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

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government Services Canada/Réception des souissions Travaux publics et Services gouvernmentaux Canada
800 Burrard Street, Room 219
800, rue Burrard, pièce 219
Vancouver, B.C.
Vancouver
British Colubia
V6Z 0B9
Bid Fax: (604) 775-9381

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

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

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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

Comments - Commentaires

Title - Sujet
Comprehensive Bridge Inspection

Solicitation No. - N° de l'invitation	**Date**
EZ899-162115/A	2016-03-10

Client Reference No. - N° de référence du client

GETS Reference No. - N° de référence de SEAG
PW-$TPV-028-7766

File No. - N° de dossier	**CCC No./N° CCC - FMS No./N° VME**
TPV-5-38369 (028)	

Solicitation Closes - L'invitation prend fin
at - à 02:00 PM
on - le 2016-04-21

Time Zone
Fuseau horaire
Pacific Daylight Saving Time PDT

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

Address Enquiries to: - Adresser toutes questions à:	**Buyer Id - Id de l'acheteur**
Lam(TPV), Tian	tpv028

Telephone No. - N° de téléphone	**FAX No. - N° de FAX**
(604) 775-9382 ( )	(604) 775-6633

Destination - of Goods, Services, and Construction:
Destination - des biens, services et construction:
PWGSC - Various Locations - Alaska Highway, BC

Instructions: See Herein

Instructions: Voir aux présentes

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

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

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

Telephone No. - N° de téléphone
Facsimile No. - N° de télécopieur

Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)
Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)

Signature **Date**

Issuing Office - Bureau de distribution
Public Works and Government Services Canada - Pacific Region
800 Burrard Street, Room 219
800, rue Burrard, pièce 219
Vancouver, B.C.
V6Z 0B9
British C

Canada

REQUEST FOR PROPOSAL (RFP)

(One Phase Procedure)

2017 and 2019 Comprehensive Bridge and Culverts Inspections
Various Locations
Alaska Highway, BC

Solicitation Number: EZ899-162115/A
Project number: R.017174.009

For information:
Tian Lam
Supply Specialist
Email: tian.lam@pwgsc-tpsgc.gc.ca

Public Works and Government Services Canada

TABLE OF CONTENTS

The following is intended to clarify the general structure of the whole document.

SUPPLEMENTARY INSTRUCTIONS TO PROPONENTS (SI)

SI1 INTRODUCTION

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

2. This is a single phase selection process. The nature of the requirement and the anticipated limited number of response by the industry leads PWGSC to believe that this approach will not unduly force a large number of firms to expend an overall unreasonable amount of effort in response to PWGSC.

3. Proponents responding to this RFP are requested to submit a full and complete proposal. The proposal will cover not only the qualifications, experience and organization of the proposed Consultant Team, but also the detailed approach to the work, and the pricing and terms offered. A combination of the technical and price of services submissions will constitute the proposal.

SI2 PROPOSAL DOCUMENTS

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

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

2. The following are the proposal documents:

   (a) Supplementary Instructions to Proponents (SI);

   R1410T (2015-07-03), General Instructions (GI) – Architectural and/or Engineering Services – Request for Proposal;
   Submission Requirements and Evaluation (SRE);

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

   (c) Project Brief / Terms of Reference;

(d) the document entitled "Doing Business with PWGSC – Pacific Region";

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

(g) the proposal, Declaration/Certifications Form and Price Proposal Form.

3. Submission of a proposal constitutes acknowledgment that the Proponent has read and agrees to be bound by these documents.

SI3 QUESTIONS OR REQUEST FOR CLARIFICATION

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

SI4 CANADA'S TRADE AGREEMENTS

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

SI5 CERTIFICATIONS

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

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

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

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

SI6 WEBSITES

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

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

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

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

Code of Conduct for Procurement
http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html

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

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

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

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

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

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

TERMS, CONDITIONS AND CLAUSES

AGREEMENT

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

   (a) the Front Page and this Agreement clause;
   (b) the General Terms, Conditions and Clauses, as amended, identified as:
   R1210D (2015-07-09), General Condition (GC) 1 - General Provisions – Architectural and/or Engineering Services
   R1215D (2014-06-26), General Condition (GC) 2 - Administration of the Contract
   R1220D (2015-02-25), General Condition (GC) 3 - Consultant Services
   R1225D (2015-04-01), General Condition (GC) 4 - Intellectual Property
   R1230D (2015-02-25), General Condition (GC) 5 - Terms of Payment
   R1235D (2011-05-16), General Condition (GC) 6 - Changes
   R1240D (2011-05-16), General Condition (GC) 7 - Taking the Services Out of the Consultant's Hands, Suspension or Termination
   R1245D (2012-07-16), General Condition (GC) 8 - Dispute Resolution
   R1250D (2015-02-25) R1650D (2015-02-25), General Condition (GC) 9 - Indemnification and Insurance
   Supplementary Conditions
   Agreement Particulars
   (c) Project Brief / Terms of Reference;
   (d) the document entitled "Doing Business with PWGSC – Pacific Region";
   (e) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
   (f) the proposal, the Declaration/Certifications Form and the Price Proposal Form.

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

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

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

   (a) any amendment or variation in the Agreement that is made in accordance with the terms and conditions of the Agreement;
   (b) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
   (c) this Agreement clause;
   (d) Supplementary Conditions;
   (e) General Terms, Conditions and Clauses;
   (f) Agreement Particulars;
   (g) Project Brief / Terms of Reference;
   (h) the document entitled "Doing Business with PWGSC – Pacific Region";
   (i) the proposal.

AGREEMENT PARTICULARS

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

PERIOD OF CONTRACT

The period of the Contract is from date of contract award to March 31, 2020.

APPENDIX A1 - TEAM IDENTIFICATION FORMAT

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

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

The consultant team to be identified at this time must include the following:
Proponent (prime consultant) - Structural Engineering Firm
Key Sub-consultants / Specialists - Inspection Engineering Consultant, Underwater Inspection Team

Information required - name of firm, key personnel to be assigned to the project. For the prime consultant indicate how you meet the provincial licensing requirements. In the case of a joint venture identify the existing or proposed legal form of the joint venture (refer to General Instructions - Limitation of Submissions).

* If the proponent includes further info other than the names and designations of the proposed personnel in Appendix A, these pages will be counted towards the page limit restriction.

I. Prime Consultant (Proponent – Structural Engineering Firm):

Firm or Joint Venture Name: .....
.....
.....

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

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

II. Key Sub Consultants / Specialists:

Inspection Engineering Consultant

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

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

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

Underwater Inspection Team

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

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

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

VALIDATION

_____
Name and title of person authorized to sign on behalf of Bidder (Type or print)

_____ _____
Signature Date

APPENDIX A2 - INTEGRITY PROVISIONS – LIST OF NAMES

If the required list of names has not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to provide the names within the time frame specified will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

APPENDIX B - DECLARATION/CERTIFICATIONS FORM

Project Title:

Name of Proponent:

Street Address: **Mailing Address:**

Telephone Number: ( )

Fax Number: ( )

E-Mail:

Procurement Business Number:

Type of Organization:	**Size of Organization:**
_____ Sole Proprietorship _____ Partnership _____ Corporation _____ Joint Venture	Number of Employees _____ Graduate Architects / Professional Engineers _____ Other Professionals _____ Technical Support _____ Other _____

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

Former Public Servant (FPS) - Certification

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

Definitions

For the purposes of this clause,

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

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

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

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

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

Former Public Servant in Receipt of a Pension

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

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

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

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

Work Force Adjustment Directive

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

If so, the Proponent must provide the following information:

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

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

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

Name of Proponent:

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

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

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

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

E-mail: _____

This Appendix "B" should be completed and submitted with the proposal, but may be submitted afterwards as follows: if Appendix "B" is not completed and submitted with the proposal, the Contracting Authority will so inform the Proponent and provide the Proponent with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the proposal non-responsive.

APPENDIX C - PRICE PROPOSAL FORM

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

PROPONENTS SHALL NOT ALTER THIS FORM

Name of Proponent:.....
Solicitation Number:……
Address: .....
.....
Phone / Fax: .....
PBN No. (refer to General Instructions to Proponents GI 1.4): .....

The following will form part of the evaluation process:

REQUIRED SERVICES

The basic fee to be paid to the Consultant for required services shall be determined in accordance with the following arrangements:

(1) Fixed Fee (R1230D (2015-02-25), GC 5 - Terms of Payment)

SERVICES (for 2017 Inspection)	**FIXED FEE**
RS 1 Analysis of Inspection Requirements	$.....
RS 2 Detailed Inspection	$.....
RS 3 Seismic and Load Rating Capacity Evaluation	$.....
SERVICES (for 2019 Inspection)	**FIXED FEE**
RS 1 Analysis of Inspection Requirements	$.....
RS 2 Detailed Inspection	$.....
RS 3 Seismic and Load Rating Capacity Evaluation	$.....
(1) MAXIMUM FIXED FEES	**$.....**

Fixed Fee – Travel and living expenses – Meals and Accommodations

For fixed fees, the Consultant will not be reimbursed travel and accommodation expenses as these expenses should be included in the fixed fee.

(2) Time Based Fees (R1230D (2015-02-25), GC 5 - Terms of Payment)

Category of Personnel*	ESTIMATED HOURS Column A	HOURLY RATES** Column B	TIME BASED FEE Columns AxB
Structural Engineer (Project Manager)	1200	$.....	$.....
Intermediate Personnel	1400	$.....	$.....
Draft Personnel	800	$.....	$.....
Admin Support Staff	200	$.....	$.....
(2) MAXIMUM TIME BASED FEES			$.....

*Payment will be based on actual hours spent. Travel time and/or expenses will be not be reimbursed separately. (Refer to R1230D (2015-02-25), GC 5.12 – Disbursements).
**All inclusive hourly rate is applicable to both normal working hours and any other shift work as required.

Time Based Fees – Travel and Accommodations

For time based fees, the Consultant will be reimbursed for the authorized living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for overhead or profit, in accordance with the meal, and incidental expense allowances specified in the Treasury Board Travel Directive, and with the other provisions of the directive referring to "travelers", rather than those referring to "employees".

Website: Http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/tbm_113/menu-travel-voyage-eng.asp

TOTAL FEE FOR REQUIRED SERVICES (R1230D (2015-02-25), GC 5 - Terms of Payment) → (1) Maximum Fixed Fees + (2) Maximum Time Based Fees:

$_____

(3) DISBURSEMENTS

At cost without allowance for mark-up or profit, supported by invoices/receipts - see clause R1230D (2015-02-25), GC 5 - Terms of Payment, section GC5.12 Disbursements:

MAXIMUM AMOUNT FOR DISBURSEMENTS **$50,000.00**

END OF PRICE PROPOSAL FORM

Appendix D

DOING BUSINESS WITH PWGSC – PACIFIC REGION

Guide for Architectural and Engineering Consultants

November 2012

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA
PACIFIC REGION
REAL PROPERTY BRANCH
PROFESSIONAL AND TECHNICAL SERVICES

TABLE OF CONTENTS

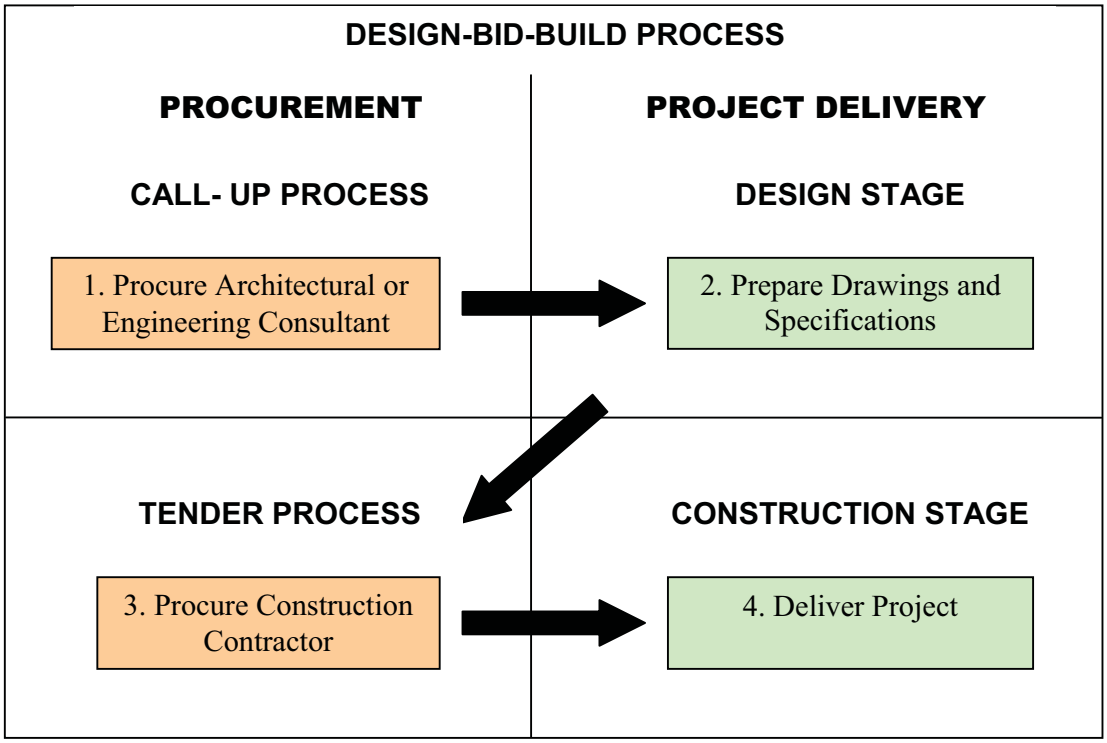
I. PURPOSE OF GUIDE

The purpose of this Guide is twofold:

1. To provide guidance to architectural and engineering consultants ("consultants") on **how to work with PWGSC**'s project managers, architects, engineers and other technical staff during a project.
2. To assist consultants and PWGSC staff to **prepare construction contract documents** (i.e. specifications and drawings). These documents are typically used in PWGSC's tendering process for acquiring design or construction services.

This document provides guidance, including by identifying some of the mandatory requirements of PWGSC. By taking the time to understand and follow this Guide, you will know better what is expected of you. You will also have fewer deficiencies identified during PWGSC reviews resulting in faster turnarounds and greater efficiencies. Your cooperation will also help ensure consistency, accuracy, safety, security, effectiveness, and value for money.

This Guide has been designed primarily for a design–bid–build scenario which is a common procurement approach used by PWGSC. A simplified graphical illustration of the process is shown below.



II. DESIGN MANAGEMENT / QUALITY MANAGEMENT

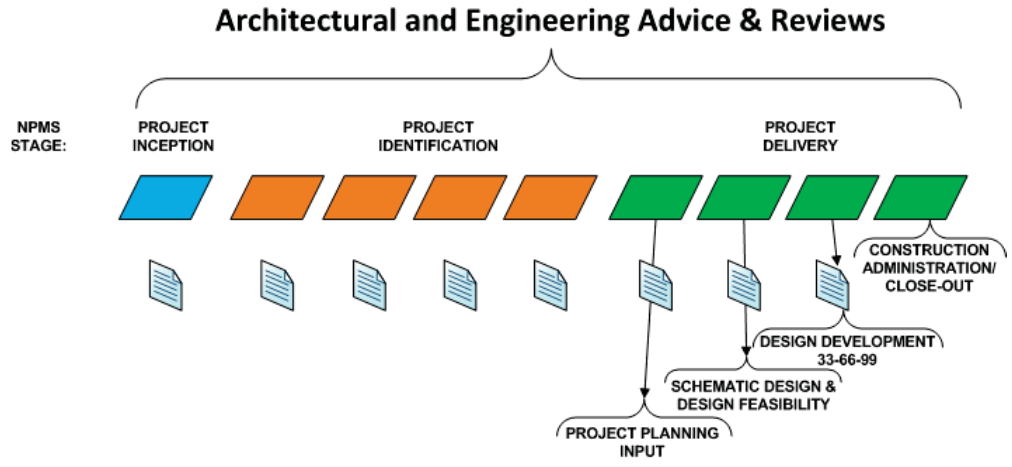
A. PWGSC's Design Management Process

The Design Management process is an efficient and seamless flow of integrated activities performed by PWGSC's Architectural and Engineering Services (AES) staff and external consultants. It is important to understand that the design is the responsibility of the consultant. The process is aimed at assuring *that the design, procurement, and delivery of a project meet client requirements*.

The process is embedded in the prescribed protocols of the department's Quality Management System (QMS) (see Appendix 1) and works in parallel to the consultant's quality assurance program. Design Management activities and deliverables are guided by Standing Offers, the Royal Architectural Institute of Canada's Canadian Handbook of Practice (CHOP), and standards of the Architectural Institute of BC and of the Association of Professional Engineers and Geoscientists of BC.

The PWGSC Strategic Design Advisor (SDA)[1], with assistance from the Design Manager (DM) and Design Team, supports the Project Manager (PM) and external client from the early project inception stage through to construction and commissioning (see Appendix 2 for a diagram of the National Project Management System) with advice, guidance, milestone reviews, and options with regard to design, technical aspects, project risk, best practices, financial matters, scheduling and project delivery.

Among PWGSC staff, A&E Reviews are usually referred to as "functional reviews" whereas reviews done by consultants on their own work are referred to as "technical reviews."



[1] The SDA role is currently being carried out by Design Managers until the SDA role is approved by Executive and incorporated into PWGSC processes.

The desired outcomes of Architectural and Engineering Advice & Reviews include the following, among other design parameters affecting the project:

- A clear design vision and objectives are formulated up-front
- The design meets the client's current and evolving needs
- The design is complete, taking into account all relevant factors as reflected in the Design Brief and Project Brief
- The design aligns with the schedule, budget and risk management plans
- The design packaging is consistent with plans for how to deliver the construction (e.g. Public-Private Partnership, design-bid-build, Construction Management, design-build, etc.)
- The design intent is accurately reflected in Requests For Proposals and statement of Required Services for consultants
- The design will enable a logical work program for construction delivery
- The design takes into account best practices and appropriate technologies
- The design meets federal government requirements, policies, and regulations
- The design meets the requirements and regulations of all levels of government having jurisdiction
- The design will result in a built environment that functions as intended
- Quality assurance has been applied to the design process internally and by the consultants

In the project delivery stage, the SDA oversees functional programming, schematic design and design feasibility, and design development. A&E Reviews are performed at project milestones/gates as defined and agreed in the project plan by the Project Manager and the SDA (e.g. at the conclusion of functional design, schematic design and design feasibility, and design development (33%/66%/99% phases).

In the construction documentation phase, an A&E Review includes the following:

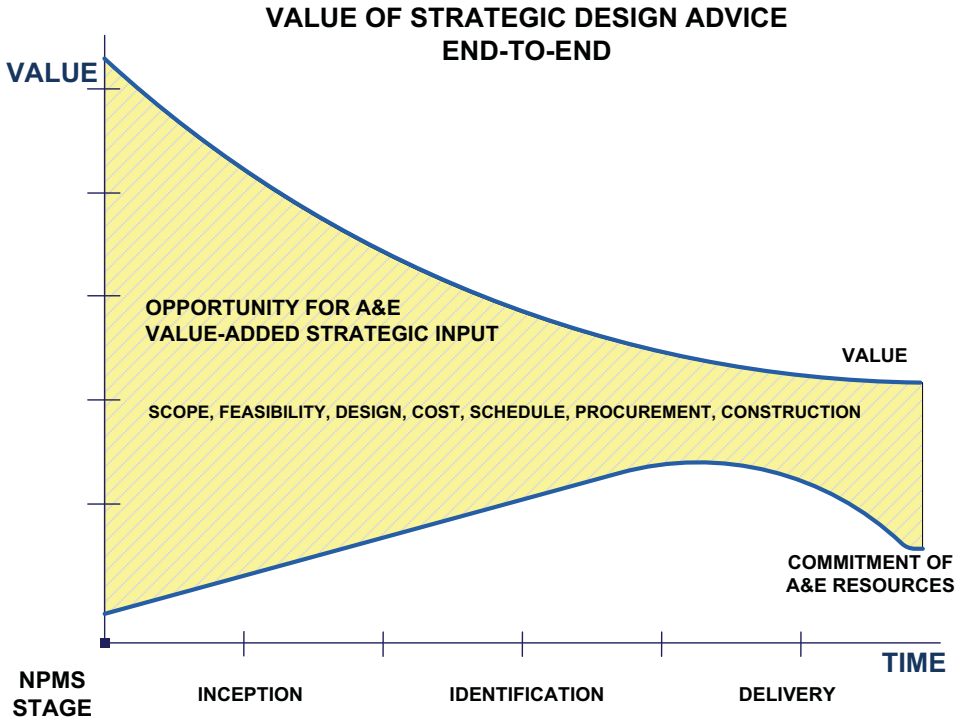
- The scope of work is clear and well-defined in the documentation
- The design is constructible
- Construction contract documents are consistent with the statement of Required Services and are correct and complete
- 33%/66%/99% drawings are defined and delivered as per the description of Required Services, the Standing Offer (if applicable), and professional industry standards (i.e. Architectural Institute of BC, Royal Architectural Institute of Canada's Doc. 6 and Canadian Handbook of Practice, Association of Professional Engineers & Geoscientists of BC)
- Materials are properly specified; building sciences best practices are incorporated; sustainability targets are met

- Quality Assurance is included in a project's specifications and all project contracts
- Specifications use the current edition of the six digit format Canadian National Master Construction Specification (NMS)
- Reference is made to the most current edition of the applicable standards
- Applicable national, provincial and local codes and regulations are specified

The SDA is responsible for obtaining and coordinating review comments from PWGSC and client staff and for communicating them to the consultant. The consultant must provide a written response to all milestone review comments. A template form used for the A&E Review is provided in Appendix 3.

During construction, AES monitors that construction is being executed as per the design intent as set out in construction documents and as per the project timeline/schedule. AES also has a role in construction administration (e.g. site meetings/reviews, change orders, RFI, shop drawings, etc).

The amount of effort that is invested in A&E Advice & Review depends to a great extent on the project. More complex or large projects benefit more from involvement by AES, while simpler projects require less time. As a rule, the greater the design management effort that is invested at the early stages of a project, the greater is the value added in the form of innovative solutions and fewer problems down the line.



B. The Consultant's Responsibility for Quality

As well as having to deliver in accordance with the contract for their work, consultants are expected to comply with the requirements of the Department and with the regulations of their professional association. Every consultant is subject to a regulatory body or association which outlines the quality assurance requirements; for example, the Royal Architectural Institute of Canada's Canadian Handbook of Practice, AIBC Practice Bulletins, and the Association of Professional Engineers and Geoscientists of BC bylaws. Consultants are to use their seal/stamp in accordance with the rules of their professional association.

Prime consultants are required to have their own parallel quality assurance program. You are expected to comply with the requirements of ISO 9001:2008 – Quality management systems – Requirements, published by the International Organization for Standardization (ISO) specifically on the following clauses:

4.1 General requirements
4.2.3 Control of documents
4.2.4 Control of records
5.2 Customer focus
7.2 Customer-related processes
7.3 Design and development
7.4 Purchasing
8.2 Monitoring and measurement
8.3 Control of nonconforming product
8.5.1 Continual Improvement
8.5.2 Corrective Action
8.5.3 Preventive Action

We do not require that the consultant be registered to ISO 9001; however, your quality management system must address the above requirements appropriate to the scope of work.

PWGSC will not serve as the consultant's quality assurance program for any discipline including, architectural, civil, structural, electrical, mechanical, etc. For example, PWGSC is not responsible for checking a structural engineering consultant's design details or calculations as this important aspect of quality and safety is addressed by a separate protocol under the respective regulatory body's bylaws, such as those of the Association of Professional Engineers and Geoscientists of BC (see http://www.apeg.bc.ca/resource/publications/governancepolicies/documents/bylaws.pdf). Obtaining an independent structural review, as per APEGBC, is the external consultant's own responsibility.

PWGSC's review processes are not intended to serve as an independent review process for consultants. Do not expect PWGSC to check your work.

PWGSC will at random request audits of the consultants' quality management processes over the length of a project:

C. Application Notes – Three Scenarios:

SCENARIO #1 – Consultant Does the Design

In this scenario, AES engages an external consultant to do the design and to prepare contract drawings and specifications for tender for construction. An SDA is responsible for leading the Architectural and Engineering Review process. Consultants involved are responsible for the design and for quality control of their own work in accordance with the requirements of their governing professional body. Professional consultants sign and seal the drawings and specifications.

SCENARIO #2 – AES Does the Design

In this scenario, AES is responsible for the design and staff prepare the contract drawings and specifications. This scenario is relatively rare. An SDA (a licensed in BC architect or engineer), through the A&E Advice & Review, is responsible for overseeing and guiding the design process. An internal team, under the guidance and supervision of the SDA, prepares the contract drawings and specifications. Independent third party AES staff are assigned to conduct peer reviews of the work of the internal design team. The SDA signs off on the completeness of the documentation.

SCENARIO #3 – AES and Consultant Jointly do the Design

In this scenario, AES collaborates with a consultant to jointly do the design and prepare contract drawings and specifications. Both Scenario #1 and #2 apply to each of the collaborative parties for their respective scope. Scope and responsibilities (architect/engineer of record, responsibility for sealing/signing for assignment) are agreed to by both parties and outlined in the contract.

III. WORKING WITH PWGSC

A. The Consultant's Role

As an external architectural or engineering consultant, we may ask you to take on any number of lead or supporting roles on a project. You may be involved in pre-design, design, construction, commissioning or close-out as per the contract for your work which sets out the Required Services. If your contract is a call-up under a Standing Offer Arrangement (SOA), then all the SOA requirements apply by reference.

Pre-design – We may engage consultants to undertake specific, pre-design tasks during the project inception or project identification stages. By being involved early in projects, AES working with their architectural or engineering consultants can foster innovative solutions. The consultant's tasks will support AES in providing advice, guidance, and options with regard to design, technical aspects, project risk, best practices, financial matters, scheduling and project delivery. For example, we may ask you to prepare a Functional Program or to write a Design Brief.

Design Development – During the project delivery stage, we typically ask a consultant to manage and coordinate a design team of internal and/or external disciplines developing specifications and drawings. The coordinating consultant, someone who is expert in the primary technical discipline of the work, is responsible for the design and for assembling all design and construction contract documents unless instructed otherwise. The coordinating consultant is usually an architect but could be a consultant in another discipline.

Construction – You may be engaged as a Project Architect or Project Engineer. Depending on the role definition, we typically expect you to be the lead (not PWGSC) in the day-to-day liaison with the general contractor, in reinforcing the project's technical requirements, in sorting out issues and challenges as they arise, and other tasks as set out in the Terms of Reference (TOR). You will be expected to deal with all contractor Requests for Information (RFI) by preparing On Site Instructions (SI) and/or Contemplated Change Notices (CCN) as may be required; and to prepare Change Orders (CO) when required. These are all to be done using the PWGSC forms (see Appendix 6 for links).

Commissioning – We may specify that a consultant manage the commissioning process.

Close out - At this point, the consultant will prepare the final as-built drawings for submission to the PM/SDA for review and approval.

The main players in a typical project and their roles are described in the table below. Use the terms for these roles on a consistent basis in any documents you prepare for PWGSC.

PROJECT ROLES	
Technical Authority	A PWGSC staff person who is identified in a Standing Offer for design and technical expertise and is responsible for the management of that Standing Offer.
Contracting Authority	The Contracting Authority is the PWGSC group responsible for administering the tender call and the contract. In the Pacific Region, it is the Acquisitions Unit, Real Property Contracting ("RPC").
Departmental Representative	The Departmental Representative is defined as the PWGSC person that exercises the roles and attributes of Canada with respect to the contract. In the Pacific Region, the Departmental Representative is usually the Project Manager. **Do not use the terms "owner," "engineer," or "client" when referring to PWGSC's representative.**
Project Leader (PL)	The client's (i.e. the other government department) representative for the project.
Project Manager (PM)	A PWGSC Project Manager is assigned to every project. He/she provides overall leadership and direction for the project team and develops the Project Charter and Project Plan. The Project Manager has overall responsibility for project scope, budget, schedule, quality and documentation. He/she may out-task project management activities to an external consultant but must retain signing authority pursuant to the Financial Administration Act.
Strategic Design Advisor (SDA)	A PWGSC staff person who is responsible to the PWGSC Project Manager and client for overall leadership and direction of a multi-disciplinary design team that provides strategic design input, oversees reviews, and delivers construction contract documents to the Project Manager. The SDA supports the PM and external client during project inception, project identification and project delivery stages. The SDA may also act as the Design Manager depending on the project's size and complexity.
Design Manager (DM)	The Design Manager is a PWGSC staff person responsible to the Strategic Design Advisor for day-to-day design management of the project from feasibility phases to completion.
Design Team	PWGSC professional and technical staff from various disciplines (e.g. mechanical, electrical, structural, civil, specifications, health & safety) assigned to the team to assist the Design Manager in the design management of the project.

PROJECT ROLES	
Consultant	An external architectural or engineering consultant that may take on any number of lead or supporting roles on a project as per the contract for the work which sets out the Required Services.
Contractor	Construction contractors use the drawings and specifications prepared by consultants to prepare a bid for construction and construct the works if they are the successful bidder.

B. Required Services

When executing a specific project, you must refer to the content in this Guide in conjunction with the description of Required Services (RS) in your contract. The Required Services describe the project-specific requirements while this Guide sets out PWGSC's requirements that are common to all projects. In the case of a conflict, the contract terms and statement of Required Services in your contract override this Guide.

Any proposed changes to your scope of work are to be discussed with the Departmental Representative but any resulting changes can only be authorized by a contract amendment.

C. Proposed Scope of Work

In your fee proposal, specify your deliverables (refer to descriptions of the Required Services, Terms, and Structure) together with cost breakdowns and promised delivery dates. Outline the team members, their hourly rates, and number of hours by person for every phase of the project.

You are required to submit a schedule for your work that we can use as a benchmark for assessing your progress and for billing. Include a project schedule in MS Project or Excel format outlining the major design and construction phases and subtasks/phases. Progress against your schedule is to be confirmed and reported monthly. Any adjustments/deviations to/from the schedule require submission of changes and written approval from the Strategic Design Advisor/Design Manager and Project Manager.

Before proceeding from one phase to the next (i.e. schematic design, 33%, 66%, 99% design, tender etc.), the consultant must seek approval from the SDA. The SDA, in turn, obtains written authorization from the PM indicating that a particular phase is complete.

Any changes to your project team must be done in accordance with General Conditions 23: Changes to the Consultant Team.

PWGSC requires effective time management to ensure that projects are planned, scheduled, monitored and controlled in a systematic manner towards timely completion of the planning, design and construction activities. Construction

documentation submitted at the 33%/66%/99% stages is a tangible indicator of project progress. Documentation that does not meet requirements will be returned to the consultant for revision. The consultant will be responsible for any schedule delays of their own making.

The SDA/Design Manager, in communication with the Project Manager, is responsible for monitoring the prime consultant's progress and performance.

D. PWGSC Roadmaps

PWGSC has a well-defined National Project Management System (NPMS) http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/index-eng.html and a Quality Management System (QMS) as described in the Appendices. Note that this QMS applies to the Pacific Region of PWGSC. We encourage you to become familiar with these systems so that you have context for your work.

E. Project Monitoring and Control (Design, Schedule and Cost)

(Reserved)

F. Preparing Construction Cost Estimates

PWGSC uses four classes of cost estimates: Classes A, B, C, and D http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/couts-cost/definition-eng.html. We require a Class A estimate prior to issuing tender-ready documents. The Class A estimate is generally expected to be within 5% to 10% of the actual contract award price for new construction. Tendering risks (e.g. cost overruns, delays, etc.) should be considered with financial implications calculated accordingly. The services of a professional estimator or quantity surveyor are often required and, if appropriate, you should include them in your project team. The cost estimate needs to clearly identify the cost for each technical discipline, e.g. civil, structural, mechanical, electrical, etc. Consultants are responsible for aligning the project construction cost with the cost estimate and design at each of the project phases, as per terms of the Required Services.

G. Construction Administration

(Reserved)

H. Site Visits during Construction

We require the prime consultant to sign off on progress claims from the construction contractor. We expect the prime consultant to know the construction's progress which means the prime and the sub-consultants on the

team must make regular site visits. For large or complex projects, the Terms of Reference may require the prime consultant to have an office on-site.

I. Project Commissioning and Close-Out

(Reserved)

J. Invoicing

The format and content of your invoices must be consistent with your contract, the requirements of the relevant Standing Offer (if applicable), and your fee proposal. Quote the project number and name, as well as the call-up number (if applicable) and contract number. See sample invoice in Appendix 4.

The invoice amount should be calculated as per your contract (i.e. hourly or percent complete for fixed fee contracts). Hourly tracking of team members is required and is to be provided if requested to support progress claims or project audits.

Make your invoices to the attention of the PWGSC Project Manager with a copy of the invoice to the project's SDA/Design Manager. The SDA/Design Manager will verify that the work was done as contracted. PWGSC will not pay an invoice until staff verify that the work was done as contracted; for example, in the case of design documentation, staff will verify that the work is indeed 33%/66%/99% complete before recommending an invoice for payment.

K. Consultant Evaluation

PWGSC evaluates the performance of consultants using the Consultant Performance Evaluation Performance Report Form (CPERF). We assess quality of design, quality of results, project management, time planning and schedule control, and cost planning and control. http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/2913-1-eng.html

IV. PREPARING CONSTRUCTION CONTRACT DOCUMENTS

This section sets out requirements for preparing construction contract documents, which include specifications, drawings, addenda, contemplated change notices, and other documentation. You can find web links to related information and PWGSC forms in Appendix 6. Review the documents that you prepare against the requirements set out below.

A. General

1. Defining the Contractor's Scope of Work

You are responsible for ensuring that the scope of work described in the construction contract documents is clear and well-defined and reflects the government's vision for the project. Your documents must be accurate, complete, and enable the contractor to properly price the work. Poorly defined scope of work can result in extra meetings, change orders, increased costs, delays, and an overall adverse impact on the project. Your construction contract documents must be free of loop holes or inconsistencies that could be exploited by contractors. Note that any change in the scope of work must be approved by PWGSC's Project Manager.

2. Knowledge of Site Conditions

Because PWGSC does not specify mandatory site visits by the contractor as part of the tendering process, you cannot assume that contractors will visit the site to fill information gaps. The onus is on you to completely describe the scope of work in the documents. It is important that you visit the site to note on-site conditions and constraints. **Do not use notations such as "verify on site," "as instructed," or "to be determined on site by the departmental representative" as this promotes inaccurate bids and inflated prices.** You must not rely on as-built documentation to deal with information gaps. Such conditions are to be resolved and agreed to by the SDA, Project Manager, and consultant.

3. PWGSC Contracting Principles

As a Federal Government department, PWGSC is bound to uphold certain principles for the public interest; e.g. a transparent contracting practices to ensure accountability. The requirement to uphold these principles means that PWGSC must ensure compliance with many government rules pertaining to the procurement of design and construction services. Hence, the Department uses contracting procedures that are different from those used in the private sector.

Here is a list of some of the ways in which PWGSC's requirements differ:

- PWGSC has a unique set of contractual terms and conditions drawn from the department's Standard Acquisition Clauses and Conditions (SACC) Manual: http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp
- PWGSC does not use the Canadian Construction Document Committee (CCDC) or the Canadian Construction Association or British Columbia Construction Association standards or guides
- PWGSC does not specify mandatory site visits by the contractor as part of the tendering process so you must completely describe the scope of work
- Use of National Master Specification and PWGSC Pacific Region abridged specifications, as well as PWGSC documentation and forms (see Appendix 6)
- The construction contract documents that you prepare for tender are considered "final for construction" versus the private sector where documents prepared for tender may require a subsequent "issued for construction" edition

4. Contractual Items

A PWGSC tender package for construction contractors includes documents that cover contract items such as payments, warranties, pricing, taxes, and bid security. You are not to repeat in the specifications and drawings any contractual items that are already addressed in the other documents in the tender package.

5. Administrative Simplicity

Ensure that construction contract documents are written in a manner that simplifies PWGSC's administration of the contract as much as possible, while still being effective; e.g. number of meetings to attend, communication protocols, reporting requirements, etc.

6. Bidding Format

For the majority of construction projects, PWGSC requires bidders to submit a single price. Unless requested by the Project Manager, do not use options, alternative prices, conditional clauses, or anything that modifies the offer as it will make the contractor's bid non-compliant.

Single Lump Sum - For a single lump sum contract, you do not need to provide a bid form (it is provided by the Contracting Authority), nor do you need measurement for payment clauses in the specifications.

Unit Price - Unit price contracts are used when the quantity can only be estimated, e.g. earth work. When using this method, give an estimated quantity for bid purposes.

Combined Price – Combined price contracts have a mix of both lump sum and unit price items.

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.

Ensure there is a clear statement of how the measurement will be made.

A 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

UNIT PRICE TABLE					
Item	**Class of Labour, Plant or Material**	**Unit of Measurement**	**Estimated Quantity**	**Price per Unit, HST extra**	**Extended Amount Price, HST extra**
				TOTAL ESTIMATED QUANTITY Transfer amount to subparagraph (1)(b) of BA03	

7. Cash Allowances

Use cash allowances only under exceptional circumstances, where no other method of specifying is appropriate. You must assist the Project Manager to obtain the Contracting Authority's approval to use cash allowances in the specifications, in which case you could use *Section 01 21 00 – Allowances* of the NMS to specify the criteria. Use of cash allowances is almost never approved.

8. Professional's Signature and Seal

Drawings and specifications are to be signed and sealed by the Professional Architect and Professional Engineer at the tender issue stage. Additional sets of signed/sealed drawings and specifications and BC Building Code schedules may be requested as needed for building permit submissions to the local authority having jurisdiction.

9. Permits

PWGSC asks for permits as if the work is being done in the private sector. Also, be aware of PWGSC's Good Neighbour Policy: http://www.tpsgc-pwgsc.gc.ca/biens-property/cndns-eng.html. The consultant will prepare the required documentation for obtaining approvals and permits from the applicable local authority on behalf of PWGSC. Confer with the PM to determine whether the consultant or contractor will submit the documentation to the local authority on behalf of PWGSC or whether PWGSC will take the further action. If the former, the consultant or the contractor will submit a documentation set(s) to the local authority and provide a documentation set(s) to PWGSC for the department's records. PWGSC, through the contractor, will pay for the permit application costs. PM/SDA/DM and consultant to confer to clarify any project specific adjustments to the above process.

B. SPECIFICATIONS

1. National Master Specifications

For the 33% milestone submission, include project specifications. **Confer with PWGSC's Strategic Design Advisor on the appropriate Specification Index and Outline Specification for the project.**

Specifications are to be based on the current edition of the six digit format Canadian National Master Construction Specification (NMS) in accordance with the *NMS User's Guide* (http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/index-eng.html). The NMS is jointly produced by Construction Specifications Canada (CSC) and the Construction Specifications Institute (CSI) in the USA.

PWGSC's Pacific Region, like other regional units across the country, has its own abridged specification sections, which reflect the unique requirements of the federal, provincial and regional authorities having jurisdiction. However, the regional specification index may not always be appropriate for large or complex projects in which case the National Master Specification is better.

You are responsible for tailoring fully developed Division 01 specifications, in consultation with the Project Manager. You shall edit, amend and supplement specifications derived from the NMS as deemed necessary and produce a project specification that is free from conflict and ambiguity.

You must fully develop the three Division 01 specification sections that are common to all projects (see below), as well as identify and develop other sections that apply to the project in question in consultation with the Project Manager:

- **General Instructions** (Section 01 11 55) – This section covers a wide range of activities such as security, environmental protection, fencing, quality

assurance, etc., that must be considered and included in the specifications as appropriate.

- **Health and Safety Requirements** (Section 01 35 33). - The Government of Canada as a whole takes all matters of Construction and Occupational Health and Safety (OH&S) very seriously. Compliance with Federal and Provincial OH&S legislation and regulations is mandatory. Use of the Pacific Region Master Template NMS Section 013533 Health and Safety Requirements, as revised from time to time, is mandatory. Discuss the health and safety requirements with the Project Manager at the beginning of the work and request a copy of the Pacific Region Master Template.
- **Commissioning** (Section 01 91 00) – Commissioning is required for all projects, although its extent is determined by the size and complexity of the project. Discuss the commissioning requirement with the Project Manager at the beginning of the work and request a copy of the most current PWGSC Commissioning Manual (CP.1).

PWGSC-prepared specifications are to use the Construction Specifications Canada full page format, whereas consultants may use either the full page or the two column format.

Narrow scope sections of the NMS describing single units of work are preferred for more complex work, whereas, broad scope sections may be more suitable for simpler work. For example, for complex concrete work, separate sections for formwork, reinforcing steel, and concrete is preferred (i.e. “narrow” scope). Whereas for simpler work, a single section for concrete which includes formwork, reinforcing steel and concrete is preferred (i.e. “broad” scope).

2. Specifying Materials

Except for special circumstances, specifying brand names and model numbers is against departmental policy in order to avoid partiality. The method of specifying shall be by one or more of the prescriptive method, reference to recognized standards, and specification by a non-restrictive, non-trade name performance specification.

Where no standards exist and where a suitable non-restrictive, non-trade name prescriptive or performance specification cannot be developed because of complexity, you may specify by Acceptable Product or Minimum Standards. Discuss this situation in advance with the PWSGC Project Manager.

In this case, either list all trade names and model numbers of materials acceptable for the purpose as follows:

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

Or, after describing the products, specify the name of a product as minimum acceptable product when the description alone or performance specifications would not be adequate. A statement must be added that the product specified as minimum standard does not exclude any other products. The specifications for the specified product will be used as the base for minimum acceptable standards during the shop drawings review. All products must meet or exceed the minimum standards.

You must use the phrase “acceptable products.” Do not use “standard of acceptance,” “approved products” or other similar phrases. Also, do not use “or equal” or “equivalent to.”

Sole sourcing for materials and work can be used for proprietary systems (i.e. fire alarm systems, EMCS systems). You must substantiate and/or justify sole sourcing and obtain approval from the Project Manager.

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

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

“*Acceptable materials*

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

If an acceptable product must be used, according to PWGSC General Conditions, the contractor must provide the specified product.

Do not use the term “Acceptable Manufacturers” as this has been deemed to restrict competition and does not ensure the actual material or product will be acceptable. A list of words and phrases to avoid is included in the NMS User’s Guide.

3. Prescriptive vs. Performance Specification

(Reserved)

4. Standards

As directed by the Division 01 specification index, make reference to the most current edition of the applicable standards, noting the exact title. Examples of recognized standards are those of the Canadian Gas Association (CGA), Canadian General Standards Board (CGSB), Canadian Standards Association (CSA), or Underwriters Laboratories of Canada (ULC). Recognized standards are also published by trade associations such as the Canadian Roofing Contractors' Association (CRCA) or the Terrazzo, Tile & Marble Association of Canada (TTMAC). Canadian standards should be used wherever possible. *NMS Section 01 42 00 – References* provides web site addresses for standards organizations.

5. National, Provincial and Local Codes and Regulations

Always use or specify the applicable national, provincial, and local codes and regulations with a clause that states *"the most stringent will apply."* It's PWGSC policy to follow and apply the most stringent of the national, provincial and local codes.

For building projects that house Federal Government employees or people in institutions under Federal Government Administration including prisoners, patients, students, etc. the Authority having jurisdiction over the design of these projects is the Fire Protection Engineering Services Branch of Labour Canada.
This department is similar to a municipal government building department and reviews all projects within its jurisdiction for building code compliance to all Federal Government standards. It is the prime consultant's responsibility, with the help of the Design Manager, to engage this department for project reviews at the 33%/66%/99% stages. The Labour Canada contact is:

Manager, Fire Protection Engineering Services, Northwest Pacific Region
Tel: (604) 666-0403
Fax: (604) 666-6206
Email: dan.jacob@hrsdc-rhdsc.gc.ca
http://www.hrsdc.gc.ca/en/labour/fire_protection/index.shtml

6. Specialty Engineer

When particular inspections or approvals are required (e.g. gluelam, seismic restraints, structural steel), identify that they must be done by a Professional Engineer/Architect registered in British Columbia or in the relevant jurisdiction. This Professional is responsible for the components designed or installed by the contractor and who signs and seals shop drawings and other documents.

7. As-Built Documentation

In the specifications, ensure you've defined the approach for preparing and reviewing as-built drawings. They are to be prepared by the contractor and reviewed and translated to the electronic drawings by the consultant. Identify for

the Project Manager any differences between the contractor's as-built drawings and the consultant's as-built drawings.

Assemble, finalize, and submit to the PWGSC Project Manager and SDA the as-built drawings and specifications electronically periodically when change orders, Requests for Information, and other changes occur, rather than wait until the end of the project. Submit the final as-built drawings and specifications in dwg format and pdf format on CD as per the statement of Required Services.

C. DRAWINGS

√ Follow generally accepted drawing conventions understandable by the construction trades.

√ Drawings should show the quantities and configuration of the project, the project dimensions, and graphic details of how the project is to be constructed. Drawings should not describe the quality of the work.

√ Follow PWGSC National CADD Standard as adapted to Pacific Region. Important standards are the ones pertaining to layering, title blocks, drawing size and achieving consistency across the documentation set. See the PWGSC National CADD Standard: http://www.tpsgc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html

√ Consult with the Strategic Design Advisor/Design Manager to confirm the selection and use of CADD platform/tools that may be required for a particular project type or procurement method (i.e. version, platform, BIM, energy modeling, 3D rendering etc.).

√ Make all drawings a uniform standard size in accordance with the PWGSC National CADD Standard. Ask the PWGSC Strategic Design Advisor/Design Manager for a paper space template and pick a size.

Appendix 5 contains a PWGSC Style Guide for Construction Contract Documents.

D. Documentation Submission

For construction contract documents:

What to Submit

☐ Index to Specifications and Drawings

☐ Specifications -

- Include a description of all units and estimated quantities for unit price table
- Include a list of significant trades including costs

☐ Drawings

☐ Addenda (if required)

- ☐ BC Building Code Schedules A, B1, B2 and C (for construction phase)

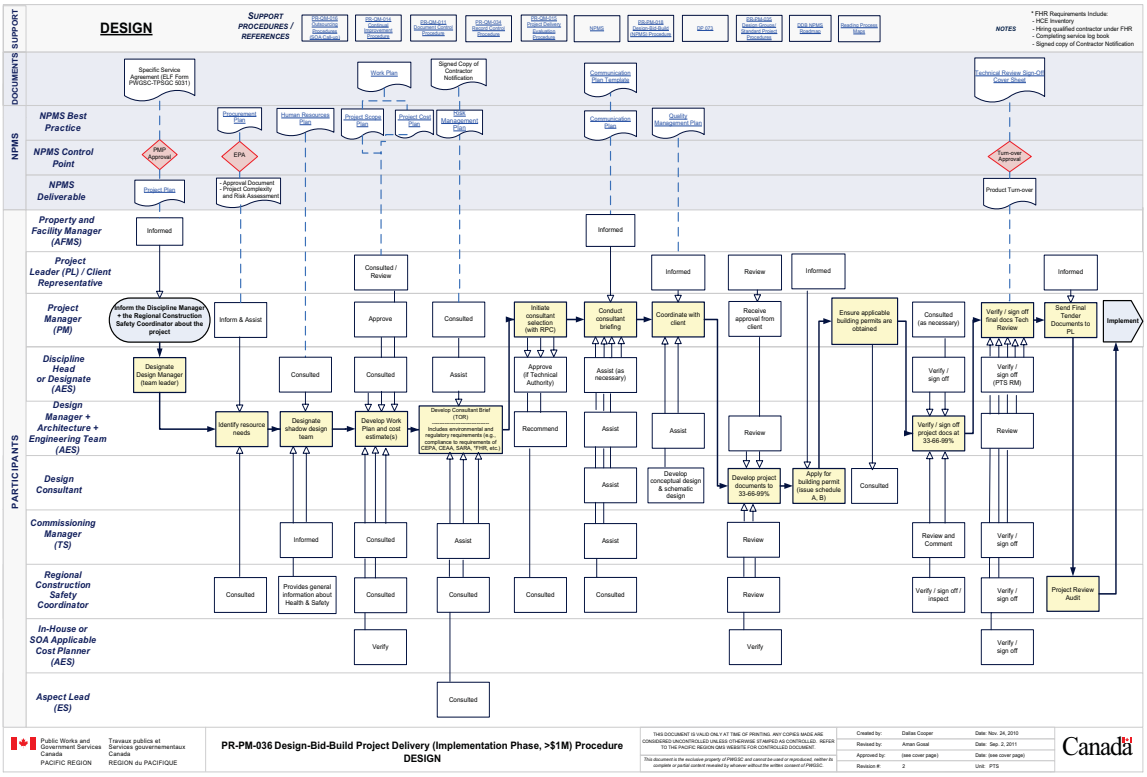
Submission Format

- ☐ Confirm the intended recipients of your documents and obtain their name, email address and courier address.
- ☐ Unless otherwise indicated in the statement of Required Services for a specific project, at the required review and tender stages, submit your work in paper format (PWGSC is considering requiring submissions in electronic format in the future).
- ☐ Use your seal/stamp in accordance with the rules of your professional association. You do not need to stamp or seal at the 33% and 66% stages.
- ☐ If at any time you create electronic pdf documents, always use software conversions (rather than scanning) to improve functionality.
- ☐ In the design phase, you may be required to send paper copies to multiple offices, with a transmittal record to the PWGSC Strategic Design Advisor. In this case, print the specification pages one-sided on 216 mm x 280 mm white bond paper. Staple or otherwise bind drawings and specifications into sets. Where presentations exceed twenty sheets of drawings, you may bind the drawings for each discipline separately for convenience and ease of handling.
- ☐ At review stages and at the completion of the construction project, submit the final specifications in pdf format and original and as-built drawings in electronic pdf and dwg formats for record keeping purposes. Include any change orders and change of work documents. Submit a separate pdf and dwg file for each drawing.

PWGSC shall provide

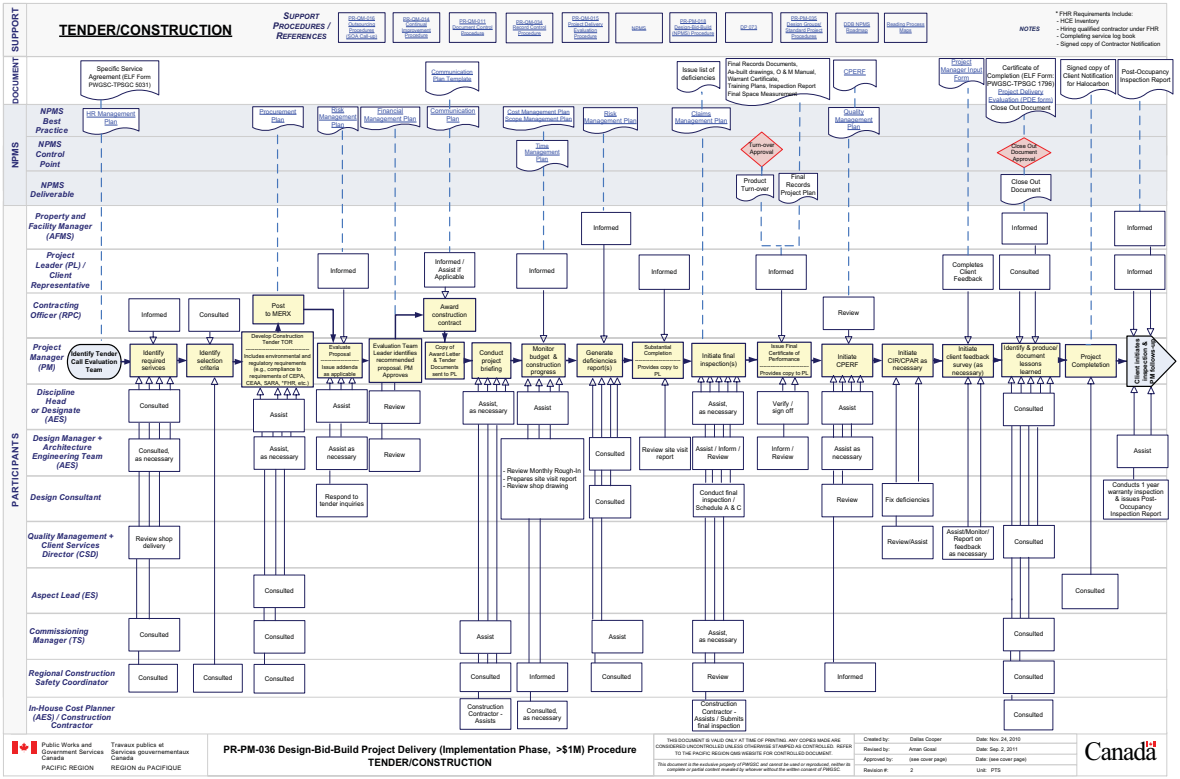
- √ Front and back cover
- √ Special addenda
- √ Instructions to tenderers
- √ Tender form
- √ Standard construction contract documents

APPENDIX 1 – QUALITY MANAGEMENT SYSTEM (QMS)[2]

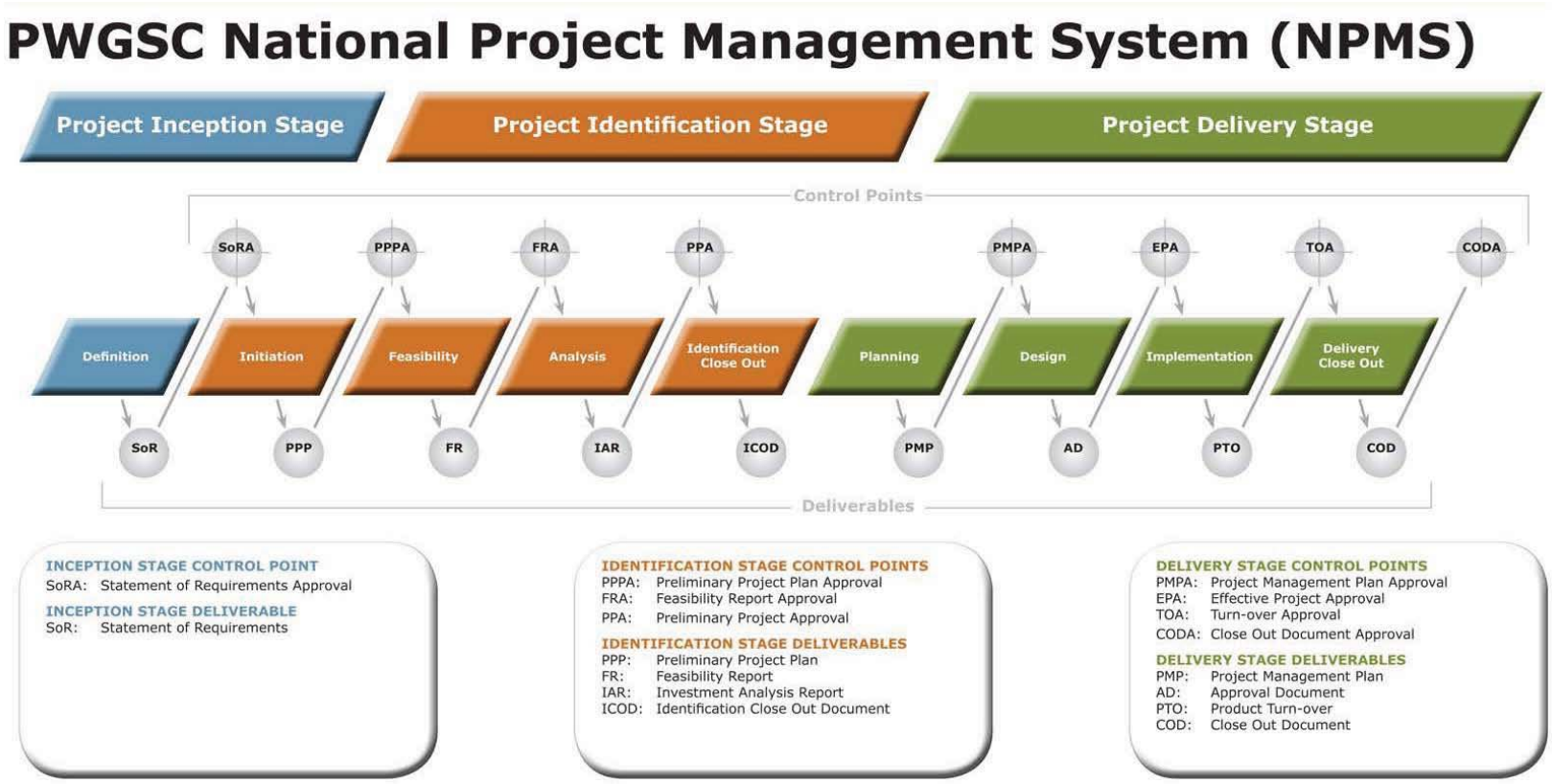


[2] For reference only. Contact the Design Manager for the most recent version. See the PDF version for more detail.

APPENDIX 1 – QUALITY MANAGEMENT SYSTEM (QMS) (Continuation)



APPENDIX 2: NATIONAL PROJECT MANAGEMENT SYSTEM (NPMS)



APPENDIX 3 – TEMPLATE FOR PWGSC's ARCHITECTURAL & ENGINEERING REVIEWS[3]

PACIFIC REGION – Professional and Technical Services (PTS)	PWGSC Technical Review[1]	EDRM #:
		Revision #:
Project Description:		

PROJECT LOCATION:	**DISCIPLINE:**	**STAGE:**
PROJECT #	**REVIEWER:**	

#	REFERENCE DWG/SPEC	REVIEW COMMENT	RESPONSE

[1] The designer is required to respond to all items noted herein. In addition to subsequent modifications made to the design documents and re-submitted for review, provide a summary in the same format as this review with a written response for each item such as "changed as noted", or "clarifications made" or other alternatives offered. This form is applicable for use for both internal/external projects

[3] For reference only. Contact the Design Manager for the most recent version of this form. The form name "PWGSC Technical Review" is being considered for revision via QMS.

APPENDIX 4 – SAMPLE INVOICE

(Reserved)

APPENDIX 5 – PWGSC-PACIFIC STYLE GUIDE FOR CONSTRUCTION CONTRACT DOCUMENTS

This style guide is intended for construction contract documentation at the 33%/66%/99% and tender stages. This guide is updated regularly. Refer to the Required Services in your contract and to the Project Manager and Strategic Design Advisor for any additional or updated requirements.

☑ Language

☐ Use the imperative voice instead of the passive voice wherever possible:

- Examples of imperative voice: Install new panel on east wall; Remove all existing wiring.
- Examples of passive voice: New panel will be installed on east wall; Existing wiring to be removed.

All instructions in the tender package are aimed at the contractor so avoid use of the word "contractor" wherever possible. Use of the imperative voice eliminates the need for any reference to a contractor.

☑ Technical Package

☐ Include the PWGSC Project Number (which is the same as the Work Breakdown Structure Element in PWGSC's SIGMA financial system) on all specifications, drawings, and reports. Here is an example of the format for a project number: R.012345.001

☐ Use the required format for the index page and obtain the template from the Strategic Design Advisor

☐ List all sections and pages of the specifications and all drawings in the index

☐ Ensure titles of all appendices are listed on the index page, with each appendix having a unique title

☐ Ensure the names used in the index match the specification section, drawing names, and appendix names

☐ Ensure the page count for each listed item in the index matches the actual number of pages

☐ Use ISO date formatting: YYYY-MM-DD, e.g. 2010-10-02 meaning the 2nd day of October, 2010

☐ Use only metric dimensions on all specifications and drawings (no imperial dimensions). Always use industry-standard metric dimensions, for example, 53mm electrical conduit instead of 50mm (2" conduit)

☐ Use the same font style throughout the package, including documents from different disciplines

- ☐ Use black font on white paper for drawings and specifications unless colour would assist clarity in which case obtain the Strategic Design Advisor's approval
- ☐ Where schedules occupy entire sheets, locate them next to the drawing sheets or at the back of each set of drawings for convenient reference. See *CGSB 33-GP-7 Architectural Drawing Practices* for guidelines on schedule arrangements.

☑ Company References

- ☐ Without specific authority from the PWGSC Project Manager, do not include references to any phone numbers, personal names, web sites, email addresses, street addresses or similar coordinates of suppliers, manufacturers, contractors or consultants
- ☐ Include your consulting firm's logo/name on all drawings below PWGSC's name at the upper right hand corner of the drawing
- ☐ You can place your consulting firm's project number near the lower right corner of drawings or on the cover page of your document

☑ Specifications

- ☐ Follow the specification notes in the NMS
- ☐ You are responsible for including all pertinent sections of the NMS (see the section on Specifications)
- ☐ Write a brief description of the work and number of weeks allocated for its completion on the first page of the Division 01 sections
- ☐ Ensure a specification section exists for all elements of work included in the drawings
- ☐ Ensure the specification headers comply with PWGSC's format (confer with PWGSC's Strategic Design Advisor)
- ☐ Include the Project Name in the specification header for each specification section.
- ☐ Start with Division 01 Sections and start each Section on a new page
- ☐ Check the specification index to ensure that the correct specification section numbers are listed
- ☐ When making cross references, for example a specification section refers to another section, ensure the references exist and the correct numbers are used
- ☐ Erase all brackets of NMS specification choices not used for the project
- ☐ Include the Section Title, six digit Section Number, and specification date, along with the Project Number, on each page of the specifications

- ☐ Put a page number on all pages in the specifications (including appendices, photo pages, etc), except for drawings

☑ Drawings

- ☐ **Do not put specifications on drawings** unless permission has been granted by the Strategic Design Advisor in advance. Such permission in not usually granted.
- ☐ Insert a unique drawing number and sheet number on every drawing
- ☐ Number drawings in sets according to the type of drawing and the discipline involved in accordance with the PWGSC National CADD Standard
- ☐ Comply with National Building Code requirements for design notes on all drawings (these are <u>not</u> the same as specification notes)
- ☐ Explanatory notes on drawings are expected
- ☐ Include a North Arrow on all floor and site drawings, as well as a set of benchmark locations to help the contractor to properly lay out the works
- ☐ Wherever possible, lay out drawings so that the north point is at the top of the sheet
- ☐ Orient all drawings in the same direction for easy cross-referencing
- ☐ If you are assuming a certain floor elevation (e.g.100.00 m), then provide a cross reference to tie it back to existing site elevations
- ☐ Include a scale bar on all drawings except sketches
- ☐ Include the names of PWGSC's Project Manager, Regional Manager of Architectural and Engineering Services, and other relevant staff in the title block. Ask PWGSC's Strategic Design Advisor for the names of the staff to include.
- ☐ Each submission to PWGSC is to be identified as a specific revision
- ☐ If extensive use of symbols, abbreviations, references, etc., provide a legend on the front sheet of each set of drawings or, in large sets of drawings, immediately after the title sheet and index sheets

☑ Addenda

- ☐ See the PWGSC Project Manager for the most current addendum template
- ☐ Ensure addenda items refer to an existing specification paragraph or drawing note
- ☐ Number consecutively every page of the addenda, including attachments
- ☐ Put the PWGSC Project Number and appropriate addendum number on every page

- ☐ Use the PWGSC National CADD Standard for any sketches
- ☐ Stamp and sign sketches

APPENDIX 6 – SELECTED REFERENCES AND FORMS

This appendix has PWGSC web site links to relevant information and forms. Contact the PWGSC Project Manager for other forms not listed below.

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

Change Order:
http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/610-eng.html

Construction Contract Administration Forms:
See your PWGSC Project Manager

Contemplated Change Notice:
http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/611-eng.html

Legal Nature of Consultant's Role for Architectural and Engineering Contracts:
http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/approv-procure/manuelga-pmmanual-6-eng.html

Managing Construction Contract Changes:
See your PWGSC Project Manager

NMS Specification Standards
http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/index-eng.html

NPMS
http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/index-eng.html

On Site Instruction:
http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/599-eng.html

PWGSC National CADD Standard:
http://www.tpsgc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html

Pre-Construction Start-up Meeting:
See your PWGSC Project Manager

Shop Drawings Review Process:
http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/qualite-quality/atelier-shop-eng.html

Specification Brief:
http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/qualite-quality/apercu-overview-eng.html

Standard Acquisition Clauses and Conditions (SACC)
http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp

Tenant Fit-Up Standards
http://www.tpsgc-pwgsc.gc.ca/biens-property/amng-ftp/index-eng.html

APPENDIX E – SUBMISSION REQUIREMENTS AND EVALUATION (SRE)

SUBMISSION REQUIREMENTS AND EVALUATION

SUBMISSION REQUIREMENTS AND EVALUATION

SRE 1 GENERAL INFORMATION

1.1 Reference to the Selection Procedure

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

1.2 Calculation of Total Score

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

Technical Rating x 90%	=	Technical Score (Points)
Price Rating x 10%	=	Price Score (Points)
Total Score	=	Max. 100 Points

SRE 2 PROPOSAL REQUIREMENTS

2.1 Requirement for Proposal Format

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

- Submit one (1) bound signed original plus [five (5)] bound copies of the proposal
- Paper size should be - 216mm x 279mm (8.5" x 11")
- Minimum font size - 11 point Times or equal
- Minimum margins - 25 mm (1") left, 19mm (3/4") top, 12mm (1/2") top, and bottom
- Double-sided submissions are preferred
- One (1) 'page' means one side of a 216mm x 279mm (8.5" x 11") sheet of paper
- 279mm x 432 mm (11" x 17") fold-out sheets for spreadsheets, organization charts etc. will be counted as two pages.
- The order of the proposals should follow the order established in the Request for Proposal SRE section.

2.2 Specific Requirements for Proposal Format

The maximum number of pages (including text and graphics) to be submitted for the Rated Requirements under SRE 3.2 is thirty (30) pages.

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

- Covering letter
- Consultant Team Identification (Appendix A)*
- Declaration Form (Appendix B)
- Code of Conduct Certifications

- Front page of the RFP
- Front page of revision(s) to the RFP
- Price Proposal Form (Appendix C)

* If the proponent includes further info other than the names and designations of the proposed personnel in Appendix A, these pages will be counted towards the page limit restriction.

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

SRE 3 SUBMISSION REQUIREMENTS AND EVALUATION

3.1 MANDATORY REQUIREMENTS

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

3.1.1 Licensing, Certification or Authorization

The proponent shall be a structural engineering firm, licensed, or eligible to be licensed to provide the necessary professional services to the full extent that may be required by provincial law in the province of British Columbia.

Provide evidence of the above license. **Photocopies of the license(s) must be included in the technical proposal. Failure to provide evidence will deem the proposal non-responsive.**

3.1.2 Consultant Team Identification

The consultant team to be identified must include the following:

Proponent (prime consultant)
- Structural Engineering Firm

Key Sub-consultants / Specialists
- Inspection Engineering Consultant
- Underwater Inspection Team

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

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

Failure to identify the consultant team and complete the required information will deem the proposal non-responsive.

3.1.3 Declaration/Certifications Form

Proponents must complete, sign and submit the following ~~at tender closing date and time~~:

- Appendix B, Declaration/Certifications Form as required.

3.1.4 Integrity Provisions - Associated Information

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

3.2 RATED REQUIREMENTS

The evaluation criteria for the proposal addresses only the previous achievements and experiences of the proposed Consultant Team. The proposal provides the opportunity for proponents to present their past work in the context of the proposed project. Interested firms are to submit to PWGSC a history of their accomplishments in order to establish the capabilities of their teams and lead designers as well as other key team members.

3.2.1 Achievements of Proponent on Projects

1. Describe the Proponent's accomplishments, achievements and experience as prime consultant on projects.
2. Select a **maximum** of three (3) projects undertaken within the last six (6) years. Joint venture submissions are not to exceed the maximum number of projects. The maximum number of pages to be submitted in this section is six (6) pages.
3. Submit a maximum of one (1) page text per project (one sided) and up to an additional one (1) pages graphics per project that will include the following information:
    - Comparison and relevancy of each project to the requested project
    - Brief description of each respective project to include narratives of inspection philosophy and methodology, inspection challenges and resolutions, load rating philosophy and methodology to meet the intent, inspection challenges and resolutions.
    - Traffic control strategy - summary of traffic control plan implemented for clients and other affected parties (municipalities, public, other government agencies, private businesses, etc.)

- Budget control and management - i.e. proponent's original and final agreement cost describing any variation
- Project schedule control and management - i.e. initial schedule and revised schedule describing any variation
- Summary of knowledge and experience in the latest inspection equipment required on inspection of this project scope and complexity
- Client references - name, address, phone and fax of client contact at working level (references may be checked).
- Names of key personnel responsible for project delivery and their roles
- Awards received

The Proponent (as defined in R1410T General Instructions to Proponents, GI2 Definitions) must possess the knowledge on the above projects. Past project experience from entities other than the Proponent will not be considered in the evaluation unless these entities form part of a joint venture Proponent. Proponents are strongly encouraged to provide specific relevant examples that clearly demonstrate the implementation of the methodology.

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

3.2.2 Achievements of Key Sub-consultants and Specialists on Projects

1. A Sub-consultants and specialists providing multidisciplinary services as part of the Proponent team will select and submit respectively. Describe the accomplishments, achievements and experience either as prime consultant or in a sub-consultant capacity on projects. If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

2. Select a **maximum** of [3] projects undertaken within the last [6] years per key sub consultant or specialist and relevant to the project requested. Only the first [3] projects listed in sequence (per key sub-consultant or specialist) will receive consideration and any others will receive none as though not included.
3. Submit a maximum of one (1) page of text per project. Up to an additional one (1) page graphics per project may be submitted. The maximum number of pages to be submitted in this section is six (6) pages.

   Information that should be supplied:
   - clearly indicate how this project is comparable/relevant to the requested project;
   - brief project description and intent. Narratives should include a discussion of design philosophy / approach to meet the intent, inspection challenges and resolutions;
   - budget control and management;
   - project schedule control and management;
   - client references - name, address, phone and fax of client contact at working level - references may be checked;

- names of key personnel responsible for project delivery;
- awards received.

3.2.3 Achievements of Key Personnel on Projects

Describe the experience and performance of key personnel to be assigned to this project regardless of their past association with the current proponent firm. This is the opportunity to emphasize the strengths of the individuals on the team, to recognize their past responsibilities, commitments and achievements. The maximum number of pages to be submitted in this section is five (5) pages.

1. Submit a maximum of one (1) page text per each Key Personnel that will include the following information:
    - Professional accreditation;
    - Accomplishments/achievements/awards;
    - Relevant experience, expertise, number of years experience;
    - Role, responsibility and degree of involvement of individual in past projects;
    - Role and responsibility the individual will have on this PWGSC project.

3.2.4 Understanding of the Project

1. The proponent should demonstrate understanding of the goals of the project, the functional and technical requirements as well as the constraints and the issues that are to be addressed for the successful completion of the project. The maximum number of pages submitted in this section cannot exceed one (1) page.

2. Submit a maximum of one (1) page to include the following information:
    - The functional and technical requirements;
    - Broader goals (federal image, sustainable development, sensitivities);
    - The relationship between this commission and any earlier project-related studies completed for PWGSC;
    - Significant issues, challenges and constraints;
    - Project schedule and cost, review schedule and cost information and assess risk management elements that may affect the project;
    - The Client User's philosophies and values.

3.2.5 Scope of Services

1. The proponent must demonstrate capability to perform the services, meet project challenges and provide a plan of action.
2. Submit a maximum of six (6) pages (written text and graphics) to include the following information:
    - Scope of Services - detailed list of services that will likely be required on this project
    - Work Plan - detailed breakdown of work tasks and deliverables
    - Project schedule - proposed major milestone schedule

- Cost control strategy
- Risk management strategy
- Report production: content, format, planning

3.2.6 Management of Services

1. The Proponent must describe how he/she proposes to perform the services and meet the constraints; how the services will be managed to ensure continuing and consistent control as well as production and communication efficiency; how the team will be organized and how it will fit in the existing structure of the firm; to describe how the team will be managed. The proponent is also to identify sub-consultant disciplines and specialists required to complete the consultant team. If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

2. Submit a maximum of two (2) pages (written text and graphics) to include the following information.
    - Project management approach to working with PWGSC (understanding of PWGSC management structure, working with governments in general)
    - Consultant Team's management structure and organization (report structure)
    - Confirm the makeup of the full project team including the names of the Consultant, Sub-consultant and Specialist personnel and their role on the project.
    - Organization chart with position titles and names (Consultant team). Joint Venture business plan, team structure and responsibilities, if applicable.
    - What back-up support will be committed?
    - Profiles of the key positions (specific assignments and responsibilities)
    - Outline of an action plan of the services with implementation strategies and sequence of main activities (Work Breakdown Structure)
    - Reporting relationships
    - Communication strategies
    - Quality control techniques
    - Response time: demonstrate how the response time requirements will be met
    - Schedule slippage detection and corrective methods

3.2.7 Design Philosophy / Approach / Methodology

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

2. Submit a maximum of three (3) pages (written text and graphics) to include the following information:
    i. Inspection Philosophy / Approach / Methodology
    ii. Describe the major challenges and how your team approach will be applied to those particular challenges.
    iii. Logistics of work on isolated sites
    iv. Inspection equipment and utilization

3.2.8 Seismic and Load Rating Approach and Methodology

1. The proponent must elaborate his/her overall team approach and methodology to perform the load rating including use of results of the comprehensive inspection.
2. Submit a maximum of one (1) page (written text and graphics) to include the following information:
    i. Seismic and Load Rating Approach and Methodology
    ii. Modeling Techniques
    iii. Reference Codes and Standards
    iv. Extent of Investigation
    v. Presentation of Results

3.3 EVALUATION AND RATING

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

Criterion	Weight Factor	Rating	Weighted Rating
Achievements of Proponent on Projects	2.0	0 - 10	0 - 20
Achievements of Key Sub-consultants / Specialists on Projects	1.0	0 - 10	0 - 10
Achievements of Key Personnel on Projects	1.0	0 - 10	0 - 10
Understanding of the Project	1.0	0 - 10	0 - 10
Scope of Services	1.0	0 - 10	0 - 10
Management of Services	1.5	0 - 10	0 - 20
Design Philosophy / Approach / Methodology	1.5	0 - 10	0 - 10
Seismic Load Rating Approach / Methodology	1.0	0 - 10	0 - 10
Technical Rating	10.0		0 - 100

Generic Evaluation Table

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

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

To be considered further, proponents **must** achieve a minimum Technical Rating of fifty (50) points out of the hundred (100) points available as specified above.

No further consideration will be given to proponents not achieving the pass mark of fifty (50) points.

SRE 4 PRICE OF SERVICES

All price proposal envelopes corresponding to responsive proposals which have achieved the pass mark of fifty (50) points will be opened upon completion of the technical evaluation. An average price is determined by adding all the price proposals together and dividing the total by the number of price proposals being opened.

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

The remaining price proposals are rated as follows:

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

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

SRE 5 TOTAL SCORE

Total Scores will be established in accordance with the following:

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

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

SRE 6 SUBMISSION REQUIREMENTS - CHECKLIST

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

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

Team Identification - see typical format in Appendix A
Declaration/Certifications Form - completed and signed - form provided in Appendix B
Integrity Provisions - list of directors / owners
Integrity Provisions - declaration form (as applicable, pursuant to subsection Declaration of Convicted Offences, of section 01 of the General Instructions)
Proposal - one (1) original plus five (5) copies required
Front page of RFP
Front page(s) of any solicitation amendment

In a separate envelope:

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

APPENDIX F – PROJECT BRIEF

PROJECT BRIEF

Description of Project

PD 1 Project Information
PD 2 Project Identification
PD 3 Project Background
PD 4 Existing Documentation
PD 5 Project Objectives
PD 6 Project Targets / Schedule

Description of Services

PA 1 Project Administration

Required Services
RS 1 Analysis of Inspection Requirements
RS 2 Detailed Inspection
RS 3 Seismic and Load Rating Evaluation

PROJECT BRIEF

1. This Project Brief is divided into two sections:
   1. Description of Project
   2. Description of Services

2. For standards relating to the service provisions herein please refer to the document "Doing Business with PWGSC – Pacific Region". The standards in "Doing Business with PWGSC – Pacific Region" must be adhered to in conjunction with this scope of services.

DESCRIPTION OF PROJECT

PD 1 Project Information

Public Works and Government Services Canada (PWGSC), in conformance with its Policy on Bridge Inspection and Evaluation, requests proposals from qualified consultants for professional services required to undertake a detailed comprehensive inspection of the Fifty six (56) Bridges and Five (5) Culverts under the jurisdiction of PWGSC on the Alaska Highway in the province of British Columbia. In addition to the Fifty six (56) Bridges to be inspected, this assignment will include performing a Seismic and Load Rating Evaluation of two (2) Bridges in Year 2017 and seven (7) Bridges in Year 2019, namely:

Two bridges in year 2017

1. Lower Liard River Bridge, located at km 763.3.0
2. Smith River Bridge, located at km 792.3

Seven bridges in year 2019

1. Beaton River Bridge, located at km 323.8
2. Sikanni Chief River Bridge, located at km 256.1
3. Buckinghorse River Bridge, located at km 277.6
4. Bougie Creek Bridge, located at km 357.4
5. Adsett Creek Bridge, located at km 366.0
6. Jackfish Creek Bridge, located at km 424.8
7. Tetsa #2 River Bridge, located at km587.5

Include in the price proposal there is a time base fee schedule. The time base fee is not a fee due to the consultant. Rather, the time base fee schedule will be made against it for miscellaneous works. Such work may include:

- Preparation of plans and specifications for minor repairs of bridges and culverts.
- Seismic and Load rating analysis of bridges.
- Underwater inspection as required.
- Preparation of plans and specifications for emergency works raised after inspection.

The detailed comprehensive inspection involves a close-up examination of the Bridges and Soil-structures and all its respective components including a detailed underwater inspection of the corresponding submerged structures to provide:

1. A qualitative and quantitative information on the structural condition
2. Prioritized recommendations for repair, rehabilitation, strengthening, replacement and/or reconstruction.

1.1	**PWGSC Project Title:**	2017 and 2019 Comprehensive Bridge and Culvert Inspections
1.2	**Location of the Project:**	Alaska Highway, km 197 to km 960, B.C.
1.3	**PWGSC Project Number:**	R.017174.009
1.4	**Client / User:**	Public Works and Government Services Canada

PD 2 Project Identification

2.1 Description

Objective:
The project is to perform Two (2) separate detailed inspections of the bridges and culverts on the Alaska Highway between km 197 and km 960.

The first detailed inspection and report is to be conducted in year 2017 and includes the underwater inspection of all submerged substructure components where applicable. The underwater inspections are to be carried out on the following structures:

1. Sikanni Chief River Bridge at km 256.1
2. Lower Liard River Bridge at km 763.3
3. Hyland River Bridge at km 937.3

The second detailed inspection and report is to be conducted in year 2019 and includes under water inspection of all submerged substructure components where applicable. The underwater inspections are to be carried out on the following structures:

1. Muskwa River Bridge at km 451.8
2. Hyland River Bridge at km 937.3

2.2 Schedule

Project completion dates will be as follows:

1. Phase 1 - Report on Detailed Inspection which includes underwater inspection and load rating evaluation is to be completed by November 15, 2017.

2. Phase 2 - Report on Detailed Inspection which includes underwater inspection and load rating evaluation is to be completed by November 15, 2019.

PD 3 Project Background

3.1. Detailed Comprehensive Inspection

1. The following is the list of all bridges to be inspected on the Alaska Highway between km 197 and km 960.

Table 1- Summary of Bridge Locations

BRIDGE NAME	LOCATION (km)
Beaton River Bridge	232.8
Sikanni Chief River Bridge	256.1
Mason Creek Bridge-Culvert	270.8
Buckinghorse River Bridge	277.6
Beaver Creek Bridge-Culvert	328.1
Bougie Creek Bridge	357.4
Adsett Creek Bridge	366.0
Bridge-Culvert No. 1	376.7
Bridge-Culvert No. 2	380.7
Bridge-Culvert No. 3	384.7
Parker Creek Bridge-Culvert	387.9
Big Beaver Creek Bridge-Culvert	399.4
Jackfish Creek Bridge	424.8
Muskwa River Bridge	451.8
Raspberry Creek Bridge-Culvert	495.3
Kledo River Bridge	509.1
Steamboat Creek Bridge	515.3
Gardner Creek Bridge-Culvert	546.2
Mill Creek Bridge-Culvert	551.0
Tetsa River Bridge No. 1	584.5
Tetsa River Bridge No. 2	587.4
*Tetsa Creek Bridge-Culvert No. 4	595.2
*Bridge-Culvert No. 5	597.1
Baba Canyon Creek Bridge-Culvert	605.2
Bridge-Culvert No. 6	608.9
113 Creek Bridge	613.0
115 Creek Bridge	616.5
MacDonald Creek Bridge	628.0
Stringer Creek Bridge-Culvert	640.5
Racing River Bridge	641.1
Wood Creek Bridge-Culvert	650.1

141 Creek Bridge-Culvert	651.0
150 Creek Bridge-Culvert	664.8
151 Creek Bridge-Culvert	666.8
Toad River Bridge	671.7
Peterson Creek Bridge	678.6
Muncho Creek Bridge-Culvert No. 9	695.0
Bridge-Culvert No. 10	697.6
Bridge-Culvert No. 11	699.8
Bridge-Culvert No, 12	700.9
Bridge-Culvert No. 13	704.8
Bridge-Culvert No. 15	713.5
Bridge-Culvert No. 16	716.0
Trout River Bridge	732.6
Bridge-Culvert No. 19	735.4
Prochniak Creek Bridge	737.5
Lower Liard River Bridge	763.3
Mould Creek Bridge-Culvert	768.4
Teeter Creek Bridge-Culvert	777.6
Smith River Bridge	792.3
Coal River Bridge	823.3
Scoby Creek Bridge-Culvert	902.2
Contact Creek Bridge-Culvert	908.5
Irons Creek Bridge	919.0
Hyland River Bridge	937.3
Mayfield Creek Bridge-Culvert	955.7

* Tetsa Creek Bridge-Culvert No. 4 – new construction in 2016 and for inspection in 2017 only.
* Bridge-Culvert No. 5 – constructed in 2014 and for inspection in 2017 only.

2. The following is the list of all culverts to be inspected on the Alaska Highway between km 197 and km 960.

Table 2- Summary of Culvert Locations

STRUCTURE NAME	LOCATION (km)
Townsend Creek Culvert	197.6
Culvert No. 14	711.1
Culvert No. 17	722.3
Culvert No. 20	725.5
Culvert No. 18	731.6

3.2 Description of Bridge Structures

1. Beatton River Bridge is a three-span structure which consists of continuous 36.6 m steel I-girders (4.7, 27.1, 4.7) , with a reinforced concrete deck. The reinforced concrete abutments and reinforced concrete solid shaft piers are supported on concrete-filled steel pipe piles.

2. Sikanni Chief River Bridge is a five-span structure which consists of five simple spans of a 23.80m precast prestressed concrete girder span, with a reinforced concrete overlay. The reinforced concrete abutments and reinforced concrete solid shaft piers are supported on timber piles.

3. Mason Creek Bridge-Culvert is a round galvanized corrugated steel culvert (3050 mm dia.).

4. Buckinghorse River Bridge is a simple-span structure which consists of 48.0 m steel I-girders, with a reinforced concrete deck. The reinforced concrete abutments are supported on steel pipe piles.

5. Beaver Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (5790 mm dia.).

6. Bougie Creek Bridge is a three-span structure which consists of continuous 48.78 m steel I-girders (13.7, 21.34, 13.7), with a reinforced concrete deck. The reinforced concrete abutments are supported on concrete-filled steel pipe piles. The piers are concrete encased steel pipe piles.

7. Adsett Creek Bridge is a simple-span structure which consists of 36.6 m steel I-girders, with a reinforced concrete deck. The reinforced concrete abutments are supported on steel pipe piles.

8. Bridge-Culvert No. 1 is a galvanized corrugated steel culvert (3670 mm dia.).

9. Bridge-Culvert No. 2 is a round galvanized corrugated steel culvert (4870 mm dia.).

10. Bridge-Culvert No. 3 is a round galvanized corrugated steel culvert (3900 mm dia.).

11. Parker Creek Bridge-Culvert is a round galvanized corrugated steel culvert (3670 mm dia.).

12. Big Beaver Creek Bridge-Culvert is a round galvanized corrugated steel culvert (3670 mm dia.).

13. Jackfish Creek Bridge is a single-span structure which consists of a 36.58 m pony steel truss, with a reinforced concrete deck and approach slabs. The reinforced concrete abutments are supported on spread footings.

14. Muskwa River Bridge is a five-span structure which consists of two continuous steel box girders, 54.86 m, 91.44m, 91.44 m, 54.86 m, 36.58 m, with a reinforced concrete deck. The reinforced concrete abutments and reinforced concrete solid shaft piers are supported on steel piles.

15. Raspberry Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (10744 mm dia.).

16. Kledo River Bridge is a simple-span structure which consists of 63.4 m steel box girders, with a reinforced concrete deck. The reinforced concrete abutments are supported on steel pipe piles.

17. Steamboat Creek Bridge is a simple-span structure which consists of 48.0 m steel I-girders, with a reinforced concrete deck. The reinforced concrete abutments are supported on steel pipe piles.

18. Gardner Creek Bridge-Culvert is a round galvanized corrugated steel culvert (3670 mm dia.).

19. Mill Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (9500 mm dia.).

20. Tetsa River Bridge No. 1 is a four-span structure which consists of two 68.60 m through steel trusses and a 12.6 m steel girder approach span at each end, with a steel grating deck. The reinforced concrete abutments and reinforced concrete solid shaft piers are supported on spread footings.

21. Tetsa River Bridge No. 2 is single span structure which consists of 60.0m weathering steel box girders, with a reinforced concrete deck. The reinforced concrete and MSE wall integral abutments are supported on steel H-piled foundations.

22. Tetsa Creek Bridge-Culvert No. 4 will be twin concrete box culverts.

23. Bridge-Culvert No. 5 is a pipe arch galvanized corrugated steel culvert (4350 mm dia.).

24. Baba Canyon Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (4050 mm dia.).

25. Bridge-Culvert No. 6 is a round galvanized corrugated steel culvert (3890 mm dia.).

26. 113 Creek Bridge is a simple-span structure which consists of 18.9 m steel I-girders, with a reinforced concrete deck. The reinforced concrete abutments are founded on spread footings.

27. 115 Creek Bridge is a simple-span structure which consists of 18.9 m steel I-girders, with a reinforced concrete deck. The reinforced concrete abutments are founded on spread footings.

28. MacDonald Creek Bridge is a three-span structure which consists of a 61.30 m through steel truss and two steel girder approach spans, 18.30 m and 15.24 m, with a steel grating deck. The concrete stub-type abutments are founded on precast concrete piling. The column-type piers with portal web wall are supported on spread footings.

29. Stringer Creek Bridge-Culvert is a structural plate corrugated steel box culvert with associated mechanically stabilized earth retaining walls.

30. Racing River Bridge is a three-span structure which consists of two through steel trusses, 68.60m & 61.30 m and a 12.6 m steel girder approach span, with a steel grating deck. The reinforced concrete abutments and reinforced concrete solid shaft piers are supported on spread footings.

31. Wood Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (5100 mm dia.).

32. 141 Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (3130 mm dia.).

33. 150 Creek Bridge-Culvert is a round galvanized corrugated steel culvert (3670 mm dia.).

34. 151 Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (4230 mm dia.).

35. Toad River Bridge is a simple-span structure which consists of 63.2 m steel box girders, with a reinforced concrete deck. The reinforced concrete abutments are supported on concrete caisson piles(North) and on rock(South).

36. Peterson Creek Bridge is a simple-span structure which consists of 18.9 m steel I-girders, with a reinforced concrete deck. The reinforced concrete abutments are founded on spread footings.

37. Muncho Creek Bridge-Culvert No. 9 is a pipe arch galvanized corrugated steel culvert (4720 mm dia.).

38. Bridge-Culvert No. 10 is a pipe arch galvanized corrugated steel culvert (3730 mm dia.).

39. Bridge-Culvert No. 11 is a pipe arch galvanized corrugated steel culvert (3730 mm dia.).

40. Bridge-Culvert No. 12 is a pipe arch galvanized corrugated steel culvert (3730 mm dia.).

41. Bridge-Culvert No. 13 is a pipe arch galvanized corrugated steel culvert (3730 mm dia.).

42. Bridge-Culvert No. 15 is a round galvanized corrugated steel culvert (3050 mm dia.).

43. Bridge-Culvert No. 16 is a pipe arch galvanized corrugated steel culvert (3130 mm dia.).

44. Trout River Bridge is a 64.9m single span weathering steel twin trapezoidal box girder integral abutment design with composite concrete deck and abutments founded on steel H-piles and contained within MSE walls.

45. Bridge-Culvert No. 19 is a pipe arch galvanized corrugated steel culvert (4130 mm dia.).

46. Prochniak Creek Bridge is a simple-span structure which consists of 21.34 m steel I-girders, with a reinforced concrete deck. The reinforced concrete abutments are supported on steel H-piles.

47. Lower Liard River Bridge is a 307.4 m long suspension bridge with steel stiffening trusses and a reinforced concrete deck. The reinforced concrete abutments and anchor blocks are founded on piles. The steel towers and reinforced concrete bases are founded on piles.

48. Mould Creek Bridge-Culvert is a galvanized corrugated steel arch on concrete footings (9000 mm wide).

49. Teeter Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (9800 mm dia.).

50. Smith River Bridge is a box girder bridge with a composite concrete deck and MSE abutments.

51. Coal River Bridge is a 145m bridge consisting of a double box spandrel arch in weathering steel of 100m and two girder approach spans at each end with a composite

concrete deck, MSE abutments, and concrete thrust blocks and bent footings on steel pipe piles.

52. Scoby Creek Bridge-Culvert is a galvanized corrugated " Super Span " steel arch (8000 mm wide).

53. Contact Creek Bridge-Culvert is a galvanized corrugated " Super Span " steel arch (19000 mm wide).

54. Irons Creek Bridge is a 45.1m single span triple weathering steel I-girder integral abutment design with composite concrete deck and cast-in-place concrete abutments founded on steel H-piles.

55. Hyland River Bridge is a five-span structure which consists of a continuous three span 146.7 m (39.5,67.7,39.5)deck steel truss and a 18.3 m steel girder approach span at each end, with a reinforced concrete deck. The reinforced concrete abutments are founded on precast concrete piles. The reinforced concrete solid shaft piers are supported on timber piles. The bridge deck was recently replaced and strengthened with a widened steel grating deck, partially filled with concrete in composite action with new galvanized stringers. The abutment seats and the pier caps were replaced and the pier stems strengthened.

56. Mayfield Creek Bridge-Culvert is a pipe arch galvanized corrugated steel culvert (4230 mm dia.).

PD 4 Existing Documentation

1. Information will be made available for viewing by Proponents at PWGSC's Office to assist in preparing proposals as follows:
    1. PWGSC Bridge Inspection Manual (BIM) including 2010 Revisions
    2. Real Property Branch Bridge Inspection and Evaluation Policy
    3. Real Property Branch Bridge Inspection and Evaluation Procedure
    4. 2013 Delcan Comprehensive Inspection Report
    5. 2015 Parsons Comprehensive Inspection Report
    6. 2016 PWGSC Annual Inspection Report
    7. Drawings as listed below
    8. Any other related documents deemed necessary that PWGSC will assist with preparing the proposal.

2. The following is a list of drawings available for viewing at the Vancouver office of PWGSC, by appointment, a PWGSC Contracting Officer during the proposal period. Please contact Tian Lam at 604-775-9382 or by email at tian.lam@pwgsc-tpsgc.gc.ca. Copies of these drawings will be made available to the successful proponent.

Description	Year	Quality
Beatton River Bridge		
Plan, elevation, girder, deck, pier, abutment (set of 5)	1971	fair
Sikanni Chief River Bridge		
Plan, elevation, deck, piers, abutment (set of 13)	1968	good

Description	Year	Quality
Deck and joint modification (set of 6)	1975	excellent
Buckinghorse River Bridge		
Plan, elevation, girder, deck, abutment (set of 5)	1980	good
Bougie Creek Bridge		
Plan, elevation, girder, deck, pier, abutment (set of 9)	1973	good
Adsett Creek Bridge		
Plan, elevation, girder, deck, abutment (set of 10)	1976	good
Jackfish Creek Bridge		
Plan, elevation, truss, pier, deck, abutment (set of 13)	1943	fair
Muskwa River Bridge		
Substructure (set of 14)	1973	fair
Superstructure (set of 15)	1973	fair
Kledo River Bridge		
Plan, elevation, girder, deck, abutment (set of 14)	1977	good
Steamboat Creek Bridge		
Plan, elevation, girder, deck, abutment (set of 12)	1978	good
Tetsa River Bridge No. 1		
Plan, trusses (set of 18)	1943	poor
Elevation, girder, pier, abutment (set of 7)	1943	poor
Renovation (set of 5)	1976	good
Renovation and strengthening I (set of 4)	1983	good
Tetsa River Bridge No. 2	2009	excellent
Plan, elevation,		
113 Creek Bridge		
Girder, deck, abutment (set of 8)	1964	poor
115 Creek Bridge		
Girder, deck, abutment (set of 8)	1964	poor
MacDonald Creek Bridge		
Elevation, girder, pier, abutment (set of 7)	1943	poor
Plan, trusses (set of 19)	1943	fair
Renovation I (set of 5)	1976	fair
Renovation II (set of 2)	1978	fair
Renovation III (set of 4)	1983	fair
Stringer Creek Bridge		
Steel box culvert	2006	good
Racing River Bridge		
Elevation, girder, pier, abutment (set of 6)	1943	poor
Elevation, plan, trusses (set of 19, set of 18)	1943	fair
Renovation I (set of 10)	1976	fair
Renovation II (set of 10)	1983	fair
Toad River Bridge		
Plan, elevation, girder, deck, abutment (set of 16)	1978	good
Peterson Creek No.1 Bridge		

Description	Year	Quality
Girder, deck, abutment (set of 8)	1964	poor
Trout River Bridge		
Plan, elevation, girder, deck, abutment (set of 16)	2003	excellent
Prochniak Creek Bridge		
Plan, elevation, girder, deck, abutment (set of 10)	1978	good
Plan, elevation, girder, deck, (set of 7)	1978	fair
Lower Liard River Bridge		
Plan, elevation, truss, tower, deck, abutment (set of 50)	1943	poor
Smith River Bridge	2006	good
Plan, elevation,		
Coal River Bridge		
Plan, elevation, arch, girder, deck, abutment (set of 27)	2001	excellent
Irons Creek Bridge		
Plan, elevation, girder, deck, abutment (set of 15)	2002	excellent
Hyland River Bridge		
Elevation, truss, pier, deck, abutment (set of 15)	1943	poor

Note: PWGSC does not take responsibility for the accuracy or completeness of the information contained in the documents. It is the Proponent's responsibility to evaluate the information and carry out any investigations or measurements necessary to confirm or supplement the information contained in the documents. The successful proponent may wish to verify the dimensions of the existing structures particularly where the quality of the existing drawings is poor.

PD 5 Project Objectives

5.1 General Objectives

1. The objective of this Request for Proposal is to select a qualified and experienced team of structural engineers to undertake the planning, inspection, studies, analysis, and reports preparation of the Alaska Highway Bridges and Culverts including all the necessary recommendations for future action.

2. The assignment for this object involves but not limited to the following:
   a) Planning of the inspections involving above water and underwater as well as inspection for load rating investigation
   b) Detailed inspection of all components of all structures in accordance with the Bridge Inspection Manual including 2010 revisions.
   c) Load rating and detailed seismic evaluation of bridge superstructure and substructure
   d) Production of all pertinent reports
   e) Recommendation on all relevant repairs and strengthening, including preliminary cost estimates; approximate quantities, description of work to be performed and priority for action
   f) Effective communications to all affected parties to minimize user disruptions and inconvenience

g) Effective time and cost control.

5.2 Risk Management

1. Consultant will undertake the following major processes from the planning of the inspection through to the completion of the reports:
   h) Risk Identification - determine which risks are likely to affect the project and document characteristics of each
   i) Risk Quantification - evaluate risks and risk interactions
   j) Risk Response Development - define steps for opportunities and responses to threats
   k) Risk Response Control - respond to changes in risk over the course of the project.

5.3 Inspection Criteria

1. Comprehensive detailed inspection on all PWGSC bridges and soil-steel structures on the Alaska Highway must be performed in accordance with the procedures outlined below and in conformance with Public Works and Canada Bridge Inspection Manual (PWGSC BIM including 2010 revisions).

2. Inspection and evaluation process must include preliminary analysis of options and priority recommendations for repair, rehabilitation, strengthening, replacement or reconstruction, with life cycle cost considerations.

3. Inspections of specialized components of bridges (mechanical, hydraulic, cables, etc.) on bridges must be carried out by specialized, experienced engineers and shall be coordinated and integrated with the inspection of other structural components of the bridge.

4. Inspections involving routine and unusual conditions that may have affect on structures must take into considerations the current state of repair undertaken on the structures and any inherent failure-sensitive conditions requiring closer monitoring and attention.

5. Emergency conditions must be reported immediately to PWGSC authorities and a remedial course of action be proposed in accordance with the urgency of the situation.

6. Inspection reports for the detailed inspections will be prepared, itemizing the extent and severity of all bridge components deficiencies using a numerical condition rating methodology consistent with the PWGSC BIM including 2010 revisions. The reports must include an assessment indicating functional constraints of each bridge and significant changes in its structural load-carrying capacity.

7. Inspection of bridge structures will be carried out by:
   a) registered professional engineers experienced in the design, inspection, construction and evaluation of bridge structures and,
   b) trained structural bridge inspectors reporting to or under the supervision of an engineer with expertise in bridge engineering.

8. All bridge inspectors must be fully knowledgeable of the practices and procedures described in the PWGSC BIM including 2010 revisions.

9. Inspector(s) will utilize appropriate and safety approved equipment in carrying inspection duties to gain proper access for the adequate evaluation of all components of every structure.

10. Components not visible or inaccessible at time of inspection must be noted. The necessary provisions for inspection will be identified and arrangements made for a proper inspection to be executed by the Consultant himself.

5.4 Performance Requirements

1. Consistent with the Principles and Guidelines in the PWGSC BIM including 2010 revisions, assess the overall or general condition rating for the entire structure including defects that are observed during the course of inspection on the materials and performance of individual components.
   a) Evaluate the condition of a component based upon observed defects of the materials of that component. The material condition rating for components are categorized as to severity and are to be rated according to pre-established criteria for consistency.
   b) Evaluate performance defects in relation to defects due to design or construction as opposed to material defects.
   c) Investigate performance defects that may be caused by the unexpected behaviour of the structure or changes in the regular service requirements.

2. For consistency in reporting, inspectors will utilize PWGSC BIM including 2010 revisions Guidelines to provide a priority code for the recommended repairs. Appendix E, indicates the appropriate tables for all the components of the bridge (from the PWGSC BIM including 2010 revisions), where the rating criteria are described with corresponding numerical ratings, ranging from 1 to 6.

3. Establish Performance Condition rating in conformance with Appendix A, figure 2.2 and, Sections 1 to 9 of the PWGSC BIM including 2010 revisions.

4. Assign the numerical rating to a particular component reflecting the most severe condition of material (defect or performance reduction) observed in that member, regardless of its importance in the structure.
5. Under the condition rating, evaluate each defect and identify the priority code for remedial action and scheduling. Indicate the degree of urgency and nature of the required action. Priority coding must be consistent with the PWGSC BIM including 2010 revisions, Section 2, Condition Rating Systems.

6. Under the functional rating, evaluate each deficiency and identify the priority code for remedial action and scheduling. Indicate the degree of urgency and nature of the required action. Priority coding must be consistent with the PWGSC BIM including 2010 revisions, Section 2, Condition Rating Systems.

5.5 Health and Safety

1. In compliance with the B.C. Provincial Traffic Acts and Regulations and the BC Traffic Control

Manual for Work on Roadways as well as Canada Occupational Health and Safety Regulations, establish a Traffic Control Plan and Safety Measures that will ensure minimal user disruption and maximum worker and traffic safety during the inspection process,

2. Apply required precautionary measures when carrying out inspections on dangerous and submerged portions of the stem and entire footing of bridge piers. Inspection process must be cost effective, efficient, safe and thorough.

3. Ensure that traffic control services will maintain a minimum of one lane open to traffic at all times and that no equipment is left on the bridge when the workers leave the site.

PD 6 Project Targets / Schedule

1. Consultant will submit at the onset a Project Control System relating to budget control, performance quality and schedule. The control system will be considered as the Based Project Control System which will be used as continuous interactive planning and scheduling process during the course of the project.

2. Major changes to the Based Project Control System will require the approval of the Project Manager.

3. The Based Project Control System will be submitted on approved network techniques such as: Critical Path Method (CPM) for Planning, Scheduling, Progress Monitoring and Reporting of project progress.

6.1 Preparation of the Project Control System

1. Consultant will provide a Project Control System Report at the end of the Analysis of Inspection Requirements Stage as a deliverable showing the following:
   a) Activities for all phases and types of inspection.
   b) Necessary reviews and acceptances
   c) Coordination and review activities leading to draft and final reports
   d) Corresponding inspection personnel
   e) Activities associated expenditures

2. Activities must be detailed to ensure effective planning and control and must relate at all times to the Milestones developed and approved in the Project Control System.

3. Activities with no float which form the "Critical Path" must be clearly indicated on the logical network as being a continuous series of activities throughout the project.

6.2 Project Reviews and Acceptance

1. A minimum of One (1) week (calendar) will be allocated by the Consultant for scheduled reviews in the proposed Schedule.

2. Following the review, any necessary revision to the initially accepted project budget, inspection methodology and schedule as well as the overall project scope, must be submitted to the Project Manager within one week (calendar) after each respective review.

3. During the course of the project, Consultant will, at the Project Manager's request and without additional charges, provide all additional information required by the Project Manager to validate Consultant's work schedule, quality of performance and budgetary diligence.

6.3 Compliance with the Project Control System

1. Consultant must comply with the approved Project Control System, direct and assist his sub-consultants in the planning and coordinating of their respective work.

2. All project work including final reports must be completed as follows:
   a) Phase 1, Detailed Inspection, Underwater Inspection and Seismic and Load Rating Evaluation - November 15, 2017.
   b) Phase 2, Detailed Inspection, Underwater Inspection, and Seismic and Load Rating Evaluation - November 15, 2019.

3. Milestone for the successful completion of the project will include, but not be limited to the following: (see also Submissions, Reviews and Acceptances Table - Description of Services Section): (Estimated Duration in Working Days)

Description	Estimated Duration
Analysis of Inspection Requirements	
Submission of project scope of work	
Submission of detailed schedule	
Submission of traffic control plan	
Project review and acceptance	5
Comprehensive detailed inspection	
Submission of preliminary detailed inspection report	
Project review and comments	8
Submission of semi-final detailed inspection report	
Project review and acceptance	5
Load Rating Evaluation	
Submission of Preliminary Load Rating Report	
Project review and comments	3
Submission of semi-final Load Rating & Evaluation Report	
Project review and comments	5
Underwater inspection	
Submission of preliminary underwater inspection report	
Project review and comments	5
Submission of semi-final underwater inspection report	

Description	Estimated Duration
Project review and comments	5
Submission of Final Report (includes: Final Detailed Inspection, Underwater Inspection and Load Rating)	
Project review and acceptance	5

6.4 Progress Monitoring and Reporting

1. On a Monthly basis with status dated on the last working day of the month, Consultant will update Project Control System to reflect the following:
   a) progress of each activity to the date of the report;
   b) any logic changes, both historic and planned;
   c) projections of progress and completion;
   d) the actual start and finish dates of all activities being monitored in the network shall be recorded and submitted; and
   e) any potential delays, outstanding issues and concerns from the inspection teams' and the structural team's point of view, and options for dealing with any serious planning and scheduling issues.

2. Consultant will submit to the PWGSC Project Manager a written monthly Narrative Report based on the updated Project Control System. The report will summarize the progress to date, detailing the work performed comparing work progress as planned, and presenting current forecasts indicating current and possible deviations as well as delays.

DESCRIPTION OF SERVICES

PA1 Project Administration

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

1.1 PWGSC Project Management

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

2. The Project Manager is the Departmental officer directly concerned with the project and responsible for its progress.

3. The Project Manager is the liaison between the Consultant and Public Works and Government Services Canada.

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

1.2 General Project Deliverables

1. Where deliverables and submissions include summaries, reports, drawings, plans or schedules, unless otherwise specified, six (6) hard copies and six (6) CD will be provided. In addition, two (2) coloured copies of all pictures taken will be provided to PWGSC.

1.3 Lines of Communication

1. Formal communications for the work will be between the Project Manager/ Departmental Representative and a representative identified by the Consultant.

2. Field communications will be between the Project Manager/ Departmental Representative and a representative identified by the Consultant.

1.4 Media

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

1.5 Project Response Time

1. Key personnel of the successful proponent and his/her respective sub-consultant or specialist firms will be personally available to attend meeting or respond to inquiries within 2 days.

1.6 Submissions, Reviews and Acceptances

The following Table include, but not limited to, the Review and Acceptances requirements and Consultant presentations required for **Stages RS 1, RS 2 and RS 3:**

Chart of Reviews and Acceptances	PWGSC	
	Review	Acceptance
Analysis of Inspection Requirements		
Detailed Project Schedule	x	x
Project Scope of Services	x	x
Traffic Control Plan	x	x
Detailed Inspection		
Preliminary Inspection Report	x	x
Final Inspection Report	x	x
Seismic and Load Rating	x	x
Preliminary Report	x	x
Final Report	x	x
Final Report	x	x

REQUIRED SERVICES

RS 1 Analysis of Inspection Requirements

1.1 Comprehensive Inspection Program

1. Consultant must review and integrate all the inspection requirements; identify and evaluate conflicts or problems; gather and survey all the necessary information; provide alternative strategies; and present and receive acceptance on a Project scope, delivery process, schedule and estimate required to successfully complete this project.

2. This deliverable will become part of the Project Scope of Services as the base throughout the course of the project.

3. Consultant will prepare a 'COMPREHENSIVE INSPECTION PROGRAM' report that include, but not limited to the following:
   a) Understanding and acceptance of Scope of Work
   b) Requirements of the project
   c) Confirmation of delivery process and schedule requirements
   d) Clarification of conflicts, issues, regulatory requirements relating to Scope of Services
   e) Work breakdown structure
   f) Detailed Project Schedule
   g) Obtained sketches of existing structures in electronic format for inspection report. The Consultant will be required to prepare electronic base documentation in a PWGSC approved AutoCAD format by updating available existing information.

1.2 Site Study

1. Review existing drawings of bridges and culverts

2. Study site characteristics of area: traffic flow, river geometry and behaviour

3. Complete review of existing documents, codes and standards

4. Verify availability of inspection equipment

5. Obtain and review the required manuals

1.3 Deliverables

1. Traffic Control Plan

2. Project Control System Plan

3. The schedule will include as a minimum the following:
   a. Detailed comprehensive inspection plan

4. Verify total scope of work and report on above items

5. Comprehensive Inspection Report

1.4 Planning and Scheduling

1. Consultant will provide scheduling services from commencement of the project through to its completion in accordance with the following general scope and detail specific services in each of stages RS 1, RS 2 and RS 3.
2. Review Impact of above findings with Project Planning and Scheduling
   a) Prepare a Detailed Schedule Plan that accounts for all major project activities. Schedule Plan must be in the form of a bar chart with milestones identifying activity duration's, early/late dates, total float, percent complete.
   b) Upon acceptance and agreement by PWGSC, Consultant must proceed immediately with services and PWGSC. Except for emergency purposes, Consultant must not proceed with services on revised schedule and work plan without prior approval by PWGSC.
   c) The accepted and agreed upon Detailed Schedule Plan will be become the Base Plan. Revision of the Base Plan will be only be made if major changes to schedule is necessary for the successful completion of the project and will require PWGSC acceptance and agreement.

3. Progress monitoring and reporting: On a monthly basis, Consultant must update detailed schedule and submit to PWGSC Project Manager/ Departmental Representative a written monthly narrative report of accomplishment. The report will summarize the progress to date, describing current activities and addressing possible deviations as well as delays against the base Schedule with plan of action for rectification.

1.5 Sustainable Development

1. Consistent with the project objectives relating sustainable development and economic constraints, Consultant must prepare and submit a Plan of Action to minimize environmental impacts in all activities associated in fulfilling the requirement of this project.

1.6 Reviews (Applicable to all Disciplines)

1. Reviews: All references to review by the Project Manager may include other members of the project team such as PWGSC in-house expertise

2. The Project Manager reviews all submissions and returns comments to the Consultant, retaining copies for record purposes.

3. Revise and resubmit documents as required to obtain Departmental acceptance of each submission stage.

4. Allow the required number of working days for the PWGSC review process. Allow for a minimum of 2 review and resubmission iterations per review/acceptance submission.

5. Consultant must provide a written response for each item raised during PWGSC review and the response is to be provided before the next submission.

6. Reviews are not detailed checks of the documents or his work, and in no way relieve the Consultant of professional responsibility for checking the work and that of his sub-consultants.

7. During each review period, maintain full production on the project, and revise documents as necessary and when review comments are received. The extent of revisions necessary will depend largely on the quality and accuracy of work submitted, and on the effectiveness of regular meetings.

8. The minimum number of copies of each review submissions will be six (6). (hard copies). Electronic copies and access to electronic media will be made available by Consultant when requested by the Project Manager/ Departmental Representative.

9. Compliance: The Consultant must comply with the approved review submissions and direct and assist its sub-consultants in the planning and coordinating of their work with respect to the approved submissions.

RS2 Detailed Inspection

2.1 General

1. This **Comprehensive Detailed Inspection assignment** is a close-up, hands-on inspection of all components of structures in order to:
   a) Analyze and asses the structural conditions of PWGSC assets relating to bridges, bridge-culverts and culverts on the Alaska Highway
   b) Rate condition of existing materials and structural performances
   c) Identify material and structural defects
   d) Conditional and Functional Rating of Structures per BIM 2010 provisions.
   e) Review components to assist in the loading evaluation
   f) Provide recommendations for required rehabilitation and/or replacement with corresponding cost estimate based on life cycle costing.
   g) Develop a program for rehabilitation and /or replacement works identifying emergency, urgent, immediate and ongoing works, with emphasis to public safety, regulatory requirement and functionality.

2. The undertaking of this assignment requires a Schedule and Traffic Control Plan to be prepared and submitted by the Consultant for review and acceptance by PWGSC.

3. Dated and properly identified photographs must be taken on all the various components inspected to reflect visual representation and description of inspection undertaken.

2.2 Comprehensive Detailed Inspection

1. **CONSULTANT MUST:**
   a. Confirm inspection team
   b. Determine inspection equipment requirements
   c. Coordinate with traffic control personnel
   d. Detailed inspection of all components of all structures

e. Maintain effective communication with all local authorities, particularly PWGSC field personnel
f. Ensure the safety of the inspector and traveling public at all times
g. Report to appropriate authorities for information of more urgent nature
h. Rate all components according to their material condition and performance; Appendix E and the PWGSC Bridge Inspection Manual will provide the necessary guidelines for these ratings
i. In Appendix D of BIM, for the concrete deck, only follow procedures 1.1.2 and 1.2.1; furthermore, only the chain drag survey on bare concrete decks is required as delamination survey
j. All components are also to be assessed with respect to a priority code of repair
Provide all the necessary recommendations with accompanying Class "D" cost estimates.
k. Verify the integrity of the cables on the suspension bridge
l. Measure, verify and record the dimensions of all major structural components including bracing systems and diaphragms. The measurements should be recorded in actual dimensions not nominal sizes;

2.3 Deliverables

1. Preliminary version of reports for review and acceptance.

2. Final version of all reports in the format indicated below.

- Drawings for all bridges inspected in AutoCAD format with a summary of information on which the drawings are based.

- Provide an elevation view and a cross-section view of each structure.

- Incorporate the measured structural dimensions into the drawings.

- Indicate on drawings of substructure areas, relative size and nature of distress.

3. The format of the contents of the reports will be written double sided and arranged as follows:

VOLUME I

- Table of Contents
- Executive Summary
- Introduction
- Summary of Inspection
- Summary of Recommendations, including as a minimum:
  - Bridge and Bridge-Culvert Condition and Prioritized Required Rehabilitation or Remedial Works and/or structure replacement;
  - Culvert condition and Prioritized Required Rehabilitation or Remedial Works;
  - Ongoing Maintenance and Repairs;
  - River Training and Protection Works;
  - Bridge Replacements;
  - Cost estimates for all work required.
- List of Bridges and Brief Descriptions

- 10-Year Management Plan
- Summary of work done since last inspection
- Conclusion and Lessons Learned

VOLUME II & III

Volume II will include the bridges and the bridge-culverts along the south section of Alaska Highway from km 197 through km 589. Volume III will include the bridges and the bridge-culverts along the north section of Alaska Highway from km 589 through k952.

Bridges and Bridge-Culverts:

- Table of Contents
- Summary of inspection
- Summary of recommendations and actions, including cost estimates (in excel spreadsheet)
- Conclusions
- Detailed inspections with clearly marked pictures and drawings

VOLUME IV

Culverts:

- Table of Contents
- Summary of Inspection
- Summary of recommendations and actions, including cost estimates (in excel spreadsheet)
- Conclusions
- Detailed inspections with clearly marked pictures and drawings

VOLUME V - Structural Seismic and Load Rating Evaluation

- Table of Contents
- Summary of Evaluation
- Summary of Recommendations
- Conclusions
- Detailed calculation with spreadsheet and/or graphs

Underwater Inspection

The results of underwater inspection should be reported in each individual structure accordingly in Volume II and Volume III.

For Year 2017:

1. Sikanni Chief River Bridge at km 256.1
2. Lower Liard River Bridge at km 763.3

For Year 2019:

1. Muskwa River Bridge at km 451.8
2. Kyland River Bridge at km 937.3

2.4 Planning and Scheduling

1. Review Impact of above findings with Project Planning and Scheduling
   a) Review, report on, and propose revisions to the proposed plan and schedule.
   b) Maintain and update Detail Schedules, Bar Charts, and Milestone Listings.

2. Progress monitoring and reporting: On a monthly basis complete detailed schedule update. The Consultant must also submit a written monthly narrative report based on the Detailed Schedule. This report should summarize the progress to date, explain current and possible deviations and delays with respect to Schedule. Submit written response to comments made by PWGSC on previous submissions

The accepted Detailed Inspection Documents will be used to monitor subsequent work; therefore, the final submission must establish a complete record of features requiring decisions governing the work. The Consultant's Final Deliverable for this Stage is to include all revisions and to provide a record of the process.

RS 3 Seismic and Load Rating Evaluation

3.1 Structural Analysis and Capacity Evaluation

1. In this assignment, structural analysis and capacity evaluation will be carried out for the following ten [10] existing structures in Years 2017 and 2019:

   Two bridges in year 2017

   1. Lower Liard River Bridge, located at km 763.3.0
   2. Smith River Bridge, located at km 792.3

   Seven bridges in year 2019

   1. Beaton River Bridge, located at km 323.8
   2. Sikanni Chief River Bridge, located at km 256.1
   3. Buckinghorse River Bridge, located at km 277.6
   4. Bougie Creek Bridge, located at km 357.4
   5. Adsett Creek Bridge, located at km 366.0
   6. Jackfish Creek Bridge, located at km 424.8
   7. Tetsa #2 River Bridge, located at km587.5

Load rating shall be carried out in accordance with the requirements in CAN/CSA-S6-06 Section 14 for Non-Permit CL-625 loading.

3. Review and Acceptance
   A. Submit for PWGSC's review and acceptance, the method of evaluation, the load combinations and factors, assumptions used in determination of component resistances, and structural analysis methods.
   B. Indicate all load combinations and bridge behaviour under these loadings.

a) Detailed loading and performance data to establish load posting criteria or strengthening recommendations.
b) Identify immediate requirement for posting and/or strengthening.

C. Establish in the final submission an Analysis and Evaluation Document to monitor and guide subsequent strengthening or rehabilitation designs. The final submission must establish a complete list of items requiring possible design work. Consultant's Final Report will include all revisions to provide a record of relevant comments.

3.2 Site Study

1. Requirements:
   A. Detailed comprehensive inspection of all components of the bridge.
   B. Carry out a detailed geometric survey of the structure to record the following:
      a) Bearing measurements and truss profiles
      b) Joint openings due to thermal variations
   C. Assessment of previous records, documents, surveys, reports, and drawings before visiting the site
   D. Provincial and territorial highway regulation load limits;
   E. Place special emphasis during inspection on elements which could reduce the structural capacity of the bridge or individual component.

2. Deliverables:
   A. Inspection procedure, time, equipment to be used
   B. Inspection report with emphasis and impact on structural components
   C. Traffic control plan for inspection
   D. Geometric survey report and its implications on the structural analysis.

3.3 Structural

1. Requirements:
   A. Submit for PWGSC's review and acceptance, the method of structural analysis and capacity evaluation to be used in the load capacity evaluation of all aspects of the bridge superstructure and substructure;
   B. Utilize static and dynamic loads and their combination; these include dead, live, impact, wind, fatigue, seismic. and all the applicable river loads;
   C. Comply with Design code, latest version of the Canadian Highway Bridge Design Code,
   D. Assess liquefaction potential of the foundation and its effects on the overall seismic capacity of the bridge.
   E. Provide all load cases to PWGSC for review and acceptance
   F. Provide an analysis of Bridge Code requirements and definition of authorities having jurisdiction;
   G. Submit in a neatly bound copy, notes made on the load calculations and the structural analysis on which the evaluation is based, including all the different load case combinations required by the Canadian Bridge Code;
   H. Identify all the necessary criteria and load limits required for load posting and submit the details for load limit signage when required;
   I. Submit recommendations for strengthening identifying location, extent and cost estimate.

2. Deliverables:
   A. Method of analysis and evaluation
   B. Summary of loads and load cases
   C. Report of load capacity evaluation (preliminary and final)
   D. Load posting requirements and signage
   E. Description and estimate of strengthening requirements
   F. Summary of bridge code requirements and list of authorities having jurisdiction
   G. Copy of all calculations for the analysis and evaluation including computer outputs.

3.4 Planning and Scheduling

1. Review Impact of Structural Evaluation Stage on Project Planning and scheduling Review, report on, and propose revisions to the proposed plan and schedule. Maintain and update Detail Schedules, bar Charts, and Milestone Listings.

2. Progress monitoring and reporting: On a monthly basis, complete detailed schedule update. Consultant must submit a written monthly narrative report based on the Project Control System to summarize the progress to date, current and possible deviations and delays.

3. Allow Two (2) weeks for PWGSC review and evaluation of Structural Evaluation Documents.

3.5 Cost Estimate

1. Upon completion of the structural evaluation prepare a Class "D" estimate for the recommended strengthening repairs.

2. Establish a complete list of prioritized items requiring further work.

3. Consultant's Final Deliverable for this State is to include all revisions and to provide a record of the process.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-162115/A		tpv028
Client Ref. No. - N° de réf. du client	File No. - N° du dossier CCC No./N°	CCC - FMS No./N° VME

NOTE TO TENDERERS: Use the mailing label below and affix it securely to the outside of the envelope or package containing your tender. Use this sheet as the cover sheet. Always ensure your company name, return address, tender number and closing date appear legibly on the outside of your bid submission.

REAL PROPERTY CONTRACTING
Public Works & Government Services Canada
Room 219 - 800 Burrard Street
Vancouver, B.C. V6Z 0B9

Requisition No.: EZ899-162115/A
Tender Closing Date & Time: **April 21, 2016 @ 2:00pm local time**
Project Description: 2017 and 2019 Comprehensive Bridge and Culvert Inspections
Various Locations, BC

TECHNICAL BID

TL

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FINANCIAL BID

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