full review and coordination of the contractual documents in accordance with professional standards of care.

Firm name:	
Signature:	
Date:	

99% Submission:

The consultant confirms the following:

- 1) The consultant has reviewed the checklist in conjunction with the requirements contained in the consultant's contract.
- 2) The consultant has completed a full review and coordination of the contractual documents in accordance with professional standards of care.

Firm name:	
Signature:	
Date:	

Final Submission:

The consultant confirms all of the following:

- 1) The documents are ready to be issued for tender.
- 2) The consultant has reviewed the checklist in conjunction with the requirements contained in the consultant's contract.
- 3) The consultant has completed a full review and coordination of the contractual documents in accordance with professional standards of care.

Consultant's Representative:	
Firm name:	
Signature:	
Date:	

REQUIRED SERVICES

The services rendered by the selected firms will be in support of the Real Property Services Branch of PWGSC. The vendor(s) shall be licensed to practice Architecture and/or Engineering in the Province of the work. Individual commissions will provide support to the Regional Manager of Architecture & Interior Design and may include one or more of the following activities broadly related to architecture. Firms will be expected to be able to provide expertise in most, if not all, of the areas that follow.

Be advised that, in general, architectural services provided to PWGSC must be complete in that they identify all major issues that will have a significant impact on the project. This will promote a surprise-free environment which will enhance the success of project implementation.

Note that depending on the type of project, PWGSC may dictate input into the design via in house resources or other PWGSC standing offers and this prime consultant is to incorporate and coordinate these "subs" in the prime consultant's team for that project. Further, this Prime Consultant will be required to sign and seal all documents that it prepares as required by the Province of the work and or its municipalities.

If the project requirements are such that the prime consultant is asked to provide a specialist/sub consultant not listed in the primary sub consultant team, the proposed specialist/sub consultant names are to be submitted to the PWGSC for approval, prior to their being engaged for the work.

The following RS sections indicate the full extent of required services that the consultant team must be able to provide. **RS 1 Pre-Design Services (Stage 1A)**

The purpose of this stage is to develop:

1. Feasibility Studies / Options Analysis;
2. Functional Requirements ;
3. Implementation Strategy and Schedule;
4. Building Condition Reports and Performance Audits;
5. Sustainable Development Strategies and Reports;
6. Facility Equipment Evaluation and Recommendations Report;
7. Order of Magnitude Cost Report.
8. Production of RFP documents for PWGSC Projects

RS 1.1 Feasibility Studies / Options Analysis

1.1.1 Intent

Feasibility Study:

A report which outlines the research and subsequent analysis to determine the viability and practicability of a project. A feasibility study analyzes economic, financial, market, regulatory, environmental/sustainable and technical issues. The purpose at this stage is to: investigate and analyze site conditions, including soil conditions, zoning, bylaws, traffic reports, service capacities, base building support systems, special purpose support systems etc. and to provide recommendations.

Options Analysis:

A design test (in schematic form) for the feasibility study recommendations to determine that the recommendations can be accommodated in a minimum of three (3) distinctly different options.

Cost Estimate:

Complete with class 'D' "Order of Magnitude" costs. (see RS 1.7)

1.1.2 Scope and Activities

Feasibility Study: (but not limited to)

Visit the building/site, investigate and analyze the availability and capacity of building services needed for the project, including renewable energy; Investigate the requirements for the particular facility, including existing and new technologies; Analyze the project requirements/program; Review all available existing material related to the type of facility; Investigate and analyze all applicable codes, regulations standards, including (but not limited to): National Building Code, Canada Labour Code, Model National Energy Code, NFPA, Ontario and Québec Occupational Health and Safety, Medical Research Council; Evaluate existing facilities including: building envelop, mechanical, electrical and structural systems, functional adaptability, code compliance, hazardous and non-hazardous waste; Identify and verify all authorities having jurisdiction over the project; Establish a policy for this project to minimize environmental impacts consistent with the project objectives and economic constraints, and consider impacts of the application of the Canadian Environmental Assessment Act (CEAA); and Prepare recommendations on the feasibility of the project.

Options Analysis (but not limited to)

Test the feasibility study recommendations on a minimum of three (3) options, schematic (sketch) only; Bubble and flow diagrams; Adjacencies and functional relationships; Horizontal and vertical stacking relationships; Orientation and renewable energy and Indication of the preferred option.

Class 'D' Order of Magnitude Cost (for each option)

See RS 1.7

1.1.3 Deliverables:

Comprehensive summary of the existing conditions, feasibility and options analysis including:
Report on existing base building system elements including their condition, deficiencies and life expectancy;
Report on existing facility systems requirements;
Report on all applicable codes, regulation, standards and authorities having jurisdiction;
Report on environmental impact, and sustainability;
Report on recommendations and options analysis;
Written identification of the problems, conflicts or other perceived information/clarifying assumptions for the acknowledgment of the Departmental Representative;
Report on Class 'D' Order of Magnitude Cost for each option.

RS 1.2 Functional Requirements

1.2.1 Intent

For any interior work related to office fit-up, the consultant shall follow the **Government of Canada Fit-up Standards:**
[Http://publiservice.pwgsc.gc.ca/fitup/text/new-e.html](http://publiservice.pwgsc.gc.ca/fitup/text/new-e.html)

Functional Requirements (Program):

A written statement which describes various criteria and data for a building (facility) project including design objectives, site requirements and constraints, spatial requirements and relationships, building systems and equipment, facility systems and equipment, and future expandability. The purpose of this stage is to describe the requirements which a building (facility) must satisfy in order to support and enhance human activities.

The programming process seeks to answer the following questions:

- What is the nature and scope of the problem?
- What information is required to develop a proper architectural solution to the problem?
- How much and what type of space is needed?
- What space will be needed in the next five to ten years to continue to operate efficiently?

How can sustainability be addressed at this stage?

Options Analysis:

A design test (in schematic form) for the functional program recommendations to determine that the recommendations can be accommodated in a minimum of three (3) options.

Cost Estimate:

Complete with class 'D' "Order of Magnitude" costs. (see RS 1.7)

1.2.2 General Scope and Activities

In preparing a functional program, the consultant's main task is to examine the client's world in detail so as to define the clients needs and objectives. These requirements will establish criteria for evaluating potential design solutions and other strategic alternatives.

The consultant must understand:

- The impacts of a building's occupants and processes (facilities) on the built environment;
- The social and environmental impacts of the building's program on the community;
- The planning impacts of its function on the local infrastructure.

To prepare a functional program, consultant's shall identify, research, and observe the Users of the proposed building (facility) and their work activities, including:

- Research and information gathering through information sessions with employees, focus group sessions etc.
- Function-by-function, room-by-room, or branch by branch activity plans;
- Staffing plans (current/future);
- Office standards; open vs. Closed
- Special purpose space;
- Support space
- Storage requirements.
- The volume of activity planned for specific facility components, such as:

- Throughput (amount of material put through experimentation, analysis);
- Flow patterns (proximity /circulation).

The consultant shall then develop approximate floor areas and technical requirements for the proposed facility, including:

- Details of the space, facility, or of the workstation;
- Special facility equipment or furniture configurations;
- Environmental criteria
- Must be based on the GOC Fit-up Standards

The Consultant shall also advise the client on alternatives, such as the architectural and financial implications of various building options. Functional programs for buildings (facilities) are future oriented - alternative scenarios may be based on high-, medium-, and low-growth projections, or on fast, medium or slow roll-outs of anticipated events. The consultant shall assist the client in assessing the advantages or benefits - and the disadvantages or costs - of each alternative.

1.2.3 Deliverables:

Depending on the size/scope of work, the consultant shall submit record documentation at the 33%, 66% and final stages of delivery as required.

The final Functional Program is a report which may include (but not limited to):

- The client's philosophy, values, goals, and desired "image";
- Site requirements, such as parking, circulation orientation.
- Explicit space requirements for the future building (facility), including:
 - Definition of the activities which will take place in each space in the building;
 - The functional relationships of the spaces;
 - "Bubble" diagrams and flow diagrams;
 - The size of each of the spaces;
 - Sketch (schematic) design options;

Special technical requirements of each of the spaces and the building systems;

Financial requirements and a preliminary "Order of Magnitude" budget; Scheduling and time frame for the project;
Other requirements including:

Regulatory issues such as zoning and building code requirements
Other requirements from Authorities having Jurisdiction;
Community goals and concerns;
Ecological and environmental concerns;
Advice on a recommended construction delivery method (traditional design-bid-build, design-build, construction management)

RS 1.3 Implementation Strategy and Schedule

1.3.1 Intent

The purpose of this stage is to detail an implementation strategy to meet the project goals and Objectives.

1.3.2 General

Scope and Activities

The consultant shall provide a detailed implementation strategy and schedule including (but not limited to):

Prepare a detailed implementation strategy that documents, in a report, all activities, milestones and deliverables required for the effective delivery of the project including time frames for submissions, reviews and approvals.

Prepare a project schedule that identifies, in a graphic format such as

Critical Path Method (CPM) or Program Evaluation Review Technique (PERT), all activities, milestones including critical deadlines, long lead delivery items and drop dead dates, required for the effective delivery of the project deliverables, including time frames for submissions, reviews and approvals.

The Implementation Strategy and Schedule described above shall include, but not be limited to the following:

Space acquisition strategy, building master plan;
Decommissioning and environmental clean-up strategy;
Move sequencing;
Swing space requirements;

Procurement of facility equipment and furniture strategy; and Construction strategy.

Advise the Departmental Representative of any changes to the scope that may affect schedule or are inconsistent with instructions or written approvals previously given. The consultant shall detail the extent and reasons for the changes and obtain written approval before proceeding. Submit the Implementation Strategy and Schedule for review. Revise as required. Resubmit for final approval. The original approved schedule will become the "Baseline" schedule to monitor project progress.

Throughout the project, monitor critical path and deadlines for submissions, revisions and approvals. Submit weekly Progress Reports identifying completed deliverables, slippage and upcoming activities.

1.3.3 Deliverables

Implementation strategy
Time Plan (Schedule)

RS 1.4 Building Condition Reports and Performance Audits

1.4.1 Intent

The purpose of this stage is to evaluate a building asset in order to determine the most appropriate management strategy for the retention, maintenance and/or retrofit / renewal of the facilities in order to satisfy current and future client requirements.

The cyclical review of building assets consists of the performance of a range of major evaluation and analysis studied:

Asset Management Plans
Investment Analysis Report (IAR) Studies
Building Management Plans
Building Condition Reports (BCR) Level 2
Building Performance Reviews
Serviceability

The scope of these cyclical reviews provides, in general terms an examination of inventory performance in five major areas:

Operational Performance
Functional Performance
Financial Performance

Technical Performance
Environmental Performance

intervention are established. All deferred maintenance, capital renewal project recommendations and the replacement value of each building are calculated and presented in the report, based on local material and labour rates.

1.4.2 Scope and Activities

1.4.2.1 Project Start-up

A Start-Up Meeting will be held at the time and place to be determined by the Departmental Representative.

1.4.2.2 Research Phase

This phase represents the building pre-inspection review of the existing documentation in order to confirm the range of information available and to identify any missing components or areas of concern which will require special attention during the next phase - Building Survey.

1.4.2.3 Surveys Phase

The Consultant team will undertake a detailed review of the current performance conditions of the building with respect to:
Operational, Functional, Technical, Environmental and Financial Performance

With respect to building maintenance, the consultant will:
assess the levels of maintenance with respect to equipment meeting its anticipated life cycle
ensure that maintenance is done to a level so as to avoid critical systems failure that could impact on tenants
ensure that life protection systems are evaluated for maintenance and testing, including randomly verifying the extinguisher maintenance, riser pressure etc.

The on-site review will be structured in such a manner as to identify and document the inter-relationship of the findings for each specific set of performance criteria as they are affected by other sets of criteria.

1.4.2.4 Report Development

After the inspection of the facility, the data is analyzed with respect to condition, remaining useful life, code compliance, condition descriptions, and their impact on the functionality of the asset, and priorities for

1.4.3 Deliverables

1.4.3.1 Content Plan This section of the Terms of Reference outlines the format and minimum scope of review to be undertaken in the performance of this building condition study.

The format has been developed in order to provide a direct link with the development of the

Asset Management Plan and therefore must be strictly adhered to.

The content plan is divided into seven major divisions and appendices:

- A. Executive Summary
- B. Project Framework/Introduction
- C. Operational Performance
- D. Functional Performance
- E. Technical Performance
- F. Environmental Performance
- G. Building Components Summary Tables
- H. Appendices
 - a) Annual Building Inspection (ABI)
 - b) Serviceability - Occupant and Facility Profiles
 - c) Sustainable Development Report Card
 - d) Life and Safety Systems Compliance Testing
 - e) Balancing Reports
 - f) Indoor Air Quality Study
 - g) Designated Substances Report
 - h) Environmental Audit
 - i) Accessibility Audit
 - j) Energy Audit
 - k) Other Audits and Studies
 - l) Heritage/FHBRO Report
 - m) Federal Building Initiative
 - n) BCR (3).

RS 1.5 Sustainable Development Strategies and Reports

Specific projects may require the services of a certified LEED consultant. If so such requirement will be identified in the terms of reference for the project.

1.5.1 Intent

The purpose is to research and investigate a wide range of strategies to achieve sustainability including; but, not limited to:

- Recycling and reuse of materials, systems, equipment;
- Procurement of "green" materials;
- Energy reduction and management;
- Water management
- Waste reduction and management;
- Life-cycle costing, cost benefit analysis;
- Integrated Design process.

1.5.2 General

Scope and Activities

The consultant shall research and investigate sustainable development strategies in the context of the project and make recommendations

Prepare a detailed inventory of existing non-contaminated materials, systems, equipment identified for reuse or recycling. Include target markets for recycled material and make recommendations. Verify with client department. Revise as required. Obtain approval.

Investigate and identify potential "green" building materials and products for the project include sourcing (i.e. In order to meet government objectives sole source is necessary). Verify with client department. Revise as required. Obtain approval.

Investigate and analyze potential to exceeding the Model National Energy Code by 30% to 50%.

Make recommendations for an Energy Reduction and Management plan. Investigate and analyze potential to increasing energy efficiency, and strategies to decrease water run-offs

Develop a non-hazardous and hazardous waste reduction and management plan. Make recommendations, verify with client department. Revise as required. Obtain approval.

Based on the recommendations included in 1 to 4, perform a cost / benefit and life-cycle costing analysis for the Sustainability Strategy for the project.

1.5.3 Deliverables

Submit the Sustainability Strategy for review, in a report. Revise as required. Resubmit for final approval.

RS 1.6 Facility Equipment Evaluation & Recommendations Report

1.6.1 Intent

The purpose of this stage is to identify and evaluate existing facility equipment and furniture and to make recommendations for their reuse, recycling, refurbishment and/or replacement. Generally, this will be at a high level and only Special Purpose Space should be identified. All other areas i.e. offices, common areas etc. Fall under Fit-up Standards.

1.6.2 General

Scope and Activities

- A. At such time as the Departmental Representative determines, prepare a detailed **inventory** of existing furniture and equipment found in workstations/worksettings, support space and special purpose facility space. Include drawings identifying existing location, layout, and user's name or employee number, if applicable. Verify with client department. Revise as required. Obtain approval. Note that the Consultant shall refer to the PW/GSC National Project Management System. This type of activity should not be undertaken too early in the process as information is quickly "stale dated".
- B. Based on parameters developed in conjunction with the Departmental Representative and the client department, prepare a furniture and equipment **evaluation report** that assesses the condition of existing furniture and equipment. Assess the current inventory against the client department's functional requirements. Include an

examination of the following: Reusing/refurbishing existing furniture and equipment; and/or Procuring new furniture and equipment; and Current technologies and innovative solutions for the total office facility environment.

- C. Prepare a detailed cost analysis (Class B) that compares the reuse/refurbishment of existing furniture and equipment, with the purchase of new furniture and equipment. Consideration should be given to cost effectiveness and time frames required for refurbishment of existing furniture and equipment and/or the procurement of new furniture and equipment.

1.6.3 Deliverables

Submit (1) **inventory**, (2) **evaluation report**, & (3) **cost analysis** in a report for review.
Revise as required.
Resubmit for final approval.

RS 1.7 Order of Magnitude "Class D" (Indicative) Cost Reports

1.7.1 Intent

The purpose of this stage is to provide an indication of the total cost of the project, based on the user's functional requirements to the degree known at the time. It is based on historical cost data for similar work, suitably adjusted for such factors as: effect of inflation, location, risk, quality, size and time. All related factors affecting cost are considered to the extent possible. Such an estimate is strictly an indication (rough order of magnitude) of the project total cost and completion date. This estimate is used to establish the indicative estimate required by Treasury Board for Preliminary Project Approval.

1.7.2 General Scope and Activities

Cost Planning

Specific tasks may include, but are not limited to:

Prepare (life-cycle) cost plans from project briefs, preliminary concepts or other preliminary information;
Prepare cost analysis;
Prepare option analysis and "what if" scenarios;
Provide advice and recommendations on project planning in order to achieve the most cost effective project sequence;
Identify and quantify potential risks and make contingency recommendations in order to minimize negative cost impacts;
Advise on alternative procurement and construction strategies to create efficiencies wherever possible; and/or
Identify, forecast and analyze project-related issues including possible market shortages and potential price fluctuations.

Cost Estimating

Develop cost estimates of projects;
Prepare order of magnitude "class D" cost estimates;
Quantify design and construction costs, contingencies and risks;
Prepare and investigate costing alternatives to assist in the identification of the most cost-effective design and/or construction approach;
Investigate and report on life-cycle costs; or
Document all unit pricing, analysis, and valuation.

1.7.3 Deliverables

Cost Planning

Cost plans;
Cost analyses and "what if" scenarios;
Cash flows; and / or
Reports on alternative procurement and construction strategies or other project-related issues.

Cost Estimating

Fully detailed cost estimate. Order of magnitude "class D" accuracy;

Documentation of the methodology of the estimate and any assumptions made;

Documentation of all pricing and valuation calculations;
Reports on investigation of costing alternatives; and / or
Reports on life-cycle costs.

RS 1.8 Production of RFP documents for PWGSC Projects

1.8.1 Intent

From time to time PWGSC will require the services of a consultant to prepare RFP documents for Government of Canada projects. The level of effort will vary depending on the scale of project and the scope of work and may require the consultant team to continue become involved as Bridging Consultants, as the project develops. If the selected consultant wishes to be considered for the actual project that will result from the RFP process, they are free to decline that commission.

1.8.2 General Scope and Activities

Visit, as necessary, the building/site, investigate and analyze the availability and capacity of building or site services needed for the project, including renewable energy and new technologies;
Investigate the requirements for the particular facility, including existing and new technologies;
Analyze the project requirements and the stated program
Meet client representatives, in conjunction with PWGSC, to confirm existing program requirements and or potential for future growth
Prepare feasibility studies or review previous studies, should they exist, to determine whether they suit current client needs
Prepare options analysis, or review previous options, should they exist, to determine whether they suit current client requirements
Assist with decisions on project delivery whether it should be design-bid-build, design-build, lease to own or any other acceptable method
Coordinate with PWGSC to obtain client approval of all ongoing decisions and of the final RFP documents
If required, this consultant may be retained to act as a Bridging Consultant to liaise between the client group, PWGSC and the successful proponent on the project.

1.8.3 Deliverables

Prepare, on behalf PWGSC, complete RFP documents suitable for solicitation of bids from other consultants for the noted project.
Assist in management of the bid process including answering questions during the bid period.

Be available to assist with tender analysis.

Provide the full scope of services described in the T.O.R.

RS 1 Pre-Design Services (Stage 1B) - Verification (when RS 1 has been prepared by others)

Based on the Project Brief prepared by the PWGSC Departmental Representative at the time of call-up, the scope of services will either be based on Section RS 1 "Pre-Design Services (Stage 1A)" or "Pre-Design Services (Stage 1B) - Verification".
Analysis of Project Requirements
Review Pre-Design deliverables (Stage 1A) prepared by others.

RS 1.1 Analysis of Project Requirements

1.1.1 Intent

The purpose of this stage is to ensure the consultant has reviewed and integrated all the project requirements, identified and evaluated conflicts or problems, provide alternative strategies, presented and received approval on a Project scope, delivery process, schedule and estimate required to deliver a cohesive quality project. This approved deliverable will become the Project Scope of Services and will be utilized throughout the project to guide the delivery.

1.1.2 General

Scope and Activities

Visit the building/site and verify the availability and capacity of services needed for the project
Attend project start up meeting
Analyze the project requirements/program
Review all available existing material related to the project

Review the proposed project schedule for verification that all milestone dates are achievable

Review the cost plan/budget for verification that the costs are realistic and achievable

Identify and verify all authorities having jurisdiction over the project

Identify the codes, regulations and standards that apply

Establish a policy for this project to minimize environmental impacts consistent with the project objectives and economic constraints

1.1.3 Deliverables

Comprehensive summary of the project requirements/program demonstrating understanding of the

scope of work including:

- ♦ report on existing base building system elements including their condition, deficiencies and life expectancy.
- ♦ confirmed or adjusted project cost and time plans
- ♦ written identification of the problems, conflicts or other perceived information/clarifying assumptions for the acknowledgment of the Departmental Representative

RS 1.2 Review of Pre-Design Deliverables - Stage 1A (prepared by others)

1.2.1 Intent

The purpose of this stage is to ensure the consultant has reviewed and integrated all the pre-design deliverables prepared by others required to deliver a cohesive quality project. This approved deliverable will become the Project Scope of Services and will be utilized throughout the project to guide the delivery.

1.2.2 General

Scope and Activities

Ensure Pre-Design (Stage 1A) prepared by others include the following deliverables, and that those are

still current, up-to-date and are approved:

1. Feasibility Studies / Options Analysis;
2. Functional Requirements ;
3. Implementation Strategy and Schedule;
4. Building Condition Reports and Performance Audits;
5. Sustainable Development Strategies and Reports;
6. Facility Equipment Evaluation and Recommendations Report;
7. Order of Magnitude Cost Report.
8. Production of RFP documents for PWGSC Projects

For a more detailed description of the content requirements of Pre-Design Services, see Section RS 1 "Pre-Design Services (Stage 1A)".

1.2.3 Deliverables

Update the Pre-Design deliverables if required. Submit for review. Revise. Resubmit for final Approval.

RS 2 Schematic Design

2.1 Intent

To translate the project requirements into space parameters in the most environmentally and sustainable manner. To explore design options and analyze them with respect to priorities and program objectives previously identified. Out of this process, one option will be recommended to proceed to Design Development.

2.2 General

Scope and Activities:

Obtain written approval from the Departmental Representative for development of schematic design options based on the analysis of the Project Brief;

Provide alternative design options exploring possible technical and environmental strategies which are viable and have potential for development;

Analyze each solution with regard to the project goals including cost and schedule;

Write a preliminary project-description report outlining the various components and system options;

Minimize the use of hazardous/toxic materials and products made for endangered or rare species (i.e. tropical hardwoods);

Recommend one option for further development with all supporting background and technical justifications;

Produce a class 'C' cost estimate for the various options;

Produce an implementation schedule, including alternative procurement and construction strategies.

2.3 Details

2.3.1 Architectural Drawings:

Site plan showing proposed building outlines, orientation, main accesses and traffic patterns;

Schematic building plans of alternatives showing relative disposition of main accommodation

areas, circulation patterns, numbers of floors, etc.;

Sketch elevations and sections indicating the basic design approach and aesthetic philosophy;

Sketch perspectives or massing studies;

Outside gross building areas and summary of main accommodation areas required and proposed;

Horizontal and Vertical space relationships.

2.3.2 Structural Drawings:

Proposed or alternative structural systems including foundation methods, explanatory sketches, etc.

and a copy of the site report on which the design is based;
Initial seismic analysis.

2.3.3 Mechanical:

The schematic design submission shall include a description of specific mechanical requirements

and function for each area (room) in the project. Identify any unique or specialized equipment

required by the subject facility. Incorporate in the submission a schedule of requirements listing all

rooms and identify the mechanical building services to be provided. Explain in the concept submission the manner in which the proposed mechanical systems correlate with user requirements.

Identify the volume of outdoor air to be supplied per person.

Identify the delivery rate of supply air to occupied spaces.

Identify whether full time operating staff will be needed for operating any of the mechanical

equipment. Differentiate between staff that is needed by code requirements versus that staff which

is needed because of the nature and size of the facility.

Identify location of entry point into the building of all mechanical services into the building.

Identify in square metres the area to be provided for mechanical rooms, and then identify what percentage of total building area this represents. Identify location of mechanical spaces in the building.

Analysis of alternative mechanical schemes at the schematic design stage shall reveal energy

consumption of building systems, operating and maintenance costs on a month by month basis for

a time span of one year. Accordingly the estimated energy, operating and maintenance costs shall

be used in life cycle cost analyses in order to determine the most beneficial mechanical systems

alternative. Life cycle cost analyses shall be based on a projected building life of 25 years.

Carry out energy analysis on system alternatives.

Establish an energy budget for the building and compare it to energy consumption of other similar

buildings. Total energy consumed in the building shall be expressed in kWh/m2.

Submit a complete energy analysis.

Identify the type of boilers to be used (i.e. cast iron sectional, fire tube, etc.) and provide an

economic and technical explanation of the reason for the type of boiler to be used.

List of non-Canadian products and materials proposed for the project with written justification

2.3.4 Electrical:

Proposed basic electrical systems of significance to the early design.
Site plan showing location of service entrances.
Distribution diagram showing single line diagrams to distribution centres.
Floor plans complete with locations of major electrical equipment and distribution centres.
Lighting layouts.
Power outlets.
Ceiling distribution systems for lighting, power and telecommunications.
List of standard PWGSC details to be utilized.
Telephone rooms, conduits and telecommunication cable systems requirements and layout.
Provide an electrical design synopsis, describing the electrical work in sufficient detail for assessment and approval by the Department. Include feasibility and economic studies of proposed systems complete with cost figures and loads.
List of non-Canadian products and materials proposed for the project with written justification.

2.3.5 Commissioning:

Define Commissioning Requirements
Identify in square meters the area to be provided to maintenance personnel, including storage and workshops for mechanical, electrical and housekeeping.
Define project verification archives (data storage and retrieval system).

2.3.6 Sustainable Development:

Design and evaluate Schematic Design Options exploring positive environment strategies.

2.3.7 Specifications:

Preliminary outline specification in Unifomat indicating main building components and options for use of "Green" components and systems.

2.3.8 Cost Plan:

Prepare preliminary cost plan from the schematic design;
Prepare preliminary cost analysis;
Prepare options analysis and "what if" scenarios;
Provide advice and recommendations on project planning in order to achieve the most cost effective project sequence;
Identify and quantify potential risks and make contingency recommendations in order to minimize negative cost impacts;
Advise on alternative procurement and construction strategies to create efficiencies wherever possible; and/or
Identify, forecast and analyze project-related issues including possible market shortages and potential price fluctuations.

2.3.9 Cost Estimate:
Prepare "class C" cost estimates;
Quantify design and construction costs, contingencies and risks;
Prepare and investigate costing alternatives to assist in the identification of the most cost-effective design and/or construction approach;
Investigate and report on life-cycle costs; and / or
Document all unit pricing, analysis, and valuation.

2.3.10 Time Plan (Schedule):

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

2.4 Deliverables:

Provide the following:

Schematic Design Drawings;
Description of the options with recommendation of preferred solution;
Waste management report;
Audit plan and Phase II Waste Division Action Plan;
Project specification amendment;

Environmental Design Modification Report;

Indoor Air Quality Report;

Cost Plan, including cost analysis, “what if” scenarios, potential risks, alternative procurement and construction strategies;

Class ‘C’ Cost Estimate, including methodology of the estimate, assumptions made, costing alternatives and life cycle costs;

Report on deviation from schedule and recommend corrective measures or updated time line.

Sustainable Design / Development checklist from LEED, BOMA or other relevant format.

RS 3 DESIGN DEVELOPMENT

3.1 Intent

To further develop one of the options presented at the Schematic Design stage. The Design Development documents consist of drawings and other documents to describe the size and character of the entire project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate.

3.2 General

Scope and Activities:

Obtain written approval from Departmental Representative for development of one of the proposed Schematic

Design options;

If any alterations are demanded, document all required changes, analyze the impact on all project components, and resubmit for approval if required;

Expand and clarify the Schematic Design intent for each design discipline;

Present the design materials to the client, design review or other committees as indicated by the

Departmental Representative;

Present the design to the government or local authorities where required;

Ensure coordination of all disciplines’ design development;

Analyze the constructability of the project and advise on the construction process and duration;

Based on all material available at the time, prepare a milestone schedule for the consideration with

special attention to the impact on tenants;

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

Provide a list of all NMS sections to be used, complete with a full draft specification, catalogue cuts and sustainable development/green choices.

3.3 Details

Scope and Activities:

3.3.1 Architectural Drawings:

Floor Plans of each floor showing all accommodation required with room names and calculated areas, including all necessary circulation areas, stairs, elevators, etc., and ancillary spaces anticipated for service use. Indicate building grids, modules, etc., and key dimensions;

Furniture and Equipment plans;

Cross Sections through the building(s) to show floor levels, room heights, inner corridor or court elevations, etc.;

Detail Sections of walls, building envelope design features or other special design features requiring illustration and explanation at this stage, including fireproofing methods.

Demolition plans, partition plans reflected ceiling plans, finish schedules, door/window schedules Etc.

3.3.2 Structural Drawings:

Drawings indicating the proposed structural framing system, structural materials, and other significant or unusual details proposed. Drawings may be separate or incorporated on the Architectural sheets. Include a copy of the site report on which the design is based;

Update seismic report.

3.3.3 Mechanical:

Site Plan showing service entrances for water supply, sanitary and storm drains and connections to

public utility services, including all key invert elevations;

Drawings showing preliminary sizing of ventilation, cooling and heating systems showing

locations, and all major equipment layouts in mechanical rooms;

Drawings of plumbing system, showing routing and sizing of major lines and location of pumping

and other equipment where required ;

Drawings of the fire protection systems showing major components;

Produce preliminary designs based on the approved schematic design.

Update the energy analysis

and energy budget established at the schematic design stage;

Update the schedule of requirements;

Provide information of all internal and external energy loads in sufficient detail to determine the

compatibility of the proposal with existing services, approved concept

and energy budget;

Analysis of selected equipment and plant with schematics and calculations sufficient to justify the

economy of the selected systems;

Describe the mechanical systems to be provided and the components of

each system. Describe the

perceived operation of the mechanical systems;

Explain what operating staff will be needed to operate the building systems and the expected

functions of the operation staff;

Describe the building systems control architecture. Provide preliminary

EMCS network

architecture, mechanical control schematics, and sequence of operation;

Explain what acoustical and sound control measures are to be included in the design.

3.3.4 Electrical drawings:

Provide drawings showing advanced development of the following:

❖ Single line diagram of the power circuits with their metering and protection, including:

1. Complete rating of equipment.
2. Ratios and connections of CT's and PT's.
3. Description of relays when used.
4. Maximum short circuit levels on which design is based.
5. Identification and size of services.
6. Connected load and estimated maximum demand on each load centre.

Electrical plans with:

1. Floor elevations and room identification.
2. Legend of all symbols used.
3. Circuit numbers at outlets and control switching identified.
4. All conduit and wire sizes except for minimum sizes which should be given in the specification.
5. A panel schedule with loadings for each panel.
6. Telephone conduits system layout for ceiling/floor distribution.

Riser diagrams for lighting, power, telephone and telecommunication cable systems, fire alarm and other systems.

Elementary control diagrams for each system.

Schedule for motor and controls.

Complete lighting layout and fixture schedule clearly indicating methods of circuiting,

switching and fixture mounting.

Electric heating layout and schedule.

Provide the following data:

Total connected load.

Maximum demand and diversity factors.

Sizing of standby load.

Short-circuit requirements and calculations showing the ratings of equipment used.

3.3.5 Commissioning

Define operational requirements.

Define Commissioning Requirements.

Prepare a commissioning Brief describing major commissioning activities for mechanical, electrical and integrated system testing.
Define and establish project specific archives

3.3.6 Sustainable Development:

Develop Design and evaluate options exploring positive environment strategies;

3.3.7 Specifications

Provide a list and draft specification sections of all 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 this project;

Highlight proposed "Green" materials, components and systems.

3.3.8 Cost Plan

Update cost plan;

Highlight changes from preliminary cost plan;

Include cash flow analysis.

3.3.9 Cost Estimate

Provide class "B" (substantive) cost estimate;

Highlight changes from class "C" (indicative) cost estimate.

3.3.10 Time Plan (Schedule)

Update time plan (Schedule);

Highlight changes to the time plan.

3.4 Deliverables

Floor plans including all disciplines showing all floor elements and services to detail necessary to make all design decisions and to substantially estimate the cost of the project;

Two (2) or three (3) building sections;

Demolition Plans;

Architectural, structural, engineering, millwork and finishing details to determine choice of

materials and finishes;

Reflected ceiling plans;

Elevations;

Site and building models as required;

Finish and colour schemes;

Outline specifications for all systems and principle components or equipment;

Updated cost plan and cash flow;

Class 'B' cost estimate;

Preliminary construction schedule including long term delivery items;

Fire Protection Engineers Report including requirements, strategies or interventions for protection

of the building and it's occupants;

Project dossier detailing the basic assumptions of the project and the

justifications for all major

decisions;

Commissioning Plan;

Updated sustainable development strategy report.

RS 4 CONSTRUCTION DOCUMENTS

4.1 Intent

To prepare bilingual coordinated A&E drawings and specifications setting forth in detail the

requirements for the construction and final cost estimate of the project.

33% indicates technical completeness of all working documents;

66% indicates substantial technical development of the project - well

advanced architectural and

engineering plans, details, schedules and specifications;

99% is the submission of complete Construction Documents ready for

tender call and submission

to local authorities for pre-permit purposes;

Develop project specific Systems Operations Manual (SOM);

Final Submission incorporates all revisions required in the 99% version and is intended to provide

PWGSC with complete construction documents for tender call.

4.2 General

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

Scope and Activities:

Obtain Departmental Representative's approval for Design Development submissions (33%, 66%, 99% and final);

Confirm format of drawings and specifications;

Clarify special procedures (i.e. phased construction);

Submit drawings and specifications at the required stages. (33%, 66%, 99%);

Provide written response to all review comments and incorporate them into Construction

Documents where required;

Advise as to the progress of cost estimates and submit updated cost

estimates as the project

develops;

Update the project time plan (schedule);

Prepare a final Class 'A' (substantive) estimate. Review and approve

materials and construction

processes specifications to meet sustainable development objectives.

4.3 Details

4.3.1 Technical and Production Meetings

Production of construction documents at the 33%, 66%, and 99%

submissions will be

reviewed during the meetings arranged by Departmental Representative

and Consultant;

Representatives from Client Department(s) and PWGSC support staff will

be present as

arranged by the Departmental Representative;

Consultant shall ensure that his staff and the sub-consultant representatives

attend the

technical and production meetings as required;

Consultant shall ensure all documents are coordinated with all sub-

consultants and disciplines;

Consultant shall arrange for all necessary data, progress prints, etc.;

Consultant shall prepare minutes of the meetings and distribute copies to all participants.

4.3.2 Progress Review

As work progresses on construction drawings, submit drawings, schedules, details, pertinent design data and updated Cost Plan and Project Schedule as required.

4.4 Deliverables

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

4.4.1 99% Submission:

Complete specification and working drawings.

99% Commissioning plan and Systems Operations manual

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

One copy of site information, soil investigating report, borehole logs, etc.

One copy of support data, studies, calculations, etc., required by PWGSC

Engineering disciplines

for final checking and record.

One copy of updated Cost Plan and Project Schedule

4.4.2 Final Submission:

This submission incorporates all revisions required by the review of the 99% submission. Provide the following:

❖ Complete set of originals of the working drawings.

Complete sets of original specifications.

Class 'A' estimate

Complete Commissioning Plan

Complete Systems Operations manual

Complete set of original Colour Schedule.

One set of designated substance survey report (provided by PWGSC).

As a safeguard against loss or damage to the originals, retain a complete set of drawings in reproducible form and one copy of specification.

Fire Protection Engineering Services, Labour Program, Human Resources Development Canada, formerly known as the Fire Commissioner of Canada (i.e. Fire Marshall)

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

RS 5 TENDER CALL, BID EVALUATION & CONSTRUCTION CONTRACT AWARD

5.1 Intent

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

5.2 General

Scope and Activities:

Attend tenderers briefing meeting(s)
Prepare addenda based on questions arising in such meetings for issue by the Contracting Authority
Provide the Departmental Representative with all information required by tenderers to fully interpret the Construction Documents. PWGSC will issue the addenda to all participants.
If PWGSC decides to re-tender the project, provide advice and assistance to the Departmental Representative
Revise and amend the construction documents to bring the cost of the work within the limits stipulated
Examine and report on any cost and schedule impact created by the issue of tender / contract addenda

5.3 Deliverables

Addenda where needed
Changes to the documents, if re-tendering is necessary
Updated cost estimate or schedule

RS 6 CONSTRUCTION & CONTRACT ADMINISTRATION & POST CONSTRUCTION WARRANTY REVIEW

6.1 Intent

6.3.1 Construction Meetings

Immediately after contract award attend a briefing meeting with the Contractor and the

6.2 General

Scope and Activities:

During the implementation of the project, act on PWGSC's behalf to the extent provided in this document
Carry out the review of the work at intervals appropriate to determine if the work is in conformity with the Contract Documents
Keep PWGSC informed of the progress and quality of the work and report any defects or deficiencies in the work observed during the course of the site review
Ensure compliance with Commissioning Plan, update plan as necessary
Determine the amounts owing to the Contractor based on the progress of the work and certify payments to the contractor
Act as interpreter of the requirements of the Contract Documents
Provide cost advice during construction
Advise the Departmental Representative on all potential changes to scope for the duration of the implementation
Review the Contractor's submittals
Prepare and justify change orders for issue by the Departmental Representative
Indicate any changes or material/equipment substitutions on Record Documents
During the twelve (12) month warranty period investigate all defects and alleged defects Review Systems Operations Manual prepared by General Contractor
Conduct a final warranty review

6.3 Details

Scope and Activities:

Departmental Representative. Prepare minutes of the meeting and distribute copies to all participants and to other persons agreed upon with the Departmental Representative.
Attend job meetings commencing with the construction briefing meeting. The Departmental Representative may invite client Departments to attend any of these meetings.

6.3.2 Project Schedule

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

6.3.3 Time Extensions

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

6.3.4 Labour Requirements

The Contractor is bound by the Contract to maintain competent and suitable workmen on the project and to comply with the Canada Department of Labour - Labour Conditions. Inform the Department of any labour situations that appear to require corrective action by the Department.
The General Contractor shall ensure that a copy of the Labour Conditions for the Contract is posted in a conspicuous place on site.

6.3.5 Bylaw Compliance

Ensure that construction complies with applicable bylaws and regulations. Matters pertaining to the Department of Labour shall be referred to the Departmental Representative.

6.3.6 Construction Safety

All construction projects that are occupied by federal employees during construction are subject to the Canada Occupational Safety and Health Act and Regulations as administered by Health and Welfare Canada and/or Provincial Regulations -which ever is more restrictive.
Fire safety provisions during construction must comply with FCC Standards 301 and 302, administered by Fire Protection Engineering Services, Labour Program, Human Resources Development Canada, formerly known as the Fire Commissioner of Canada.
In addition to the above, the Contractor must comply with the provincial and municipal safety laws and regulations, and with any instructions issued by the officers of these authorities having jurisdiction relating to construction safety.
Ensure the Contractor is mandated to provide all required coordination, isolation, protection and reinstatement of the fire protection and suppression systems throughout construction. Ensure the Contractor is mandated to provide Watchman Service as defined in FC 301 and by the Fire Commissioner

6.3.7 Site Visits

Provide non-resident construction inspection services if required by the Terms of Reference for the call-up. Ensure compliance with contract documents.
Provide services of qualified personnel who are fully knowledgeable with technical and administrative requirements of project.
Establish a written understanding with contractors as to what stages or aspect of the work are to be inspected prior to being covered up.
Assess quality of work and identify in writing to the Contractor and to the Department all defects and deficiencies observed at time of such inspections.
Inspect materials and prefabricated assemblies and components as necessary for the progress of the project.

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

6.3.8 Clarifications

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

6.3.9 Progress Reports

Report to the PM regularly on the progress of the work.

6.3.10 Work Measurement

If work is based on unit prices, measure and record the quantities for verification of monthly progress claims.

When Contemplated Change Notice is to be issued based on Unit Prices, keep accurate account of the work. Record dimensions and quantities.

6.3.11 Detail Drawings

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

6.3.12 Shop Drawing Reviews

Verify the number of copies of shop drawings required. Consider additional copies for Client's departmental review.

Ensure that shop drawings include the project number and are recorded in sequence.

Shop drawings shall be stamped: "Checked and Certified Correct for Construction" by the

Contractor and stamped: "reviewed" by the Consultant before return to the Contractor.

Expedite the processing of Shop Drawings.

On completion of project forward three copies of reviewed shop drawings to the Department.

6.3.13 Inspection and Testing

Prior to tender, provide Department with recommended list of tests to be undertaken, including on

site and factory testing

Ensure all testing is detailed within commissioning plan

When contract is awarded, assist Departmental Representative in briefing testing firm on required

services, distribution of reports, communication lines, etc.

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

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

Assist Departmental Representative in evaluating testing firm's invoices for services performed.

6.3.14 Construction Changes

The Consultant does not have authority to change the work or the price of the Contract. However, the Consultant will prepare Contemplated Changes Notices (CCNs) and Change Orders (COs) as required by project conditions for consideration by the Department. Changes which affect cost or design concept must be approved by the Department.

Upon Departmental approval obtain quotations from the Contractor in detail. Review prices and

forward promptly recommendations to the Department.

The Department will issue Consultant-prepared CCNs and COs to the Contractor, with copy to

Consultant, once the Department is in agreement with the change.

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

Orders.

The practice of "trade offs" is not allowed.

6.3.15 Contractor's Progress Claims

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

Construction Contract.

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

- ♦ Request for Construction Payment
- ♦ Cost Breakdown for Unit and/or combined Price Contract
- Cost Breakdown for Fixed Price Contract

- ♦ Statutory Declaration Progress Claim

Review and sign designated forms and promptly forward claims to the Department (Departmental representative) for processing. Submit with each progress claim:

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

6.3.16 Materials On Site

The Contractor may claim for payment of material on site but not incorporated in the work.

Materials must be stored in a secure place designated by the Department. A detailed list of materials with supplier's invoices showing the price of each item must accompany a claim; the Consultant shall check and verify this list (Detail Sheet).

Items shall be listed separately on the Detail Sheet after the break-down list and total.

As material is incorporated in the work the cost must be added to the appropriate Detail item and removed from the material list.

6.3.17 Acceptance Board

Inform the Department when satisfied that the project is substantially completed. The Consultant shall ensure that his/her representative, his/her sub-consultant representative, Resident On-Site Reviewer, Contractor and major sub-trades representatives shall form part of the Project Acceptance Board and attend all meetings as organized by the Department.

6.3.18 Interim Inspection

The Acceptance Board shall inspect the work and list all unacceptable and incomplete work on a designated form. The Board shall accept the project from the Contractor subject to the deficiencies and uncompleted work listed and priced.

6.3.19 Interim Certificates

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

- ❖ Certificate of Substantial Completion
- Statutory Declaration Interim Certificate of Completion

Worker's Compensation Board Certificate.

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

6.3.20 Building Occupation

The Department or Client Department may occupy the building after the date of acceptance of the building by the Acceptance Board. The acceptance date is normally that of the Interim Certificate issued to the Contractor. As of the acceptance date, the Contractor may cancel the Contract Insurance, and the Department or Client Department (as the case may be) assumes responsibility for:

- ❖ Security of the work(s).
- Fuel and utility charges.
Proper operation and use of equipment installed in the project.
General maintenance and cleaning of the work(s).
Maintenance of the site. (Except any landscaping maintenance covered by the contract.)

6.3.21 Operation and Maintenance Data Manual

Operation and Maintenance Data Manuals: The required sets of each volume produced by Contractor in accordance with project specifications and verified for completeness, relevance and format by the Architectural, Mechanical and Electrical Consultants and submitted to PW/GSC Departmental Representative prior to interim acceptance or actual start of operation and instruction period, whichever occurs sooner. The Contractor shall retain one copy of each volume for his record and use during the instruction period.

6.3.22 Instruction of Operating Personnel

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

6.3.23 Final Inspection

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

6.3.24 Final Certificate

The final payment requires completion and signing, by the parties concerned, of the following

Documents:

- ❖ Final Certificate of Completion
- Statutory Declaration
- Workers Compensation Clearance Certificate

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

6.3.25 Take-over

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

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

6.3.26 As-Built and Record Drawings and Specifications

Following the take-over, obtain as-built marked-up hard copy from the Contractor:

As-built drawings will show significant deviations in construction from the original Contract drawings, including changes shown on Post-Contract

Drawings, changes resulting from Change Orders or from On Site Instructions.

Check and verify all as-built records for completeness and accuracy and submit to PWGSC.

Produce Record Drawings by incorporating As-Built information into project drawings.

Submit Record Drawings and Specifications in number and format required by the Consultant

Agreement within [8] weeks of final acceptance.

General Contractor to provide a complete set of final shop drawings.

6.4 Deliverables

Written reports from site visits including persons involved

Written reports on the progress of the work and the cost of the project at the end of each month

Additional detail drawings when required to clarify, interpret or supplement the Construction Documents

Post contract drawings

Interim or Final certificates

Debrief of Commissioning Activities

As built records

Warranty deficiency list

Report on Final Warranty Review

RS 7 RISK MANAGEMENT (ALL STAGES)

7.1 Intent

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

7.2 General

Scope and Activities

Risk Management Process:

Identify risk events based on past experience and using proposed checklist or other available lists;

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

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

Develop risk response (i.e. evaluate alternatives for mitigation. This is the real added-value of risk management); and,
Implement risk mitigation.

7.3 Deliverables

Prepare Risk Management Reports at Design Development, 66% Design Documents, and 100% Design Documents stages.

Include input from all sub-consultants, and from Client.

Take steps to implement risk mitigation as required. This may include (but is not limited to) further recommendations, analysis, investigations, site meetings, site supervision, etc.

RS 8 ESTIMATING AND COST PLANNING

8.1 Cost Specialist: (where required by project scale/scope and as outlined in the call-up)

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

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

1. For projects budgeted at more than \$1,000,000 construction

value, the "Cost three designations:

- PQS (Professional Quantity Surveyor) or
- CEC (Construction Estimator Certified) or
- "Gold Seal Certified Estimator

2. For projects budgeted at more than \$5,000,000 construction value, an independent cost consulting firm shall be hired to perform the Cost Planning/Estimating functions.

3. Cost Plan presentation format: The link shown is to the NPMS system which gives the required forms and formats.

<http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/conn-know/couts-cost/definition-eng.html>

4. When an estimate, at any stage, is presented for PWGSC review it must be covered by a "sign-off" sheet encompassing the names and signatures of all those sub consultants who contributed to the estimate. The submitting cost specialist will also verify, by signature, that the estimate has been coordinated, to properly contain all required elements relevant to the "class" of the submission.

8.2 Scope of Services

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

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

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

- Exception Report** The Cost Specialist is to provide continuous cost monitoring, timely identification and early warning of all changes that affect or potentially affect the estimated construction costs of the project.
- If the estimate falls short of or exceeds the Construction Cost Limit due to such changes, the Cost Specialist with the Consultant team shall fully advise the Departmental Representative. The Cost Specialist with the Consultant team shall submit to PWGSC proposed alternative design solutions.
- An Exception Report will include sufficient description and cost detail to clearly identify:

- A. Scope Change: Identifying the nature, reason and total cost impact of all identified and potential project scope changes affecting Construction Cost Estimate.
- B. Cost Overruns and Under runs: Identifying the nature, the reason and the total cost impact of all identified and potential cost variations.
- C. Options Enabling a return to the Construction Cost Estimate: Identifying the nature and potential cost effects of all identified options proposed, in order to return the project within the Construction Cost Estimate.

8.3 Responsibilities to PWGSC

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

8.4 No Action Abrogates Consultant's Responsibilities

- No acceptance or approval by PWGSC, whether expressed or implied, shall be deemed to relieve the Cost Specialist, or the Consultant, of professional or technical responsibility for the estimates and cost reports.
- Neither does acceptance of an estimate by PWGSC in any way abrogate the Consultant's responsibility to maintain the specified Construction Cost Limit throughout the life of the project, or the requirement to redesign should the lowest acceptable bid differ significantly from the agreed Construction Cost Plan, unless and until the Departmental Representative indicates otherwise in writing.

RS 9 Commissioning

9.1 Commissioning objectives

As a member of the PWGSC team, the Commissioning Manager/Representative represents the Crown, Owner's and User's interests, and is responsible for overseeing all commissioning activities from the initial Project Identification Stage through to the Post Operational Stage.

Through these stages, the Consultant and Consultant's representatives on site will work closely with the Commissioning Manager/Representative, PWGSC and the Contractor to implement commissioning activities and create useful, well integrated drawings, reports and manuals, in compliance with Contract Documents: The Contract Documentation will reference the PWGSC Commissioning Manual CP 1 2006, as the guidelines to achieve the Commissioning requirements.

Commissioning is a planned program of activities that advances the built works, from the earliest project stages of planning to a condition of full operation, to meet the objectives of commissioning as defined in the PWGSC Commissioning Manuals CP 1 2006.

To ensure that the Commissioning Policy pursuant to the Federal Real Property Act 1992 is implemented as part of the PWGSC accountabilities for commissioning.

9.2 Intent

To define the operational and performance requirements of the Owner and User.

To support real property assets to meet the needs of the owner and occupants

To ensure that the assets operate satisfactorily within the design parameters defined for the asset.

To ensure the process is fully documented.

To ensure the process is officially accepted by the PWGSC Commissioning Manager and operational staff.

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

To ensure that appropriate and start-up and checkout procedures are employed for components, subsystems, including meaningful documentation for and certification of Quality Control reports and

techniques under the normal or enhanced basic services and contractual procedures.

To ensure that the building components, subsystems are exposed to a system integrated testing format to ensure the integrity of the building operational systems.

To ensure that the final product meets the specified requirements.

To document the operations, maintenance and management requirements, and transferring the completed works to qualified facility operators.

To minimize the life-cycle operating and maintenance costs.

To verify that the department's functional requirements are correctly interpreted during the design stage, and that the building systems operate consistently at peak efficiencies, under all normal load conditions, and within the specified energy budget.

9.3 Scope and Activities:

Commissioning is not a replacement for good design and construction practices. Commissioning of buildings ensures that when a building or facility is handed over to its owner as an operating entity it will meet the requirements of the occupants and owner, as described in the Project Brief. It requires coordinated efforts of the part of the Project Planning Team, the Design Team, the Commissioning Team, the Construction Team and the Project Management Team

The process consists of a series of checks and balances to ensure that the work is designed, installed and proven to operate as intended. The roles and responsibilities of the various teams involved are defined in the Commissioning Plan, Project Brief, Consultant Brief and Construction Specifications. These documents also will define the commissioning testing, reporting, witnessing, and acceptance requirements.

This commissioning approach has those responsible for the delivery of the build works, the Design Consultant and the Contractor, utilized in the delivery of the commissioning service and is audited by the PWGSC Commissioning Manager/Representative.

The PWGSC Commissioning Manager shall provide a Commissioning Brief to all Commissioning Agents and Commissioning Representatives to help support the Commissioning Guidelines and requirements.

The Consultants will co-ordinate and facilitate the commissioning activities as part of the basic services provided by the consultant.

The Contractor will execute the commissioning verifications, testing and reporting as a deliverable outlined in the contract documents.

The Commissioning Manager/Representative will audit the entire process on behalf of the PWGSC Project Team. The Commissioning Manager/Representative will also recommend the acceptance of the commissioning results to the Departmental Representative.

9.4 Standards

Follow industry standard best practices
PWGSC CP 1 Commissioning Manual 2006
PWGSC CP 1 - CP 13 Commissioning Guidelines

RS 10 Additional Services

If required, any additional services will be identified at the time of each individual Call-up, and the consultant will be responsible for the provision and management of these additional services. Such additional services could include specialists for acoustics, building envelope design or assessment, seismic studies, traffic design, landscape design, heritage buildings, clerk of the works, etc. or any other work generally considered to be Architecture and or Engineering. Fees for any such required specialist, unless provided by PWGSC staff, will be considered as a disbursement against fees.

•

ANNEX B ROTATIONAL LISTS

The Annex provides the qualified Suppliers for each Specialty Service by Geographical Region. The order of the suppliers presented will be used in Part 6B, Selection Process when determining invited suppliers on a rotational basis. The order of the suppliers will be randomly generated.

The number of names selected is based on the selection process detailed in Part 6B. The name at the top of the list would be selected first. If a supplier is selected they move to the bottom of the list even if they choose to not participate in the RFP or they do not receive a contract as a result of a RFP process.

Suppliers may be added to the list after the annual refresh. New suppliers would be added to bottom of the list and the selection process would continue as per Part 6B.

		Geographic Region		
		Nova Scotia	New Brunswick	Prince Edward Island Newfoundland and Labrador
Architectural 1	1	1	1	1
	2...	2...	2...	2...
Architectural 2	1	1	1	1
	2...	2...	2...	2...
Architectural 3	1	1	1	1
	2...	2...	2...	2...
Architectural 4	1	1	1	1
	2...	2...	2...	2...
Interior Design 1	1	1	1	1
	2...	2...	2...	2...
Interior Design 2	1	1	1	1
	2...	2...	2...	2...

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

ANNEX C SECURITY REQUIREMENTS CHECK LIST

The Security Requirements Check List (Annex C) appended to the arrangement package is to be inserted at this point and forms part of this document.

Solicitation No. - N° de l'invitation
E0225-152290/A
Client Ref. No. - N° de réf. du client
E0225-152290

Amd. No. - N° de la modif.
File No. - N° du dossier
E0225-152290

Buyer ID - Id de l'acheteur
PWA115
CCC No./N° CCC - FMS No./N° VME

ANNEX D DOING BUSINESS

Doing Business (Annex D) appended to the arrangement package is to be inserted at this point and forms part of this document.



Government
of Canada

Gouvernement
du Canada

RECEIVED

MAR 06 2015

Contract Number / Numéro du contrat

E0225 15 2290

Security Classification / Classification de sécurité
UNCLASSIFIED

SECURITY REQUIREMENTS CHECK LIST (SRCL)

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

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE

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



PART A (continued) / PARTIE A (suite)

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

If Yes, indicate the level of sensitivity:

Dans l'affirmative, indiquer le niveau de sensibilité :

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

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

Document Number / Numéro du document :

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

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

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

Special comments:

Commentaires spéciaux :

This Supply Arrangement will be utilized to procure professional services re: a variety of projects in a variety of locations in Atlantic Region. Most may require Reliability Status, but a smaller number of projects may require Secret level.

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

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

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

If Yes, will unscreened personnel be escorted?

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

☒ No ☐ Yes
Non Oui

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

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

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

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

PRODUCTION

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

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

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

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



Government
of Canada

Gouvernement
du Canada

Contract Number / Numéro du contrat

E0225 15 2290

Security Classification / Classification de sécurité
UNCLASSIFIED

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			CONFIDENTIAL	SECRET	TOP SECRET TRÈS SECRET
											A	B	C			
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 ☐ Yes
Non Oui

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

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

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

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

☒ No ☐ Yes
Non Oui

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

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



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Serving
GOVERNMENT,
Serving
CANADIANS.

Doing Business with the National Capital Area (NCA)



www.pwgsc-tpsgc.gc.ca

Last updated: Apr 8, 2013

TABLE OF CONTENTS

SECTION	PAGE
SECTION 1 INTRODUCTION	3
SECTION 2 PWGSC NATIONAL CADD STANDARD	4
SECTION 3 GUIDE TO PREPARATION OF CONSTRUCTION DOCUMENTS FOR PWGSC	4
SECTION 4 CLASSES OF CONSTRUCTION COST ESTIMATES USED BY PWGSC	14
SECTION 5 TIME MANAGEMENT	16

Appendices

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

SECTION 1 INTRODUCTION

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

SECTION 2 PWGSC NATIONAL CADD STANDARD

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

Refer to:

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

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

SECTION 3 GUIDE TO PREPARATION OF CONSTRUCTION DOCUMENTS FOR PWGSC

1 Purpose

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

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

- 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.
- 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.
- Addenda are changes to the construction contract documents or tendering procedures, issued during the tendering process.

2 Principles of PWGSC Contract Documents

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

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

3 Quality Assurance

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

SPECIFICATIONS

1 National Master Specification

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

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

2 Specification Organization

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

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

3 Terminology

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

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

4 Dimensions

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

5 Standards

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

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

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

6 Specifying Materials

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

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

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

Acceptable Materials: set up the paragraph format as follows:

Acceptable Materials:

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

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

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

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

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

"Designated Contractor

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

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

"Designated Contractor

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

and in Part 2 as "Materials

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

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

"Acceptable materials

.1 The only acceptable materials are [] .”

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

7 Unit Prices

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

Use the following wording:

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

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

Sample of Unit Price Table:

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

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

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

8 Cash Allowances

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

9 Warranties

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

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

Delete all references to manufacturers' guarantees.

10 Scope of Work

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

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

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

12 Related Sections

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

13 Index

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

14 Regional Guide

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

15 Health and Safety

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

16 Designated Substances Report

Include "Section 01 14 25 - Designated Substances Report"

17 Subsurface Investigation Reports

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

Subsurface investigation report(s)

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

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

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

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

18 Experience and Qualifications

Remove experience and qualification requirements from specification sections.

19 Prequalification and Pre-award submissions

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

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

20 Contracting Issues

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

Remove all references within the specifications, to the following:

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

DRAWINGS

1 Title Blocks

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

2 Dimensions

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

3 Trade Names

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

4 Specification Notes

No specification type notes are to appear on any drawing.

5 Terminology

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

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

6 Information to be included

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

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

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

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

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

ADDENDA

1 Format

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

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

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

2 Content

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

DOCUMENTATION

Translation

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

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

Consultant shall provide:

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

PWGSC shall provide:

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

SECTION 4 CLASSES OF CONSTRUCTION COST ESTIMATES USED BY PWGSC

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

Class 'D' (Indicative) Estimate:

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

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

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

Class 'C' Estimate:

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

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

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

Class 'B' (Substantive) Estimate:

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

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

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

Class 'A' (Pre-Tender) Estimate:

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

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

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

SECTION 5 TIME MANAGEMENT

1 Time Management, Planning, and Control

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

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

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

1.1 Schedule Design

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

When building a Control System you must consider:

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

1.2 Schedule Development

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

Work Breakdown Structure

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

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

The WBS is as follows:

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

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

Major and Minor Milestones

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

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

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

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

Activities

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

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

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

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

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

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

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

Project Logic

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

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

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

Activity Duration

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

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

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

Activity List

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

Milestone List

A Milestone List identifies all project Major and Minor milestones.

Master Schedule

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

Detailed Project Schedule

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

1.3 Schedule Review and Approval

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

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

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

1.4 Schedule Monitoring and Control

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

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

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

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

Progress Reports

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

The Progress Report includes:

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

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

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

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

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

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

Exception Report

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

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

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

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

1.5 Standard Submissions

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

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

1.6 Schedule Outputs and Reporting Formats

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

Progress Reports

Paper Size: Letter

Paper Format: Portrait

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

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

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

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

Exception Reports

Paper Size: Letter

Paper Format: Portrait

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

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

Paper Size: Letter

Paper Format: Landscape

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

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

Work Breakdown Structure (indent tree):

Paper Size: Letter

Paper Format: Portrait

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

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

Activity Lists

Paper Size: Letter

Paper Format: Portrait

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

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

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

Milestone Lists

Paper Size: Letter

Paper Format: Portrait

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

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

Master Schedule (Bar Chart)

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

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

Detailed Project Schedules (Bar Chart)

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

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

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

Last updated November 21, 2012

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

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

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

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

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

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

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

Consultant's Representative: _____

Firm name: _____

Signature: _____ Date: _____

APPENDIX 'B' - Sample of Addendum

Last updated April 22, 2008

ADDENDUM No. _____

Project Number: _____

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

DRAWINGS

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

- 1 A1 Architectural
- .1

SPECIFICATIONS

SPEC NOTE: indicate section number and title.

- 1 Section 01 00 10 - General Instructions

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

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

APPENDIX 'C' - Sample of Index

Last updated April 22, 2008

Project No: _____

Index
Page 1 of _____

DRAWINGS AND SPECIFICATIONS

DRAWINGS:

SPEC NOTE: List all Drawings by number and title.

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

SPECIFICATIONS:

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

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

APPENDIX 'D'

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

Issued by:

Real Property Contracting Directorate

PWGSC

May 2005

Last Updated: June 3, 2008

Version 1.0

PREFACE

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

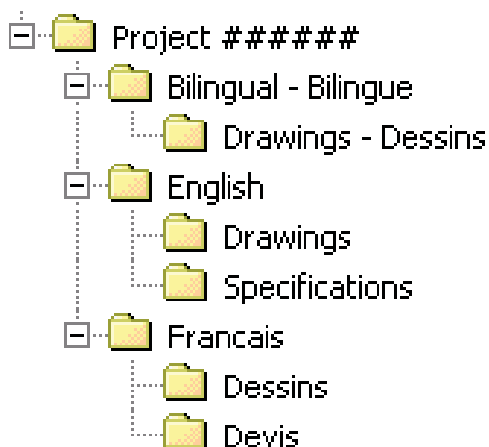
There is therefore a need to adopt a common directory structure and file-naming convention to ensure that the information made available to contractors electronically and in hard (printed) copy is in accordance with the sequence adopted in the real property industries, both for design and construction.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

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

1. DIRECTORY STRUCTURE

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

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



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

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

IMPORTANT:

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

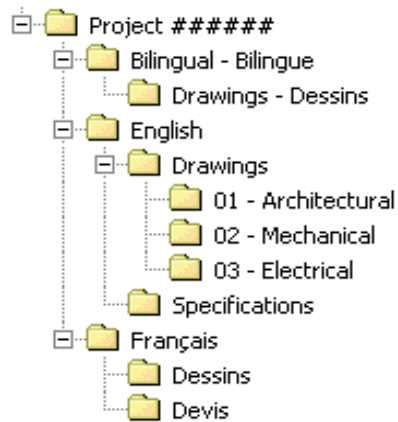
1.2 4th Tier Sub-Folders for Drawings

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

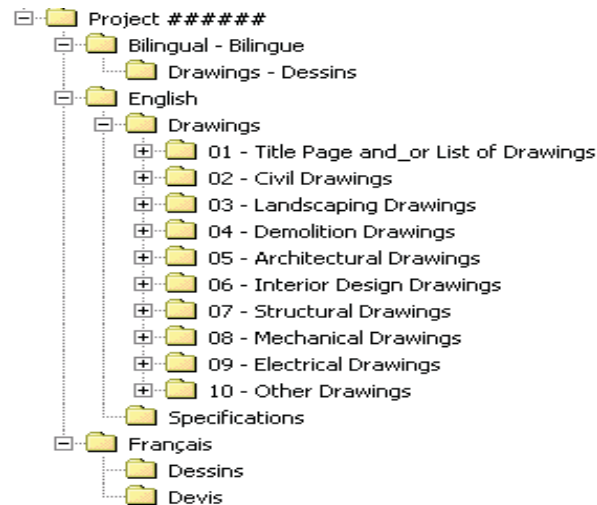
Because the order of appearance of the sub-folders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the sub-folders in the “Drawings – Dessins”, “Drawings” and “Dessins” folders.

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

Examples of 4th Tier sub-folders for drawings:



or



1.2.1 Naming Convention

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

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

- Y

Where:

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

Y = The title of the folder

Example: 03 – Mechanical

For the “*Drawings - Dessins*” folder:

- Y - Z

Where:

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

Y = The English title of the folder

Z = The French title of the folder

Example: 04 - Electrical - Électricité

It should be noted that the numbering of the 4th Tier sub-folders is for sorting purposes only and is not tied to a specific discipline. For example, “*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.

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:

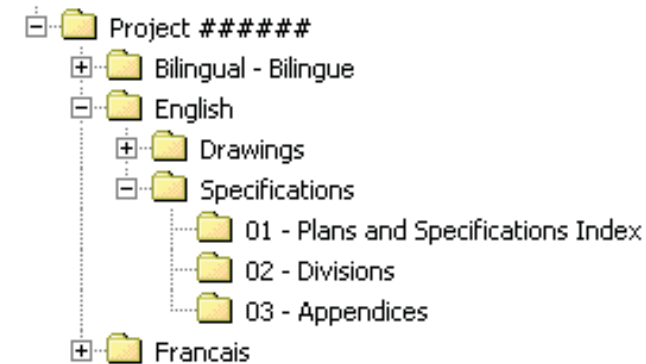
- The alphanumerical sorting is done on an ascending order;
- The alphanumerical order of the sub-folders determines the order of appearance on the screen as well as the order of printing (as an example: all the drawing PDF files in the 01 sub-folder will be printed in alphanumerical order before the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

1.3 4th Tier Sub-Folders for Specifications

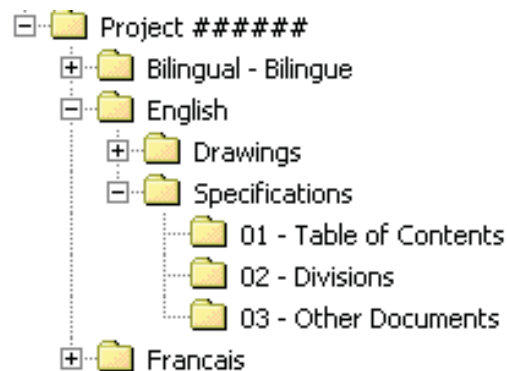
The “*Specifications*” and “*Devis*” folders must have 4th Tier sub-folders created to reflect the various elements of the specifications.

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

Examples of 4th Tier sub-folders for specifications:



or



1.3.1 Naming Convention

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

For the “Specifications” and “Devis” folders:

- Y

Where:

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

Y = The title of the folder

Example: 02 – Divisions

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

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

screen display and printing as per the following rules:

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

2. NAMING CONVENTION FOR PDF FILES

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

2.1 Drawings

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

X### - Y

Where:

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

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

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

Example: A001 - First Floor Details

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

The following important points about drawings are to be noted:

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

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

- Y

Where:

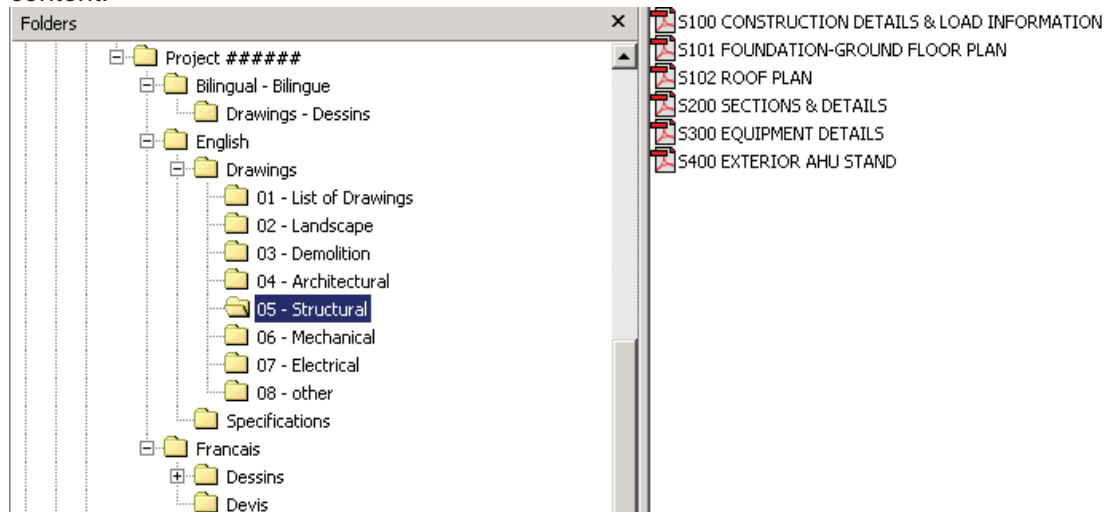
= A two digit number ranging from 01 to 99 (leading zeros must be included)

Y = The name of the drawing

Example: 01 - Title Page
02 - List of Drawings

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

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



2.2. Specifications

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

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

2.2.1 Documents other than Specifications Divisions

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

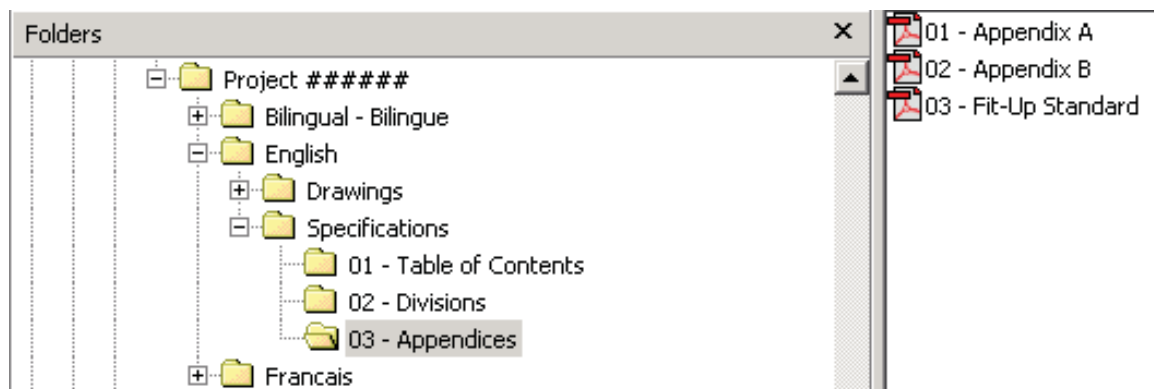
- Y

Where:

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

Example: 01 - Plans and Specifications Index

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



2.2.2 Specifications Divisions

The Specifications Divisions must be named as follows:

Division ## - Y

Where:

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

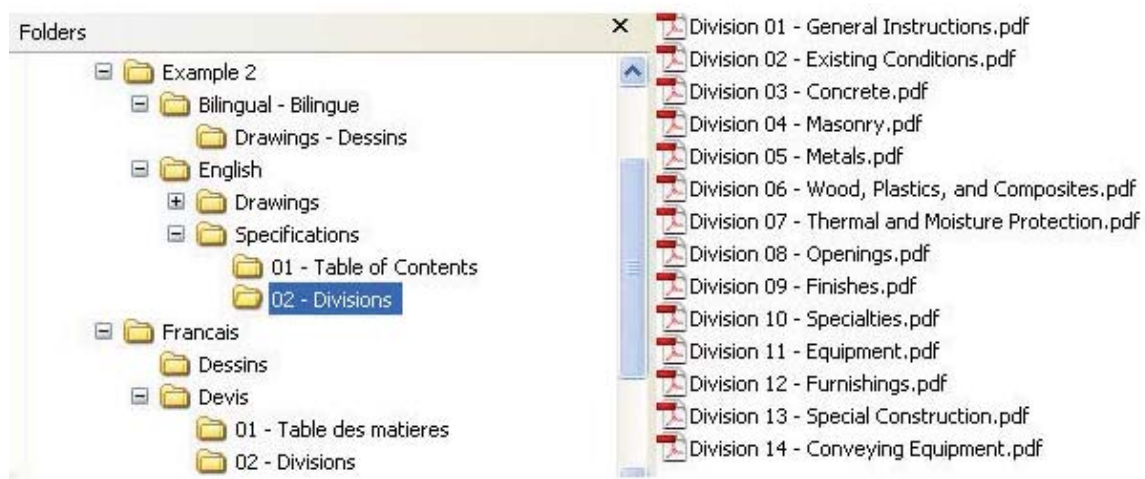
Y = Name of the Specifications Division as per **CSC/CSI MasterFormat™**

Example: Division 05 – Metals

The following important point about specifications is to be noted:

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

Example of a “Divisions” sub-folder content:



3. CD-ROM LABEL

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

Project Number / Numéro de projet

Project Title / Titre du projet

Documents for Tender / Documents pour appel d'offres

CD X of/de X

Example:

Project 123456 / Projet 123456

Repair Alexandra Bridge / Réparation du pont Alexandra

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

APPENDIX 'E'

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

Issued by:
Real Property Contracting Directorate
PWGSC

May 2005 Last Updated: May 3, 2005

Version 1.0

PREFACE

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

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

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

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

1. PRINTER DRIVERS

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

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

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

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

2. PRINTER CONFIGURATION

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

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

3. CREATING PDF FILES

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

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

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

4. PDF FILES SETTINGS

4.1 Security

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

4.2 Drawing Orientation

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

4.3 Font Type

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

4.4 Resolution

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

4.5 Scale

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

5. SCANNING

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

6. FINAL CHECKLIST

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

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

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

7. ADDITIONAL INFORMATION

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