Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

Réception des soumissions - TPSGC / Bid Receiving - PWGSC
1550 Avenue d'Estimauville
1550 D'Estimauville Avenue
Québec
Québec
G1J 0C7

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

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

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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

Comments - Commentaires

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

Issuing Office - Bureau de distribution

TPSGC - PWGSC
601 - 1550 Avenue d'Estimauville
Québec
Québec
G1J 0C7

Title - Sujet Work Monitoring Harrington Harbour	
Solicitation No. - N° de l'invitation F3731-140201/A	**Date** 2015-02-26
Client Reference No. - N° de référence du client F3731-140201	
GETS Reference No. - N° de référence de SEAG PW-$QCW-026-16356	
File No. - N° de dossier QCW-4-37319 (026)	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2015-04-08**	**Time Zone** **Fuseau horaire** Heure Avancée de l'Est HAE
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Perron, Jonathan	**Buyer Id - Id de l'acheteur** qcw026
Telephone No. - N° de téléphone (418) 649-2838 ( )	**FAX No. - N° de FAX** (418) 648-2209
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:** MINISTÈRE DES PÊCHES ET DES OCÉANS HARRINGTON HARBOUR BAIE DE BIG COVE Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée 0000-00-00	**Delivery Offered - Livraison proposée**
Vendor/Firm Name and Address **Raison sociale et adresse du fournisseur/de l'entrepreneur** **Telephone No. - N° de téléphone** **Facsimile No. - N° de télécopieur**	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) **Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)** **Signature**	**Date**

Canada

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SI1 INTRODUCTION

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

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

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

SI2 PROPOSAL DOCUMENTS

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

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

2. The following are the proposal documents:

   (a) Supplementary Instructions to Proponents (SI);
   R1410T (2014-09-25), General Instructions (GI) – Architectural and/or Engineering Services – Request for Proposal;
   Submission Requirements and Evaluation (SRE);

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

   (c) Project Brief / Terms of Reference;

   (d) the document entitled "Doing Business ";

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

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

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

SI3 QUESTIONS OR REQUEST FOR CLARIFICATION

Questions or requests for clarification during the solicitation period must be submitted in writing to the Contracting Authority named on the RFP - Page 1 as early as possible. Enquiries should be received no later than [5] five 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).

SI5 CERTIFICATIONS

1. Integrity Provisions - Associated Information

By submitting a proposal, the Proponent certifies that the Proponent and its Affiliates are in compliance with the provisions as stated in Section GI1 Integrity Provisions - Proposal of R1410T (2014-09-25) General Instructions (GI) – Architectural and/or Engineering Services – Request for Proposal. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

2. Federal Contractors Program for Employment Equity - Proposal Certification

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

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

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

Consent to a Criminal Record Verification (PWGSC-TPSGC 229 form)
http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html

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

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

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

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

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

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

TERMS, CONDITIONS AND CLAUSES

AGREEMENT

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

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

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

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

3. If there is a discrepancy between the 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”;
   (i) the proposal.

SUPPLEMENTARY CONDITIONS (SC)

SC1 LANGUAGE REQUIREMENTS

1. Communication between Canada and the Consultant shall be in the language of choice of the Consultant Team, which shall be deemed to be the language of the Consultant’s proposal.

2. The Consultant’s services during construction tender call (such as addenda preparation, tenderers’ briefing meetings, technical answers to questions by bidders) shall be provided expeditiously in both languages, as necessary.

3. Other required services in both of Canada’s official languages (such as construction documentation) are described in detail in the Project Brief.

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

AGREEMENT PARTICULARS

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

SUBMISSION REQUIREMENTS AND EVALUATION OF PROPOSALS

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 80%	=	Technical Score (Points)
Price Rating x 20%	=	Price Score (Points)
Total Score	=	Max. 100 Points

SRE 2 PROPOSAL REQUIREMENTS

2.1 Requirement for Proposal Format

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

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

2.2 Specific Requirements for Proposal Format

The maximum number of pages (including text and graphics) to be submitted for the Rated Requirements under SRE 3.2 is twenty-two (22) pages.

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

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

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

SRE 3 SUBMISSION REQUIREMENTS AND EVALUATION

3.1 MANDATORY REQUIREMENTS

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

3.1.1 Licensing, Certification or Authorization

The proponent shall be an engineering firm licensed or eligible to be licensed, certified or otherwise authorized to provide the necessary professional services to the full extent that may be required by provincial or territorial law in the province of Quebec.

3.1.2 Consultant Team Identification

The consultant team to be identified must include the following:

For the Prime Consultant:

- Responsible for Supervision of construction on site;
- Responsible for Office supervision;
- Responsible for Project management (if different from Office supervision).

For the Prime Consultant or a sub-contracting consultant:

- Responsible for Construction site testing and pile driving analysis.

If the bidder proposes to provide multidisciplinary services that would normally be provided by a sub-consultant, it should be indicated here.

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

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

3.1.3 Declaration/Certifications Form

Proponents must complete, sign and submit the following:

- Appendix B, Declaration/Certifications Form as required.

3.1.4 Code of Conduct Certifications

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

3.2 RATED REQUIREMENTS

3.2.1 Achievements and experience of Proponent on Project management in marine construction

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

Choose a maximum of three (3) harbour structure projects comparable in cost and complexity to the project subject to this RFP undertaken in the past ten (10) years. Similarities and comparables include, but are not limited to : pile anchoring to concrete blocks, isolated environment, breakwater, remote and difficult access on Lower North Shore, sediments excavating, respect for environmental constraints, timber floating docks, steel piles, etc.

Only the first three projects presented will be reviewed and all others will receive no consideration as if they had not been submitted.

<u>Information that should be supplied:</u>

- 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, design challenges and resolutions.
- budget control and management - i.e. contract price & final construction cost - explain variation
- project schedule control and management - i.e. initial schedule and revised schedule - explain variation

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

3.2.2 Achievements and experience of prime consultant or Key Sub-consultants and Specialists on construction supervision in marine projects

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

Three (3) projects in the past ten (10) years must be presented. At least one (1) of these three projects must include construction works in a remote site on the North Shore ; at least one (1) of these three projects must include a breakwater and at least one (1) must include steel piles.

Only the first three projects presented will be reviewed and all others will receive no consideration as if they had not been submitted.

<u>Information that should be supplied:</u>

- 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, design 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.

For each of the following key individuals, indicate the experience acquired on past projects at the same level and in an identical role. To this end, submit at most three (3) projects involving monitoring of marine construction projects on a scale comparable to the projects subject to this RFP, as described in the "Project Brief," undertaken in the past ten (10) years by each key individual. Projects of comparable scale are those that include pile and structural slab installation in a marine environment.

Only the first three projects presented will be reviewed and all others will receive no consideration as if they had not been submitted.

- Responsible for Office supervision; experience as project manager and office supervisor for the construction of marine structures ;
- Responsible for Supervision of construction on site; experience as on site principal work supervisor for the construction marine structures;
- Responsible for Project management (if different) ; experience as project manager for the construction of marine structures.

For the assistant supervisor, indicate the general experience acquired on past projects on construction sites, at the same level and in an identical role. To this end, submit at most two (2) projects completed in the past five (5) years.

Only the first two projects presented will be reviewed and all others will receive no consideration as if they had not been submitted.

Information that should be supplied for each key personnel:

- professional accreditation
- accomplishments/achievements/awards
- relevant experience, expertise, number of years experience
- role, responsibility and degree of involvement of individual in past projects

3.2.4 Understanding of the Project:

The proponent should demonstrate understanding of the goals of the project, the functional/technical requirements, the constraints and the issues that will shape the end product.
Information that should be supplied:

- The functional and technical requirements
- Broader goals (federal image, sustainable development, sensitivities)
- The relationship between this commission and any earlier studies completed for DFO
- 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:

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

Information that should be supplied:

- Scope of Services - detailed list of services
- Work Plan - detailed breakdown of work tasks and deliverables
- Project schedule - proposed major milestone scheduleConsiderations on remoteness of site
- Risk management strategy

3.2.6 Management of Services:

The Proponent should 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 firms; to describe how the team will be managed. The proponent is also to identify sub-consultant disciplines and specialists required to complete the consultant team.

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

Information that should be supplied:

- Confirm the makeup of the full project team including the names of the consultant sub-consultants and specialists personnel and their role on the project.
- Organization chart with position titles and names (Consultant team). Joint Venture business plan, team structure and responsibilities, if applicable
- What back-up 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
- Reporting relationships
- Communication strategies
- Response time: demonstrate how the response time requirements will be met

3.3 EVALUATION AND RATING

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

Criterion	Weighting coefficient	Rating	Weighted score
3.2.1 Proponent's achievements and experience in project management in a marine environment	1.5	0 – 10	0 – 15
3.2.2 Proponent's achievements and experience in Construction supervision on site in a marine environment	1.5	0 – 10	0 – 15
3.2.3 Achievements and experience of key personnel • Project Manager/Office Supervisor – Maximum 5 points • Assistant Supervisor – Maximum 5 points	5.5	0 – 10	0 – 55
3.2.4 Understanding of projects	0.5	0 – 10	0 – 5
3.2.5 Scope of services	0.5	0 – 10	0 – 5
3.2.6 Management of services	0.5	0 – 10	0 – 5
Total technical score	10		0 – 100

Generic Evaluation Table

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:

NON RESPONSIVE	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 expert 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 lacks qualifications and experience	Proponent does not have minimum qualifications and experience	Proponent has minimum 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 all 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 project's needs	Sample projects generally not related to this project's needs	Sample projects generally related to this project's needs	Sample projects directly related to this project's needs	Leads in sample projects directly related to this project's needs
	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Minimum acceptable capability, should meet minimum performance	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:

1. The lowest price proposal receives a Price Rating of 100
2. 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.
3. 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 is 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	80	0 - 80
Price Rating	0 - 100	20	0 - 20
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
- ☐ Code of Conduct Certifications - list of directors/owners
- ☐ Proposal - one (1) original plus four (4) copies
- ☐ Front page of RFP
- ☐ Front page(s) of any solicitation amendment

In a separate envelope:

- ☐ Price Proposal form - see Appendix C - one (1) completed and submitted in a separate envelope

PROJECT BRIEF

This Project Brief is divided into two sections:

- **Description of Project**
- **Description of Services**
  - Project Administration
  - Required Services
  - Additional Services

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

DESCRIPTION OF PROJECT

PD 1 PROJECT INFORMATION

Fisheries and Oceans Canada (DFO) intends to retain a firm of civil engineers and other professionals for the provision of the services required for this project.

1.1 DFO Project Title: Supervision of Construction Works for the Harbour Development Construction in Harrington Harbour.

1.2 Location of the Project: Harrington Harbour, Lower North Shore, Québec
Coordonnates : 50°30'22.2"N, 59°28'51.0"O

1.3 DFO Project Number: #716213

1.4 Client / User: Department of Fisheries and Oceans Canada

1.5 DFO Project Manager:

Mr Mario Nicol, senior project tech.
Fisheries and Oceans Canada
Small Craft Harbours
104, Dalhousie street
Québec, QC
G1K 7Y7
(418) 649-7473

PD 2 PROJECT IDENTIFICATION

2.1 Description

2.1.1 Background

The Fisheries and Oceans Canada (DFO) Small Craft Harbours Branch (SCHB) wants to build a new fishing harbour in Harrington Harbour Island, located on the Lower North Shore.

At this moment all fishing activities take place at Transport Canada wharf, located nearly 1,1 km south of the Big Cove bay. The fish plant is located on TC's wharf. But this wharf does not protect properly the fishing boats from wave agitation and during storms, the must leave the wharf and sail still on the sea until the storms is over. Also, when the main supplying boat comes to Harrington Harbour and berths to TC's wharf, fishing boats must free space for her.

Those conditions are not ideal at all for the fishers and other users, and the construction of a new harbour is a priority for DFO. When the harbour will be in function, all fish landings will still take place at TC's wharf, but the boats will then berth at the protected floating docks of the new harbour for the night.

2.1.2 Project description

The new harbour will be built nearly 750 m north of the Village, in the *Big Cove*. The new harbour consists of a breakwater on the eastern part of the bay, behind which floating docks will be installed and protected from the waves ; a parking for ATV, lighting and timber walkways complete the terrestrial features.

The type of work planned is as follows (but not limited to):

- Construction of steel piles and concrete bases installed on the sea bed;
- Construction of timber floating docks and fastening system to steel piles;
- Construction of a rubblemound breakwater ;
- Installation of electricity on docks ;
- Excavation of sediments;
- Construction of a parking lot, an access walkway and lighting of site and docks;
- Construction of concrete anchoring blocks and gangways.

The rationale behind the project is the need to maintain an active fishery in Harrington Harbour and assure safe fishing conditions for fishermen. Port infrastructure is essential to this community's development.

2.1.3 Construction of steel piles and concrete bases on the sea bed

A total of nine (9) steel piles will be installed on concrete bases on the sea bed to fix the anchoring system for docks. These piles have a diameter of 508 mm and a thickness of 16 mm. The 2,5 m X 2,5 m concrete bases will be supported on a crushed stone foundation.

2.1.4 Construction of timber floating docks and fastening system to steel piles

The steel piles will support the berthing and mooring efforts on docks. Those efforts will be transmitted to piles by a steel fastening system located behind the docks.

2.1.5 Construction of a rubblemound breakwater

A new 54 m long breakwater will be built on the eastern shoreline of the bay of *Big Cove* to protect the docks against wave agitation. This breakwater will be built with different stone size according to plans.

2.1.6 Installation of electricity on docks

Floating docks will be equipped with 3 electrical stations composed 15A and 30A power outlets. Electrical wires from service area will be installed alongside of gangway.

2.1.7 Excavation of sediments

To enable large vessels to navigate safely in the new harbour, an area will be excavated to an elevation of 3.2 m below chart datum. This represents an approximate volume of 1 200 m^3 over an area of 1 000 m^2.

2.1.8 Construction of a parking lot, an access walkway and lighting of site and docks

A service area and a parking lot for approximately 20 all-terrain vehicles and some trailers will be built near the gangway and docks access. The lot will have a gravel surface. A timber walkway will also be built between the main access walkway and the service area, all the way to the gangways.

Lighting of site and docks will be supplied by terrestrial lighting poles.

2.1.9 Construction of concrete anchoring blocks and gangways

Two (2) gangways to access the docks will be installed. The gangways will be supported on concrete blocks directly anchored to the rocky cliff. Safe railings will be installed on concrete blocks.

2.2 Cost

The construction budget for this project is between $5,500,000 and $6,000,000.

2.3 Schedule

The Consultant will be required to effectively supervise the construction site and manage the project in a safe and operational environment to fulfil program, budget and schedule requirements.

Overall, the project must be carried out according to the following schedule, which takes into account the publication of this RFP on February 9th, 2015 (this date is flexible according to DFO's administrative branch and all following dates will follow from them).

Harrington Harbour – dates planned for the supervision mandate

- Publication of bid solicitation (consultants): February 27th, 2015
- Opening of consultants' proposals: April 8th, 2015
- Appointment of Consultant: April 16th, 2015

Harrington Harbour – dates planned for construction

- Start of on-site work in 2015 : May 15th, 2015
- Pause for winter : Nov. 2015 – April 2016
- Resumption of works : April 13th, 2016
- Provisional acceptance : June 15th, 2016
- Final acceptance of work and Closing of project file: Sept. 15th, 2016

PD 3 EXISTING DOCUMENTATION

3.1 Existing Documentation - available for all proponents

Please consult https://buyandsell.gc.ca/procurement-data/tender-notice/PW-QCM-008-16192.

3.2 Existing Documentation - to be made available for successful Proponent

A list of documents available for the project will be provided to the successful Proponent at the kick-off meeting. Any documents the successful Proponent deems relevant will also be provided to the Proponent for the duration of the mandate. This involves primarily specialized expertise, inspections and photographs.

PD 4 PROJECT OBJECTIVES

4.1 Sustainable Development

The Canadian Federal Government has begun a series of initiatives to ensure that sustainable development principles are built into the policy of all federal organizations. DFO like all federal departments require to have a Sustainable Development Strategy (SDS). DFO has developed their Strategy Plan, that sets out principles, goals and actions for integrating sustainable development principles into its policies and operations. The Branch has established the following sustainable development goals under the issues of management, leadership and operation.

4.2 Waste Management

The Construction, Renovation, and Demolition (CRD) Non-hazardous Solid Waste Management Protocol to which Real Property Services (RPS) is bound, provides directions on the undertaking of non-hazardous solid waste management actions for CRD projects. The protocol is designed to meet the requirements of federal and provincial policies and the objectives of the RPS Sustainable Development Strategy (SDS) as these relate to non-hazardous solid waste generated in CRD projects.

For all Real Property Services projects where the area exceeds 2,000 m2, a solid waste management program must be implemented. This requirement exists by regulation in the province of Ontario and by policy for the rest of Canada. For projects where the area is less than 2,000 m2, a preliminary waste management evaluation of the economic feasibility of a waste management program must be carried out.

The results from the RPS CR&D waste management pilot projects have been very positive. Based on these results and results obtained from similar projects that have been completed by other organizations, the following can be said:

* Approximately 50% to 95% of the waste generated during CR&D projects can be diverted from landfill through reduction, reuse, and recycling initiatives.

* Approximately 40,000 tonnes of waste are produced for every one billion dollars that is spent on construction projects.

* Contractors and projects managers must plan for extra project time when implementing CR&D waste diversion initiatives. However, added labour hours costs can be recuperated and a savings of up to 30% of the waste management costs (approximately 10% of the total project budget) can be achieved through reduced tipping fees, avoided haulage costs, and the sale of reusable and recyclable materials.

Project Manager to provide details of waste management delivery strategies. Details for specifying deliverables are provided in "Additional Services" - Waste Management.

4.3 Code Compliance

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

4.4 Risk Management

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

4.5 Health and Safety

DFO recognizes the responsibility to ensure the health and safety of all persons on Crown construction projects and the entitlement of both federal employees and private sector workers to the full protection afforded them by occupational health and safety regulations.

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

PD 5 CONSULTANT SERVICES

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

urban design
landscape architecture
structural engineering
civil engineering
mechanical engineering,
electrical engineering
commissioning
time control
cost control
risk management,
waste management

sustainable development
lighting design
color specialist
sustainable development
security
communications
exhibit design
geo technical engineering
environmental protection

DESCRIPTION OF SERVICES

PA 1 PROJECT ADMINISTRATION

INTENT

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

1.1 DFO Project Management

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

The Project Manager is the Departmental officer directly concerned with the project and responsible for its progress. The Project Manager is the liaison between the Consultant and DFO.

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

1.2 General Project Deliverables

Where deliverables and submissions include summaries, reports, drawings, plans or schedules, four(4) hard copies shall be provided plus one (1) copy shall be provided in electronic format unless otherwise specified.

1.3 Lines of Communication

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

1.4 Media

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

1.5 Meetings

The Project Manager shall arrange meetings every three weeks throughout the entire construction period, for all members of project team, including representatives from:

- DFO
- Contractor
- Consultants

The Consultant shall attend the meetings, record the issues and decisions and prepare and distribute minutes within four (4) days of the meeting.

1.6 Project Response Time

It is a requirement of this project that the key personnel of the successful proponent and sub consultant or specialist firms be personally available to attend meeting or respond to inquiries within three (3) days.

1.7 Submissions, Reviews and Approvals

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

DFO **in-house services**

- Submission Format: supervision report
- Submission Schedule: reports are reviewed weekly
- Expected Turnaround Time: 2 days following Fridays.
- Number of Submissions: one report should be sent by email including photos, counting of quantities, major events on site, use of machinery, working personnel, etc.

1.8 Official Languages

This project requires services in both official languages. Written reports must be submitted to DFO in French with quality syntax. Thus the Contractor, other stakeholders, residents or even workers may speak English. On site supervisors and other Consultant representatives must have a sufficient quality English.

REQUIRED SERVICES

RS 1 ANALYSIS OF PROJECT REQUIREMENTS

Not applicable.

RS 2 DESIGN CONCEPT

Not applicable.

RS 3 DESIGN DEVELOPMENT

Not applicable.

RS 4 CONSTRUCTION DOCUMENTS

Not applicable.

RS 5 TENDER CALL, BID EVALUATION & CONSTRUCTION CONTRACT AWARD

Not applicable.

RS 6 CONSTRUCTION AND CONTRACT ADMINISTRATION

6.1 INTENT

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

6.2 GENERAL

Scope and Activities:

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

6.3 DETAILS

Scope and Activities:

6.3.1 Construction Meetings

- Immediately after contract award arrange a briefing meeting with the Contractor and the Departmental Representatives. Prepare minutes of the meeting and distribute copies to all participants and to other persons agreed upon with the Project Manager.
- Call job meetings as frequently as required, commencing with the construction briefing meeting. The meetings should include the job superintendent, Inspector of Construction main sub-subcontractors, affected sub-consultants and Government Services representatives as necessary. Prepare minutes of the meeting and distribute copies to all participants. The Project Manager may invite client Departments to attend any of these meetings.

6.3.2 Project Schedule

- Obtain Project Schedule with detailed commissioning component shown separately, as soon as possible after contract award and ensure proper distribution.
- Monitor the approved construction schedule, take necessary steps to ensure that the schedule is maintained and submit a detailed report to the Department concerning any delays.

- Keep accurate records of causes of delays.
- Make every effort to assist the Contractor to avoid delays.

6.3.3 Time Extensions

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

6.3.4 Cost Breakdown

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

6.3.5 Sub-contractor Changes

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

6.3.6 Labour Requirements

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

6.3.7 Bylaw Compliance

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

6.3.8 Construction Safety

- All construction projects that are occupied by federal employees during construction are subject to the Canada Occupational Safety and Health Act and Regulations as administered by Health and Welfare Canada.
- Fire safety provisions during construction must comply with FCC Standards 301 and 302, administered by the Fire Commissioner Canada.
- In addition to the above, the Contractor must comply with the provincial and municipal safety laws and regulations, and with any instructions issued by the officers of these authorities having jurisdiction relating to construction safety.
- Ensure the Contractor is mandated to provide all required coordination, isolation, protection and reinstatement of the fire protection and suppression systems throughout construction. Notify the Property Manager each time the fire protection and suppression systems are bypassed and advise of estimated reinstatement time. Ensure the Contractor is mandate to provide Watchman Service as defined in FC 301 and by the Fire Commissioner

6.3.9 Site Visits

- Provide non-resident construction inspection services. Ensure compliance with contract documents.
- Provide services of qualified personnel who are fully knowledgeable with technical and administrative requirements of project.
- Establish a written understanding with contractors as to what stages or aspect of the work are to be inspected prior to being covered up.
- Assess quality of work and identify in writing to the Contractor and to the Department all defects and deficiencies observed at time of such inspections.
- Inspect materials and prefabricated assemblies and components at their source or assembly plant, as necessary for the progress of the project.
- Any directions, clarifications or deficiency list shall be issued in writing to DFO.

6.3.10 Clarifications

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

6.3.11 Progress Reports

- Report to the Department regularly on the progress of the work. Submit weekly reports.

6.3.12 Work Measurement

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

6.3.13 Detail Drawings

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

6.3.14 Shop Drawings

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

6.3.15 Inspection and Testing

- Prior to tender, provide Department with recommended list of tests to be undertaken, including on site and factory testing
- Ensure all testing is detailed within commissioning plan
- When contract is awarded, assist Departmental Representative in briefing testing firm on required services, distribution of reports, communication lines, etc.
- Review all test reports and take necessary action with Contractor when work fails to comply with contract.

- Immediately notify Project Manager when tests fail to meet project requirements and when corrective work will affect schedule.
- Assist Departmental Representative in evaluating testing firm's invoices for services performed.

6.3.16 Training

- Prior to tender, provide Department with recommended list of training to be undertaken
- Ensure all training is detailed within the commissioning plan

6.3.17 Construction Changes

- The Consultant does not have authority to change the work or the price of the Contract.
- Changes which affect cost or design concept must be approved by the Department.
- Upon Departmental approval obtain quotations from the Contractor in detail. Review prices and forward promptly recommendations to the Department.
- The Department will issue Consultant-prepared Change Orders to the Contractor, with copy to Consultant.
- All changes, including those not affecting the cost of the project, will be covered by Change Orders.
- The practice of "trade-offs" is not allowed.

6.3.18 Contractor's Progress Claims

- Each month the Contractor submits a progress claim for work and materials as required in the Construction Contract.
- The claims are made by completing the following forms where applicable:
    - Request for Construction Payment
    - Cost Breakdown for Unit and/or combined Price Contract
    - Cost Breakdown for Fixed Price Contract
    - Statutory Declaration Progress Claim
- Review and sign designated forms and promptly forward claims to the Department for processing.
- Submit with each progress claim:
    - Updated schedule of the progress of the work.
    - Photographs of the progress of the work.

6.3.19 Materials On Site

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

6.3.20 Acceptance Board

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

6.3.21 Interim Inspection

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

6.3.22 Interim Certificates

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

1. Interim Certificate of Completion
2. Cost Breakdown for Fixed Price Contract
3. Cost Breakdown for Unit or Combined Price Contract
4. Inspection and Acceptance
5. Statutory Declaration Interim Certificate of Completion
6. Workmen's Compensation Board Certificate.

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

6.3.23 Building Occupation

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

6.3.24 Operation and Maintenance Data Manual

- Operation and Maintenance Data Manual: Four (4) sets of each volume produced by Contractor in accordance with Section 01 33 00 of project specification and verified for completeness, relevance and format by the Architectural, Mechanical and Electrical Consultants and submitted to DFO Project Manager prior to interim acceptance or actual start of operation and instruction period, whichever occurs sooner. The Contractor shall retain one copy of each volume for his record and use during the instruction period.

6.3.25 Instruction of Operating Personnel

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

6.3.26 Keys

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

6.3.27 Final Inspection

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

6.3.28 Final Certificate

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

1. Final Certificate of Completion
2. Cost Breakdown for Fixed Price Contract
3. Inspection and Acceptance
4. Statutory Declaration Final Certificate of Completion
5. Cost Breakdown for Unit and/or Combined Price Contract
6. Workmen's Compensation Clearance Certificate
7. Hydro Certificate

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

6.3.29 Take-over

- The official take-over of the project, or parts of the project, from the Contractor is established by the DFO Project Team which includes the Consultant and the Client Department. The date of Interim Certificate of Completion and the Final Certificate of Completion signifies commencement of the 12 month warranty period for work completed on the date of each certificate in accordance with the General Conditions of the Contract.
- Provide Department with original copy of Contractor's warranties for all materials and work covered by an extended warranty or guarantee, according to the conditions of the specifications. Verify their completeness and extent of coverage.

6.3.30 As-Built and Record Drawings and Specifications

- Following the take-over, obtain as-built marked-up hard copy from the Contractor:
- Show significant deviations in construction from the original Contract drawings, including changes shown on Post-Contract Drawings, changes resulting from Change Orders or from On Site Instructions.
- Consultant must provide the Department with handscripted drawings for changes, modifications and differences noted and/or approved compared to initial construction drawings so that the department can produce the As Built ;
- Check and verify all as-built records for completeness and accuracy and submit comments to DFO.
- Produce Record Drawings by incorporating As-Built information into project drawings.
- Submit Record Drawings and Specifications in number and format required by the Consultant Agreement within eight (8) weeks of final acceptance.
- Provide a complete set of final shop drawings.

6.4 DELIVERABLES:

- Written reports from site visits including persons involved

- Written reports on the progress of the work and the cost of the project at the end of each month
- Additional detail drawings when required to clarify, interpret or supplement the Construction Documents (with handscripted notes and differences on the construction drawings).
- Post contract drawings
- Interim or Final certificates
- Debrief of Commissioning Activities
- As built records
- Warranty deficiency list
- Report on Final Warranty Review

RS 7 COMMISSIONING THE FACILITY

Not applicable.

RS 8 RISK MANAGEMENT

The consultant is to provide support to the Project Manager in identifying risks throughout the project life cycle.

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

Risk Management Process:

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

ADDITIONAL SERVICES

AS 1 FUNCTIONAL PROGRAMMING

Not applicable.

AS 2 PROJECT TIME PLANNING, SCHEDULING AND CONTROL

Not applicable.

AS 3 ESTIMATING AND COST PLANING

Not applicable.

AS 4 BILINGUAL CONSTRUCTION DOCUMENTS

Not applicable.

AS 5 RESIDENT SITE SERVICES DURING CONSTRUCTION

5.1 Description of Services

The purpose of the Resident Site services is to ensure the presence the Consultant's full-time representative on site to inspect, co-ordinate and monitor all aspects of the work during the construction of the facility, and liaise with the contractor, DFO and other agencies as appropriate to the work. More than one person may be required to suit the hours of construction. More than one person shall be necessary to perform an adequate supervision of construction.

The Consultant Resident Site representative is responsible for providing full time (including overtime) resident inspection for all aspects of the project, maintaining daily records of all construction work placed. He is to ensure constant communication amongst the DFO Project Manager, design agencies, Contractor, Regional Fire Commissioner and the Provincial Department of Labour.

The representative of project reports directly to the consultant.

The Consultant Resident Site representative shall become thoroughly familiar with the Contract documents, the National Building code and all Fire Commissioner of Canada Standards for Construction operations (incl. FCC No. 301 dated June 1982 and the Standard for Welding and Cutting FCC No. 302 dated June 1982). He shall also be aware of all Provincial and Municipal standards for the health and safety of construction workers.

The Consultant Resident Site representative shall become thoroughly familiar with the requirements of the Consultant Project Brief and project responsibilities of others which relate to his services.

5.2 Specific Duties and Responsibilities

Provide full time resident inspection, co-ordination and monitoring during the construction work and be responsible to the consultant. In addition, the departmental representative may delegate additional responsibilities subject to consultants agreement.

Maintain daily records of all construction work placed and ensure constant communication amongst DFO Project Manager, the Regional Fire Commissioner, the Consultant, the Contractor, the appropriate DFO Representative and Consultants.

Co-ordinate and direct an assistant as approved by Department.

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

5.3 Inspection and Reporting

The Consultant Resident Site representative shall inspect all phases of the work in progress, for the purpose of bringing to the attention of the Contractor, after checking with the Consultant, and Departmental Representative any discrepancies between the work, the contract documents and accepted construction procedures. He shall keep a daily log of such inspections and shall issue a weekly written report to the Consultant, both for distribution, in the form directed. The Resident Site representative shall make any other reports or surveys as may be requested by the Project Manager through the Consultant.

5.4 Interpretation of the Contract Documents

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

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

5.5 Changes in the Work

The Resident Site representative nor the Consultant shall not authorize or order any change in the work which will constitute a change in design or in the value of the contract except as delegated by the Departmental Representative. This task and responsibility lies in the hands of the Department Representative following the recommendation of the designer.
The Consultant may call upon the Resident Site representative to assist in the evaluation of changes in the work, where a knowledge of job conditions is required.

5.6 Communication & Liaison

The Resident Site representative shall:

1. Convey the Consultant's instructions regarding the required standards of workmanship to the Contractor(s);
2. Identify defects or works that do not conform to the drawings and specifications, confer and obtain guidance on these findings with the Consultant. The matter is then to be brought to the attention of the Contractor's Superintendent. Although informal discussions with Sub-trade Superintendents are usually permissible, (but only with the agreement of the Contractor), the Resident Site representative should not deal directly with foreman or tradesmen, or interfere with the progress of the work.
3. Communicate formally with the contractor via memorandum form only. When this form is issued the Resident Site representative must immediately file copies with DFO and the Consultant.
4. Contact the Consultant immediately when it is apparent that information or action is required of the Consultant, e.g. general instructions, clarifications, sample of shop drawing approvals, requisitions, contemplated change orders, site instructions, details, drawings, etc.

5. Accompany DFO representatives on inspections and report to the Consultant requirements, comments or instructions of the DFO's forces. Note that the Resident Site representative should encourage such requirements, comments or instructions to be provided to him in writing.
6. Consider and evaluate any suggestions or modifications to the documents advanced by the Contractor and immediately report these to the Consultant with comments.
7. Ensure that DFO and the Consultant are notified promptly when key pieces and/or components of materials and equipment are delivered, so that these parties can arrange for the appropriate personnel to have an opportunity to inspect same prior to installation.

The Resident Site representative will investigate, schedule and approve in writing, all temporary or permanent connections into any of the buildings' systems prior to the work being done. He shall provide advanced forecasts and advise the DFO Project Manager of any interruption of normal building services with a minimum 24 hours notice prior to the work being undertaken, where this work cannot be done during the silent hours.

5.7 Daily Log

The Resident Site representative shall keep a daily log recording:

1. weather conditions, particularly unusual weather relative to construction activities in progress;
2. major material and equipment deliveries;
3. daily activities and major work done;
4. start, stop or completion of activities;
5. presence of inspection and testing firms, tests taken, results, etc;
6. unusual site conditions experienced;
7. significant developments, remarks, etc;
8. special visitors on site;
9. authorities given contractor to undertake certain or hazardous works
10. environmental incident
11. reports, instructions from Appropriate Authorities Response Actions.

Note: The log is the personal property of the Resident Site representative. Copies of the log book, certified as copies, are to be provided to DFO and consultant at the end of the project.

5.8 Weekly Records

The Resident Site representative shall prepare weekly reports for the Consultant in the form directed:

1. progress relative to schedule;
2. major activities commencing or completed during the week; main activities now in progress;
3. major deliveries of materials and/or equipment;
4. difficulties which may cause delays in completion;
5. materials and labour needed immediately;
6. cost estimates of work completed and materials delivered (cost plus contracts);
7. outstanding information or action required by Consultant or DFO;
8. work force;
9. weather;
10. remarks;
11. accidents on site;
12. life safety or building hazards caused by the work, the contractor or his agents.

13. Environmental monitoring report (see Appendix E).

5.9 Site Records

The Resident Site representative shall maintain orderly and updated files at the site for the use of the DFO, Consultant and himself as follows:

1. Contract and Tender Documents.
2. Approved Shop Drawings.
3. Approved Samples.
4. Samples.
5. Site Instructions.
6. Contemplated Change Orders.
7. Change Orders.
8. Memoranda.
9. Test and Deficiency Reports.
10. Correspondence and Minutes of Meeting.
11. Names, addresses, telephone numbers of Client representatives, Consultant and all Contractors, sub-trades key personnel associated with the contract; including home telephone numbers in case of emergencies.

In addition, the Resident Site representative shall maintain an updated progress schedule.

A reproduction of the original contract drawings shall be carefully preserved and shall be kept marked up to date with all addenda, change orders, site instructions, details, as-built conditions, etc., issued subsequent to the award of the contract.

5.10 Inspection of the Work

The Resident Site representative shall make on site observations and spot checks of the work to determine whether the work, materials and equipment conform with the contract documents and supplementary conditions. The Site consultant’s representative shall advise the Contractor of any deficiencies or unapproved deviations via memorandum and report immediately to the Consultant and DFO Representative any of these on which the Contractor is tardy or refuses to correct.

The Resident Site representative shall arrange for the Consultant's architectural, structural, mechanical, electrical and other consultants to make the periodic inspections required by the Consultant's contract, and for these inspections to be made timely with respect to the progress of the work.

The Resident Site representative shall also report if materials and equipment are being incorporated into the project prior to approval of relative shop drawings or samples.

The Resident Site representative shall assist in the preparation of all deficiency reports, interim, preliminary, and final, in collaboration with the DFO and Consultant's representatives.

The Resident Site representative shall be responsible for the measurement of all work to be done on a unit-cost basis.

5.11 Site Meetings
The Resident Site representative shall attend all job-site meetings.

5.12 Inspection and Testing
The Resident Site representative must see that the tests and inspections required by the contract documents are conducted, and should observe these tests and report the results in the daily log.

The Consultant should be notified if the test results do not meet the specified requirements, or if the Contractor does not have tests undertaken as required.

5.13 Emergencies
In the case of emergency where safety of persons or property is concerned, or work is endangered by the actions of the contractor of the elements, to safeguard the interests of DFO, the Resident Site representative shall give immediate written notice to the Contractor of the possible hazard. He shall further, if necessary, stop the work or give orders for remedial work, and contact the Consultant immediately for further instruction.

5.14 Limitations
The Resident Site representative shall not:
1. Authorize deviations from the contract documents.
2. Conduct tests.
3. Approve shop drawings or samples.
4. Advise the user-client in any matter without obtaining guidance from the Consultant.
5. Accept any work or portions of the building.
6. Enter into the area of responsibility of the Contractor's Field Superintendent.
7. Stop the work unless convinced that an emergency exists as noted above.

5.15 Hazardous Construction Operations
It is the duty of the Resident Site representative to examine all site conditions and methods to be used by the Contractor undertaking hazardous operations.

Give written authority to undertake hazardous operations to the Contractor, when fully satisfied that all necessary precautions and acts have been taken by the Contractor to safeguard the life safety of the workers and building occupants and Crown property. Written authority shall be countersigned by the Contractor to acknowledge that the latter is aware of the Resident Site representative's instructions and requirements and both parties will retain copies of the authority document signed mutually by them.

The Resident Site representative shall inspect the areas where hazardous work is under way to ensure that the Contractor is maintaining the agreed safety standards. Any infractions may result in the Resident Site representative stopping the work. All infractions, or work stoppages ordered shall be reported in writing and verbally to the Consultant and DFO Construction Supervisor.

5.16 Building Security

Special precautions must be taken at all times to prevent unauthorized entry of the building. The Resident Site representative is to ensure that all contractor-made openings and means of access are firmly secured when the contractor leaves the site.

The Resident Site representative will liaise closely with the Consultant and DFO Departmental Representative on all security and/or safety problems that may arise due to the contractor's operations.

AS 6 SEISMIC STUDIES

Not applicable.

AS 7 SUSTAINABLE DEVELOPMENT

Sustainable Development and the Role of Government

Since 1987, the Canadian Federal Government has begun a series of initiatives to ensure that sustainable development principles are built into the policy of all federal organizations. By December 1997, all federal government departments are required to have a *Sustainable Development Strategy* (SDS). Department Ministers are required to update their SDS every three years and to report annually on progress towards sustainable development.

DFO Principles

1 TO SUSTAIN OUR NATURAL RESOURCES, BY ENSURING SUSTAINABLE USE OF RENEWABLE RESOURCES AND EFFICIENT USE OF NONRENEWABLE RESOURCES.
2 TO PROTECT THE HEALTH OF CANADIANS AND OF ECOSYSTEMS, BY MANAGING THE RISKS ASSOCIATED WITH TOXIC SUBSTANCES, BY PROTECTING REPRESENTATIVE AREAS, AND BY DEVELOPING EFFECTIVE WARNING AND ADAPTIVE RESPONSE CAPABILITY TO BOTH NATURAL AND HUMAN-CAUSED DISASTERS.
3 TO MEET OUR INTERNATIONAL OBLIGATIONS, BY CONTRIBUTING TO THE PROTECTION OF THE OZONE LAYER, THE REDUCTION OF GREENHOUSE GAS EMISSIONS, AND THE CONSERVATION OF BIODIVERSITY.
4 TO IMPROVE OUR QUALITY OF LIFE AND WELL-BEING, BY FOSTERING IMPROVED PRODUCTIVITY THROUGH ENVIRONMENT EFFICIENCY, AND BY SUPPORTING INNOVATION TOWARDS SUSTAINABLE DEVELOPMENT.

DFO Goals

Considering the above within the context of RPS's mandate, the Branch has established the following Sustainable Development Goals under the issues of management, leadership and operations:

1 RPS WILL INTEGRATE A COMPREHENSIVE ENVIRONMENT MANAGEMENT SYSTEM INTO ITS OVERALL MANAGEMENT FRAMEWORK TO DEMONSTRATE DUE DILIGENCE, AND TO ENSURE THAT ENVIRONMENTAL PERFORMANCE IS ACHIEVED AND SUSTAINED ACCORDING TO ESTABLISHED OBJECTIVES.
2 RPS WILL CONTINUE TO PROVIDE ENVIRONMENTAL LEADERSHIP, THROUGH:
(A) RESEARCH, DEVELOPMENT, AND TRANSFER OF COST-EFFECTIVE AND TIMELY MEANS OF MEETING ENVIRONMENTAL REQUIREMENTS, AND OF ACHIEVING RPS SUSTAINABLE DEVELOPMENT GOALS AND CLIENTS OBJECTIVE; AND
(B) COMMUNICATION OF KNOWLEDGE TO PROMOTE SUSTAINABLE DEVELOPMENT.

3 RPS WILL REITERATE ITS PRIORITY TO MEET OR EXCEED APPLICABLE ENVIRONMENTAL STATUTES, REGULATIONS, AND POLICIES; AND PURSUE A POLLUTION PREVENTION APPROACH IN ALL ASPECTS OF ITS OPERATIONS. IN SUPPORT OF THE ABOVE, RPS WILL CONTINUE THE DEVELOPMENT AND IMPLEMENTATION OF BEST PRACTICES PLACING A SPECIAL FOCUS ON THE FOLLOWING OPERATIONAL ISSUES:

1. TOXIC OR HAZARDOUS SUBSTANCES AND WASTE MANAGEMENT

2. OZONE DEPLETING SUBSTANCES MANAGEMENT

3. NON-HAZARDOUS SOLID WASTE REDUCTION

4. ENERGY AND WATER EFFICIENCY IN FACILITIES

5. CONTAMINATED SITES MANAGEMENT

6. LAND AND MARINE / FRESH WATER ACTIVITIES MANAGEMENT

7. ENVIRONMENTAL ACTIVITIES

Real Property Operational Goals

Goal 3.1: Toxic or Hazardous Substance and Waste Management

Real Property Services (RPS) will continue to the prevention, reduction and, where possible, the elimination of impacts of toxic or hazardous substances and wastes on human health and.

Goal 3.2: Ozone Depleting Substances Management

RPS will phase out the use of ODSs to respond to the deadlines laid out in the 1987 "Montreal Protocol on Ozone Depleting Substances" and its subsequent amendments:

Goal 3.3: Non-Hazardous Solid Waste Reduction

RPS will:

* Contribute to the objective of reducing the amount of office solid waste sent for disposal by at least 50% by the year 2000 relative to 1998 levels;

* Facilitate the reduction of construction, renovation and demolition waste.

Goal 3.4: Energy and Water Efficiency in Facilities

RPS will:

* Contribute to the use and promotion of more efficient, environmentally friendly alternative sources of energy to heat, cool, ventilate and provide lighting and power facilities. It will also promote the efficient use of water.

* Reduce gas emissions to respond to Canada's Kyoto Convention commitments.

Goal 3.5: Contaminated Sites Management

RPS will contribute to the prevention, reduction and, where possible, the elimination of negative impacts of contaminated sites on humans and the environment.

Goal 3.6: Land and Marine / Fresh Water Activities Management

RPS will contribute to the prevention, reduction and, where possible, the elimination of negative impacts on humans and the environment in their land and marine / fresh water activities.

Goal 3.7: Environmental Management

RPS will complete and implement an Environmental Management System (EMS) that will:

* Support the integration of environmental issues into the RPS management framework;

* Facilitate the harmonization of environmental issues with RPS clients and tenants.

Approach

* The approach of this environmental component is to view the built environment and the natural environment as integral and interdependent. It is an attempt to address building and environmental concerns in a holistic manner.

* Within this context, the role of management in the development process takes on special significance. Like the natural environment, a facility is more than the sum of its parts. It is a system. A facility can boast many 'green' features, but unless there is an overall vision and skilled people to carry out the plan, it falls short. An "environmental vision" and team approach is crucial to sustainable building. This approach involves team members educated in green building practices and open lines of communication between team members. The role of management in the three stages of building, (design, construction and operations) is crucial in establishing a vision statement that embraces sustainable principles and an integrated building approach. The management of the project activities, ensures that team members use a multidisciplinary approach in which the interrelated impacts of design, systems and materials are recognized.

* The environmental component of the project brief works under the premise that many of the solutions to sustainability in development can be achieved with a low-tech approach. Through careful orientation of a building with respect to sun, wind and land and special consideration of materials, sustainable development is possible.

* Although it is understood that there are specific environmental problems that need special attention (such as ozone depletion), this document is an attempt to change attitudes as well as address specific environmental problems. It does not take a "damage control" attitude, but rather a "pollution prevention" approach. It is primary organized around seven environmental issues. These issues are: management, air, water, land, material, energy and waste. It is also a means of addressing the RPS sustainable development goals in relation to the project brief organization of Concept / Design Submission, Working Document Submission (at 33%, 66% and 99% stages) and the Contract Supervision.

* This document is in a checklist format, which allows the consultant to systematically address each issue. The consultant should respond to the following checklist points in an environmental strategy in a written or graphic form.

* Finally this document approaches environmental sustainability with a "best-effort" approach. At a minimum, DFO will attempt to accommodate all federal clients in facilities that are as 'green' as can be.

ISSUE: **PROJECT MANAGEMENT**

GOAL Greater coordination of design team and communication among all parties.
Improved metering and reporting to facilitate the auditing and reporting process.
Comprehensible, reliable and visible environmental strategies.

*The role of management in the building process takes on special significance. An "environmental vision" and team approach is crucial to sustainable building. This involves team members educated in green building practices and open lines of communications between team members. The management of the project activities ensures that team members use a multidisciplinary approach in which the interrelated impacts of design, system and materials are recognized.

*The checklist is management tool which allows each point to be address in the environmental strategy.

CONTRACT SUPERVISION

*The Environmental Coordinator will table progress of the Environmental Strategy as a separate agenda during the project meeting.

*The contractor is to provide the consultant with an environmental protection plan for the construction process.

*Consultant and contractor to ensure that all sub-contractors are advised of the environmental objectives of this project.

ISSUE: **AIR**

GOAL Toxic or hazardous substances and waste management.
Ozone depleting substances management.
Provide healthy and comfortable indoor air.

CONTRACT SUPERVISION

*Consultant will provide building Flush-out or Bake-off strategy for approval by the department.

*Review construction practices to ensure that workers are protected from dust.

*Review construction practices to ensure that workers' exposure to fumes, which may contribute to environmental sensitivities, are minimized. Ensure that workers wear carbon face masks or respirators when applying paints and other coverings. Provide temporary ventilation as required for products utilized.

*Review construction practices to minimize the impacts of construction dust on adjacent properties. Surrounding sites could be adversely impacted by blowing dusts from exposed soil, dust escaping from sandblasting activities and over spray from sealants and paints which may be utilized on the outside of the building.

*Shop drawing review is to include, when appropriate, test results from ASTM D51116, Guide for Small Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials Products and Material Safety Data Sheets.

ISSUE: **WATER**

GOAL Reduction of impacts on marine / freshwater activities.
Water efficiency in facilities

CONTRACT SUPERVISION

*Review practices to minimize the impacts of construction on adjacent water bodies, water supplies, and wastewater systems.

*Ensure no polluting substances are released into any water bodies.

ISSUE**:** **LAND**

GOAL Reduction / elimination of soil contamination and human caused erosion.
Toxic or hazardous substance management

CONTRACT SUPERVISION

*Review practices to ensure erosion is minimized or eliminated during construction.

ISSUE**:** **ENERGY**

GOAL Energy efficiency in facilities.

ISSUE **MATERIAL**

GOAL Conservation of renewable and nonrenewable resources.
Application of 3R concepts (reduce, reuse, recycle) for reduction of waste.

CONTRACT SUPERVISION

*Meet with subcontractor and installers to ensure that all installation of materials meet with environmental objectives.

ISSUE **WASTE**

GOAL Toxic and hazardous waste management.
Non- hazardous solid waste reduction.
Elimination of the concept of waste through increased reduction, reuse and recycling.

CONTRACT SUPERVISION

*Inspect and report regarding contractor's disposal practices for paints, solvents and pressure treated wood scraps.

*Construction waste is to be sorted on site by types as has been determined to be practicalin regard to the potential for recycling each individual material.

* The working documents are to ensure that all personnel on site are aware of the expectations regarding waste recycling. The working documents are to ensure that labeled waste bins for recycling of waste materials produced by all sub-contractors are provided on site.

*Indicate the degree to which recycling objectives were achieved.

AS 8 WASTE MANAGEMENT

Waste Management Specialist - key responsibilities:

- Designated Substance Report - identifies the types and locations of materials present at a site that constitute hazardous/dangerous/controlled substances under the applicable regulatory regime and recommends procedures for the proper disposal.
- Waste Audit - determines the types and volumes of construction materials that will be produced as surplus to the project. (mandatory in the province of Ontario)
- Waste Management Workplan - describes the procedures to maximize the recovery and the value of those materials identified in the Waste Audit, including on-site practices, procedures and potential destinations for the materials recovered. (mandatory in the province of Ontario)
- Training - includes presentation of a mandatory training session to be given prior to the commencement of the work on site and attendance at a midpoint update meeting, convened by the project manage, to discuss progress and problems of the Waste Management Workplan.

v Waste Management Report - documents the recovered construction materials to ensure that the results anticipated in the Waste Audit and Waste Management Workplan are realized to the highest degree possible. It records the results at the end of the project.

Note: The Real Property Non Hazardous Solid Waste Management Protocol exists in 'draft' format. Project managers requiring information to enable them to specify more precisely their waste management project requirements should obtain a copy of the most up-to-date Protocol from Craig Boyle, Environmental Management Analyst (Environmental Services, National Capital Area) who can be reached at 1-819-956-1553.
When approved, the Protocol will be included in Appendix 'D' - Doing Business with A&ES

APPENDIX A - TEAM IDENTIFICATION FORMAT

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

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

I. Prime Consultant (Proponent - Engineering consultants):

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

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

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

II.I Key Sub Consultants / Specialists:

Expertise: .....

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

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

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

II.II Key Sub Consultants / Specialists:

Expertise: .....

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

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

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

II.III Key Sub Consultants / Specialists:

Expertise: .....

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

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

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

APPENDIX B - DECLARATION/CERTIFICATIONS FORM

Project Title: Work Monitoring – Harbour Development – Harrington Harbour

Name of Proponent:

Street Address:

Mailing Address:
(if different as Street 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 inform the Proponent of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the proposal non-responsive.

APPENDIX C - PRICE PROPOSAL FORM

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

PROPONENTS SHALL NOT ALTER THIS FORM

Project Title: Work Monitoring – Harbour Development – Harrington Harbour

Name of Proponent:

The following will form part of the evaluation process:

REQUIRED SERVICES

1.1 CONSTRUCTION AND ADMINISTRATIOUN OF CONTRACT

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

SERVICES	FIXED FEE
TOTAL FIXED FEES	$_____

Note : Fixed fees must include all services and related deliverables specified in the project brief and elsewhere in the RFP documents.

MAXIMUM FIXED FEES (1.1) **$.....**

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

2. ADDITIONAL SERVICES

2.1 ONGOING SITE SERVICES

2.1.1 Time Based Fees (R1230D (2012-07-16), GC 5 - Terms of Payment)

Comment: The project budget was based on continuous monitoring by a senior technician and intermittent monitoring by auxiliary staff (1 day out of 2) on the site for 216 working days (36 weeks x 6 days/week) for the purposes of this proposal.

Time payable for supervisory staff will only include time spent working on the site, i.e. the actual hours worked.

The Consultant must consider the terms set out in Additional Services including all overtime payable according to valid laws and rules.

Site supervision services	ESTIMATED HOURS Column A	HOURLY RATES** Column B	TIME BASED FEE Columns AxB
Senior Technician	1728	$.....	$.....
Auxiliary Staff	864	$.....	$.....
MAXIMUM TIME BASED FEES (2.1.1)			$.....

*Payment will be based on actual hours spent. Travel time and/or expenses will not be reimbursed separately.
** All inclusive hourly rate is applicable to both normal working hours and any other shift work as required.

Comment: This additional service must first be submitted to and approved by the Project Manager, including anticipated fees and disbursements. The fees will be in accordance with the rates listed in section 6, based on the duties of the additional staff used.

2.1.2 Disbursements for on-site services

Disbursements: At cost without allowance for mark-up or profit, supported by invoices/receipts - see clause R1230D (2012-07-16), GC 5 - Terms of Payment, section GC5.12 Disbursements: Disbursements must be related to the project and do not include the standard operating expenses of the Consultant's company. The amounts payable must not exceed the amount indicated below, unless approved in advance by the Departmental Representative.

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

For the purposes of the proposal, total estimated construction time is 36 weeks x 6 days/week as set out in the Contractor's work completion schedule.

Disbursements for on-site services			
Type of worker	Number of days (estimated)	Fixed rate	Total (estimated)
1. Senior technician	216 days	X $_____	= $_____
2. Auxiliary staff	108 days	X $_____	= $_____
3. Site equipment	216 days	X $_____	= $_____
Total estimated disbursements for on-site services: (2.1.2)			**= $_____**

The Consultant will also have to consider the following assumptions:

1. Equipment on the site includes a vehicle with registration, insurance, fuel and maintenance available to supervisors, the necessary surveying equipment, a computer with a scanner, a fax machine, a printer and paper, a cell phone with a battery charged at all times, a digital camera and an Internet connection. **All personal protective equipment for the Consultant's employees will be provided by the Consultant and is included in the site equipment**. All other equipment must first be submitted to and approved by the Project Manager.

2. Total of 216 days (36 weeks x 6 days/week) for personal protective equipment, computers, surveying and other items that supervisory staff will need during construction.

3. Boarding costs for supervisory staff, payable for each day of construction based on the Contractor's work completion schedule. Boarding costs include the cost of transportation to and from the construction site and the cost of accommodation and meals.

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

3. TOTAL COST OF SERVICES FOR PROPOSAL EVALUATION PURPOSES

Summary of estimated supervision costs

Required Services	
1.1 Total fixed fees:	**$_____ (1.1)**
Additional services	
2.1 Ongoing site inspection services	
2.1.1 Fees based on time spent on-site supervising construction	**$_____ (2.1.1)**
2.1.2 Disbursements for on-site services	**$_____ (2.1.2)**
TOTAL COSTS FOR EVALUATION	**$_____** **(sum of cells 1.1, 2.1.1 and 2.1.2)**

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

The following will NOT form part of the evaluation process

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

4. DISBURSEMENTS FOR REQUIRED SERVICES

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

4.1 DISBURSEMENTS FOR PROJECT AUTHORITY'S LIVING EXPENSES:

At cost without markup or profit, supported by invoices/receipts, these disbursements are defined as follows: Reimbursement of costs associated with air travel from Québec City and the cost of accommodation and meals for the company's Project Authority to travel to the site and conduct site meetings. If applicable, expenses for travelling to Québec City to attend site meetings will not be reimbursed as disbursements. Only preapproved meetings by Department Representative will be reimbursed.

This clause supersedes any other provision relating to the payment of disbursements.

4.2 DISBURSEMENTS FOR LABORATORY SERVICES:

Testing on site, at a quarry, in a laboratory, at a workshop or at other locations as well as the underwater surveys will be performed by the Consultant or one of its sub-contractors. The Prime Consultant will coordinate and administer the mandate(s) until payment, including this mandate, for which the Prime Consultant will be reimbursed by the Department at no extra cost upon submission of itemized invoices.

MAXIMUM AMOUNT FOR DISBURSEMENTS **$60,000.00**

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

5. SUMMARY OF ANTICIPATED SUPERVISION COSTS

TOTAL EVALUATION SERVICES	**$_____**
TOTAL SERVICES LISTED IN POINT 4, NOT INCLUDED IN THE EVALUATION PROCESS (MAX)	**$60,000** **(maximum)**
TOTAL ANTICIPATED SUPERVISION SERVICES	**$_____**

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

6. OTHER ADDITIONAL SERVICES

Executives, managers and other staff, including authorized consulting experts and sub-consultants. The hourly rate must be fixed for the duration of the contract.

For the contract administration phase, increases in hourly rates for the staff listed below must be submitted with supporting documentation for approval by the Department.

THOSE RATES CAN BE USED IN THE VENETUALITY OF A CHANGE IN THE GENERAL SCOPE OF WORK DURING CONTRACT :

POSITION	EXPERIENCE	MAXIMUM HOURLY RATES (labour costs)
Head/Managing Engineer	Note 1	
Chief Engineer	Note 2	
Senior Engineer	10 years or more	
Intermediate Engineer	5 to 10 years	
Junior Engineer	0 to 5 years	
Chief Technician/Draftsman	15 years or more	
Senior Technician/Draftsman	10 to 15 years	
Intermediate Technician/Draftsman	5 to 10 years	
Junior Technician/Draftsman	0 to 5 years	
Auxiliary staff	N/A	
Support staff	N/A	

Note 1: Head Architect/Engineer: The hourly rate for this classification is applicable to the engineer who performs tasks for which the company holds a very high degree of liability.

Note 2: This engineer normally coordinates and manages one or more specialties provided by the company. These tasks must be performed by professionals with at least 15 years of experience. This classification applies as long as the Chief Engineer acts as Department Head; otherwise, the remuneration for Senior Engineer applies.

APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

6.1 Insert below the name and title of your staff who may be assigned to the project for unforeseen additional requests for services on an hourly basis. However, the rates and percentages that apply for any additional requests for “Basic Services” and “Additional Services / Site Supervision” are the same as those provided under sections 1 and 2.

THE FOLLOWING HOURLY RATES MAY BE USED FOR FUTURE CONTRACT AMENDMENTS

Principals The all-inclusive hourly rate is fixed for the duration of the contract.

Name	$ per hour
.....	$.....
.....	$ .....
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APPENDIX C - PRICE PROPOSAL FORM (CONT’D)

Staff: The factor used to calculate the cost of remuneration must be fixed for the duration of the contract. For the contract administration phase, increases in hourly rates for staff must be submitted with supporting documentation for approval by the Department.

Name / Position	$ per hour
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END OF PRICE PROPOSAL FORM

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

Canada

Respect • Integrity • Excellence • Leadership

Serving GOVERNMENT, Serving CANADIANS.

Appendix D
Doing Business
Quebec Region

Architectural and Engineering Services

May 1st, 2013 – GDDE # 721745

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SECTION 1 INTRODUCTION

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

The Consultant shall check with the Project Manager if this document is current. The updated version of the latest is the one applicable to the project.

SECTION 2 PWGSC NATIONAL CADD STANDARD

Drawings shall be in accordance with Public Works and Government Services Canada (PWGSC) National CADD Standards, **Quebec regional version**, and CSA B78.3 of Canadian Standards Association.

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

For the Quebec region:
http://www.tpsgc-pwgsc.gc.ca/cdao-cadd/index-eng.html

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

SECTION 3 - GUIDE TO PREPARATION OF CONSTRUCTION DOCUMENTS FOR PWGSC

1 Purpose

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

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

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

2 Principles of PWGSC Contract Documents

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

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

3 Quality Assurance

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

SPECIFICATIONS

1 National Master Specification

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

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

2 Specification Organization

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

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

3 Terminology

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

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

4 Dimensions

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

5 Standards

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

- CSA standards: http://www.csa.ca
- CGSB standards: http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html
- ANSI standards: http://www.ansi.org
- ASTM Standards: http://www.astm.org
- ULC standards: http://www.ulc.ca
- General reference of standards: http://www.techstreet.com/

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

6 Specifying Materials

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

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

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

Acceptable Materials: set up the paragraph format as follows:

Acceptable Materials:

1. ABC Co. Model [_____].
2. DEF Co. Model [_____].
3. GHI Co. Model [_____].
4. Alternative Materials: Approved by addendum in accordance with Instructions to Tenderers.

Alternatively, include the following article in Part 1 of each Section in which trade names appear:

> ***Acceptable Materials****: Where materials are specified by trade name refer to the "Instructions to Tenderers" for a procedure to be followed in applying for approval of alternatives.*

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

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

Sole Sourcing: Sole sourcing for materials and work can be used for proprietary systems (ie. fire alarm systems, EMCS – Energy Monitoring and Control Systems). A justification will be required in this context.

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 Energy Monitoring and Control Systems (EMCS) should be in Part 1 as:

“Designated Contractor

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

and in Part 2 as “Materials

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

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

“Acceptable materials

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

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

7 Unit Prices

Unit prices are used where the quantity cannot be precisely estimated (eg. earth work). The approval of the Project Manager must be sought in advance of their use.

Use the following wording:

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

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

Refer to Appendix 1 of the Bid and Acceptance Form to view a sample of Unit Price Table.

8 Cash Allowances

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

9 Warranties

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

- "For the work of this Section [_____], the 12 month warranty period is extended to 24 months.

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

Delete all references to manufacturers' guarantees.

10 Scope of Work

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

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

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

12 Related Sections

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

13 Index

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

14 Regional requirements

The Consultant should contact the Project Manager to obtain the regional requirements concerning Division 01 or other short form specifications as might be appropriate. For example, in the Quebec Region, the use of the *Section 01 11 01 – Work related general information* is necessary.

15 Health and Safety

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

16 Designated Substances Report

Include "Section 01 14 25 - Designated Substances Report"

17 Subsurface Investigation Reports

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

Subsurface investigation report(s)

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

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

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

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

18 Experience and Qualifications

Remove experience and qualification requirements from specification sections.

19 Prequalification and Pre-award submissions

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

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

20 Contracting Issues

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

Remove all references within the specifications, to the following:

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

DRAWINGS

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

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

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

4 Specification Notes
No specification type notes are to appear on any drawing.

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

Notes such as: "verify on site", "as instructed", “to match existing”, “example”, “equal to” or “equivalent to”, "to be determined on site by “Departmental Representative", should not appear on drawings as this promotes inaccurate and inflated bids. Drawings must allow bidders to calculate all quantities and bid accurately. In exceptional cases, where quantities are impossible to quantify (i.e. cracks to be repaired), refer to indications contained in section 3, Specifications, 3 Terminology.

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

7 Drawing Numbers: Sets of drawings shall be numbered according to the type of drawing and the discipline involved, as indicated in the PWGSC NATIONAL CADD STANDARD.

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

8 Presentation Requirements: Present drawings in sets comprising the applicable civil, architectural, structural, mechanical and electrical drawings in that order. All drawings should be of uniform standard size.

9 Prints: Print with black lines on white paper. Confirm with Project Manager the size of prints to be provided for review purposes.

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

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

12 **Schedules:** Where schedules occupy entire sheets, locate them on top of each set of drawings for convenient reference. *See CGSB 33-GP-7 Architectural Drawing Practices for schedule arrangements.*

13 **North Points:** On all plans include a north point. Orient all plans in the same direction for easy cross-referencing. Wherever possible, lay out plans so that the north point is at the top of the sheet.

14 **Drawing Symbols:** Follow generally accepted drawing conventions, understandable by the construction trades, and in accordance with PWGSC publications.

ADDENDA

1 Format

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

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

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

2 Content

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

DOCUMENTS FOR TENDER CALLS

1 Translation

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

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

2 Consultant shall provide:

- Per construction document submission, a completed and signed Checklist for the Submission of Construction Documents. See Appendix 'A'.
- Specification: originals printed one side on 216 mm x 280 mm white bond paper.
- Index: as per Appendix 'C'
- Addenda (if required): as per Appendix 'B' (to be issued by PWGSC).
- Drawings: reproducible originals, sealed and signed by the design authority.
- Tender information:
  - Including a description of all units and estimated quantities to be included in unit price table.
  - Including a list of significant trades including costs. PWGSC will then determine which trades, if any, will be tendered through the Bid Depository.

    Government Electronic Tendering System (MERX): Consultants to provide an electronic true copy of the final documents (specifications and drawings) on one or multiple CD-ROM in Portable Document Format (PDF) without password protection and printing restrictions. The electronic copy of drawings and specifications for bidding and construction purposes are required to be signed and sealed by professionals in each discipline. See Appendix 'D' and Appendix 'E'.

3 PWGSC shall provide:

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

SECTION 4 CLASSES OF CONSTRUCTION COST ESTIMATES USED BY PWGSC

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

Class 'D' (Indicative) Estimate:

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

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

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

Class 'C' Estimate:

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

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

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

Class 'B' (Substantive) Estimate:

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

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

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

Class 'A' (Pre-Tender) Estimate:

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

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

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

SECTION 5 TIME MANAGEMENT

5 Time Management, Planning, and Control

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

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

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

5.1 Schedule Design

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

When building a Control System you must consider:

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

5.2 Schedule Development

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

Work Breakdown Structure

When developing the schedule the consultant needs to use PWGSC standards and practices. Two basic requirements are the National Project Management System (NPMS) and a Work Breakdown Structure (WBS), structured supporting the NPMS (Levels 1-4).

The WBS is as follows:

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

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

Major and Minor Milestones

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

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

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

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

Activities

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

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

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

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

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

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

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

Project Logic

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

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

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

Activity Duration

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

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

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

Activity List

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

Milestone List

A Milestone List identifies all project Major and Minor milestones.

Master Schedule

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

Detailed Project Schedule

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

5.3 Schedule Review and Approval

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

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

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

5.4 Schedule Monitoring and Control

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

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

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

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

Progress Reports

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

The Progress Report includes:

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

Narrative reporting begins with a statement on the general status of the project followed by a summarization of delays, potential problems and project status criticality, any potential delays, outstanding issues and concerns and options for dealing with any serious planning and scheduling issues.

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

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

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

Exception Report

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

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

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

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

5.5 Standard issue of documents

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

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

5.6 Schedule Outputs and Reporting Formats

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

Progress Reports

Paper Size: Letter
Paper Format: Portrait
Title Format: Project Title; Report Type; Print Date; Data Date; Revision Block
Body Text: Narratives for each report to match other reports generated in the D.S.S.
Variance Report Columns: Activity ID, Activity Name, Planned Finish, Revised Finish, Variance, Activity % Complete,
Criticality Report Columns: Activity ID, Activity Name, Duration, Start, Finish, Activity % Complete, Total Float.

Exception Reports

Paper Size: Letter
Paper Format: Portrait
Title Format: Project Title; Report Type; Print Date; Data Date; Revision
Body Text: Narrative to match other reports generated in the D.S.S.
Paper Size: Letter
Paper Format: Landscape
Title Format: Project Title; Report Type; Print Date; Data Date; Revision
Columns: Activity ID, Activity Name, Duration, Remaining Duration, Start, Finish, Total Float.
<u>Work Breakdown Structure (indent tree):</u>

Paper Size: Letter
Paper Format: Portrait
Columns: WBS Code, WBS Name, Duration, Cost estimate, start and finish dates.
Footer Format: Project Title; Report Type; Print Date; Data Date; Revision Block

Activity Lists

Paper Size: Letter
Paper Format: Portrait
Columns: Activity ID, Activity Name, Start, Finish, Predecessor, Successor.
Footer Format: Project Title; Report Type; Print Date; Data Date; Revision Block

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

Milestone Lists

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

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

Master Schedule (Bar Chart)

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

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

Detailed Project Schedules (Bar Chart)

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

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

SECTION 6 RISK MANAGEMENT

6.1 DEFINITIONS

Procurement Plan: Formal submission for approval to enter into a contract and composed of a (1) cost estimate of the requirement (including cash allowances, and design, estimating and inflation allowances), (2) a contingency and, (3) an anticipated amendment amount.

Allowances: Additional resources included in an estimate to vcover the cost of known but undefined requirements for an individual activity, work item, account or sub account: design allowance, ecstimating allowance, inflation allowance and other allowances specifically identified are part of a cost estimate

Cash Allowances : a specific amount to be used for specific work item or service.
(a) Cash Allowance Construction: additional resources included in an estimate to cover the cost of known but undefined requirements whose probability of occurrence is high. this allowance is specifically identified in a cost estimate.
(b) Cash Allowance Consultant: additional services included in an estimate to cover the cost of known but undefined requirements whose probability of occurrence is high. this allowance is specifically identified in a cost estimate.

Risk Allowance: Anticipated monetary value of risk events, due to the complexity of the project, market conditions, competitiveness, and timing of project, contingencies are likely to happen and do not form part of cost estimates.

Anticipated Amendments: This is basically the pre-authorization of amending authority to a certain level. Individual contract amendments within this authority must still be approved by the correct level of authority.

The total amount of the Anticipated Amendment to a project cost estimate is determined as the summation of the Expected Monetary Value of risk events reasonably expected to occur during the life cycle of a project.

Risk Management: The art and science of identifying, analyzing, and responding to risk factors throughout the life of a project and in the best interests of its objectives. (PMBOK)

Risk Event: A discrete occurrence that may effect the project for better or worse (i.e. late delivery of a piece of equipment is a “risk event” that may cause a schedule delay).

Probability: The likelihood that an event will occur (i.e. Low, Medium, High).

Impact: The result of the occurrence of an event on the project either positive or negative. (i.e. a schedule delay as a result of late delivery of a piece of equipment may have a high negative impact on a project; increased access to a construction site due to early departure of occupants in an office space may have a positive impact on a project).

The Impact of individual Risk Events can be qualified as low, medium, high or quantified in terms of time, cost (immediate cost or in-service cost (O&M)) or performance.

High risk*: A project (or element of a project) may be assessed as high risk if one or more hazards exist in a significant way and, unless mitigated, would result in probable failure to achieve project objectives.

Medium risk*: A project (or element of a project) may be assessed as medium risk if some hazards exist but have been mitigated to the point that allocated resources and focused risk management planning should prevent significant negative effect on the attainment of project objectives.

Low risk*: A project (or element of a project) should be assessed as low risk if hazards do not exist or have been reduced to the point where routine project management control should be capable of preventing any negative effect on the attainment of project objectives.

**per Treasury Board Secretariat Manuals Chapter 2-2 Project Management*

EMV: Expected monetary value of risk event (i.e. cost or saving to the project if risk event occurs)

6.2 RISK MANAGEMENT CHECKLIST

Probability, impact, over all risk, risk response and risk allowance are to be determined for each item listed below;

Resources External to Project Management Team

- Planning Resources and Performance
  - errors and omissions
  - low accuracy of estimates (allowances)
  - data inadequacies
  - level of liability insurance
  - potential for misinterpretation / misunderstanding of documents
  - planning inexperience
- Construction Resources Required & Performance
  - level of liability insurance
  - design versus execution methods
  - suitability of execution methods to design
  - commissioning issues (start up / turnover difficulties)
  - contractor construction strategy
  - reputation of contractor
  - contractor financial stability
  - contractor inexperience
  - resources obtained less qualified than desired
  - availability / suitability / performance of resource

Project Scope Delivery

- Delivery of Specified Requirement
  - accuracy of client requirements in terms of cost/ schedule / performance / quality and ability to interface with existing environment
  - conflicting client priorities
  - low level of client knowledge

- Unstated Client Requirements
  - completeness of client requirements in terms of cost/ schedule / performance / quality and ability to interface with existing environment
  - restricted working conditions
  - opportunities for changes / positive impact

- Stakeholder Requirements, Stated and Unstated
  - low involvement of user groups in scope of definition
  - interface with existing systems
  - restricted working conditions
  - operational needs

Site / Asset / Building Actual Conditions

- Actual Physical Environment
  - availability / accuracy of as built documentation and existing condition reports
  - high variability / low stability of soils
  - potential for soil contamination
  - presence of hazardous materials
  - availability / access to site
  - presence of other contractors on site
  - climate (winter conditions, rain, wind, water levels)

Government / PWGSC / Client / Context

- Impact on Adjacent Areas Actual
  - impact on adjacent areas (land / tenants/ traffic / operations)

- Impact from External Sources
  - legal lawsuits, patent rights, licensing, etc.
  - political impacts including visibility of project
  - social sensibilities
  - potential strikes
  - market risks
  - bad press (media coverage)

- Impact from Unanticipated Regulatory Change
  - environmental legislation and environmental screening
  - potential changes to Acts, Codes and Regulations
  - municipal building / occupancy permit issues

- Procedures Known
  - suitability of tender documents
  - suitability of contracting method
  - delays in tendering process
  - client internal coordination
  - change order process

- Plan Approval / Design Reviews
  - approvals may be required from Client, PWGSC, Treasury Board, FHBRO, Fire Commissioner, Police, Emergency Services, Municipalities, Cities, etc.
  - absence of Investment Analysis
  - unstable / changing client organization
  - heritage building issues
  - health and safety issues
  - potential for “hold orders”
  - design review delays (client / PWGSC / TBS / other)
  - approval delays (client / PWGSC / TBS / other)

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

Last updated 2011-07-28

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

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

Item	Verified by:	Comments:	Action by:
Specifications:			
6 Specifications Materials			
6a The method of specifying materials uses recognized standards. Actual brand names and model numbers are not specified.			
6b Identify if non-restrictive, non-trade name "prescription" or "performance" specifications are used.			
6c Indicate if a list of acceptable materials have been used.			
6d The term "Acceptable Manufacturers" is not used.			
6e Indicate if sole sourcing has been used.			
7 Unit Prices			
7a Unit prices are used only for work that is difficult to estimate.			
8 Cash Allowances			
8a Indicate if cash allowances have been used.			
9 Warranties			
9a Indicate if warranties extend more than a 12 or 24 months period.			
9b Manufacturers guarantees are not indicated.			
10 Scope of Work			
10 No paragraphs noted as "Scope of Work" are included.			
11 Summary and Section Includes			
11a In part 1 of section, paragraphs "Summary" and "Section Includes" are not used.			
12 Related Sections			
12a The list of related sections and appendices are coordinated.			
13 Index			
13a The index shows a complete list of drawings and specification sections with the correct number of pages and correct drawing titles and section names.			

Item	Verified by:	Comments:	Action by:
Specifications:			
***14* Regional requirements**			
14a General Instructions are included (Section 01 11 01 for Quebec region).			
15 Health and Safety			
15a Section 01 35 29.06 - Health and Safety Requirements is included.			
16 Designated Substances Report			
16 a Section 01 14 25 - Designated Substances Report is included.			
***17* Subsurface Investigation Reports**			
17a Subsurface Investigation Reports are included in Division 31.			
18 Experience and qualifications			
18a Experience and qualification requirements do not appear in the specification sections			
19 Pre-qualifications			
19a There are no mandatory contractor and/or subcontractor pre-qualification requirements or references to certificates, transcripts or license numbers of a trade or subcontractor being included in the bid.			
20 Contracting Issues			
20a Contracting issues do not appear in the specifications.			
20b Division 00 of the NMS is not used.			
21 Quality Issues			
21a There are no specification clauses with square brackets "[ ]" or lines "__" indicating that the document is incomplete or missing information.			

Item	Verified by:	Comments:	Action By:
Drawings:			
1 Title Blocks			
1a The PWGSC title block is used.			
1b The project information in the title block is coordinated between disciplines.			
2 Dimensions			
2a Dimensions are provided in metric only.			
3 Trade Names			
3a Trade names are not used.			
4 Specification Notes			
4a There is no specification type notes.			
5 Terminology			
5a The term Departmental Representative is used instead of Engineer, PWGSC, Owner, Consultant or Architect.			
5b Notations such as: “verify on site”, “as instructed”, “to match existing”, “example”, “equal to”, “equivalent to” and “to be determined on site by” are not used.			
6 Information to be included			
6a The project quantity and configuration, dimensions and construction details are included.			
6b References to future work and elements not in contract do not appear or are kept to an absolute minimum and clearly marked.			

Item	Verified by:	Comments:	Action By:
Drawings:			
7 ***Respect of PWGSC standards for electronic format***			
7a The electronic format of drawings respects the current CADD standards of PWGSC.			
7b The electronic format of drawings and specifications, in English and French, respects the PWGSC directory structure for electronic tender documents.			

I confirm that the plans and specifications of all disciplines have been thoroughly reviewed and that the items listed above have been addressed or incorporated. I acknowledge and accept that by signing certifying that all items noted above have been addressed, should it be found during the tendering of these documents or implementation of the project, that the items above were not properly addressed, my firm will be responsible to resolve all related issues at my firm's expense and may receive an unsatisfactory consultant performance evaluation which could have an impact on my firm's ability to obtain work from PWGSC in the future.

Consultant's Representative: _____

Firm name: _____

Signature:_____ Date: _____

APPENDIX 'B' - Sample of Addendum
Last updated April 22, 2008

ADDENDUM No. _____

Project Number: _____

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

DRAWINGS

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

1 A1 Architectural

.1

SPECIFICATIONS

SPEC NOTE: indicate section number and title.

1 Section 01 11 01 – Work related general information

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

.1 Delete article (xx) entirely.
.2 Refer to paragraph (xx.x) and change ...

2 Section 23 05 00 - Common Work Results - Mechanical

.1 Add new article (x) as follows:

APPENDIX 'C' - Sample of Index for Drawings and Specifications
Last updated April 22, 2008

Project No: _____

Index
Page 1 of ___

DRAWINGS AND SPECIFICATIONS

SPECIFICATIONS:

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

DIVISION	SECTION	NO. OF PAGES
DIVISION 01	01 11 01 – Work related general information.....	xx
	01 14 25 - Designated Substances Report.....	xx
	01 35 29.06 - Health and Safety.....	xx
DIVISION 23	23 xx xx	
DIVISION 26	26 xx xx	

DRAWINGS:

SPEC NOTE: List all Drawings by number and title.

C-1	Civil and landscaping
A-1	Architectural
S-1	Structural
M-1	Mechanical
E-1	Electrical

APPENDIX 'D'

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

Issued by:

Real Property Contracting Directorate

PWGSC

May 2005

Last Updated: June 3, 2008

Version 1.0

PREFACE

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

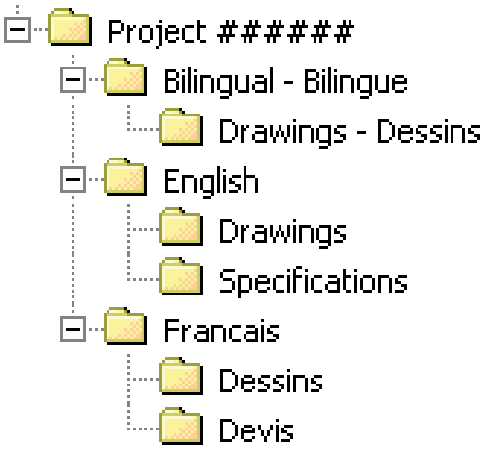
There is therefore a need to adopt a common directory structure and file-naming convention to ensure that the information made available to contractors electronically and in hard (printed) copy is in accordance with the sequence adopted in the real property industries, both for design and construction.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

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

1. DIRECTORY STRUCTURE

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

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



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

- The "*Project ######*" folder is considered the 1st Tier of the Directory Structure where ###### represents each digit of the Project Number. The Project Number must always be used to name the 1st Tier folder and it is always required. Free text can be added following the Project Number, to include such things as a brief description or the project title;

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

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

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

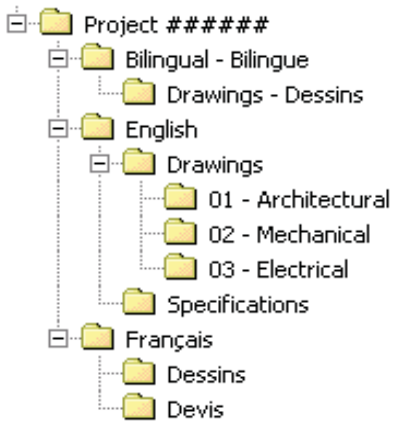
1.2 4th Tier Sub-Folders for Drawings

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

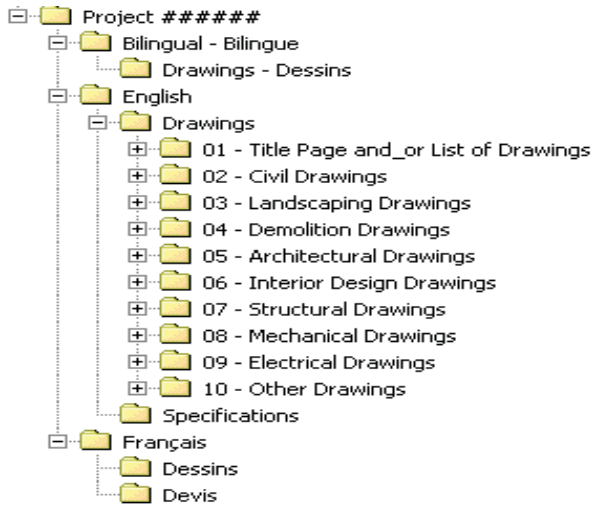
Because the order of appearance of the sub-folders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the sub-folders in the "*Drawings – Dessins*", "*Drawings*" and "*Dessins*" folders.

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

Examples of 4th Tier sub-folders for <u>drawings</u>:



or



1.2.1 Naming Convention

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

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

- Y

Where:

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

Y = The title of the folder

Example: 03 – Mechanical

For the "*Drawings - Dessins*" folder:

- Y - Z

Where:

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

Y = The English title of the folder

Z = The French title of the folder

Example: 04 - Electrical - Électricité

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

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

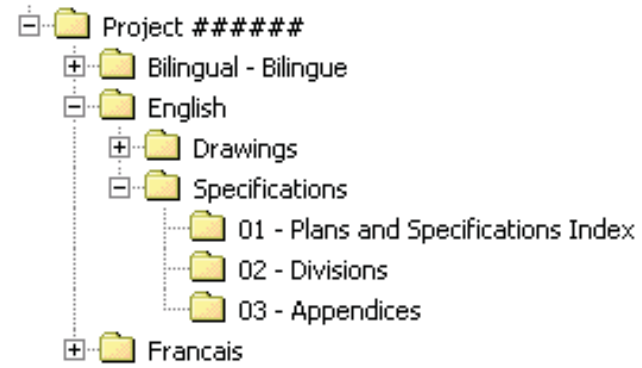
- The alphanumerical sorting is done on an ascending order;
- The alphanumerical order of the sub-folders determines the order of appearance on the screen as well as the order of printing (as an example: all the drawing PDF files in the 01 sub-folder will be printed in alphanumerical order before the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

1.3 4th Tier Sub-Folders for Specifications

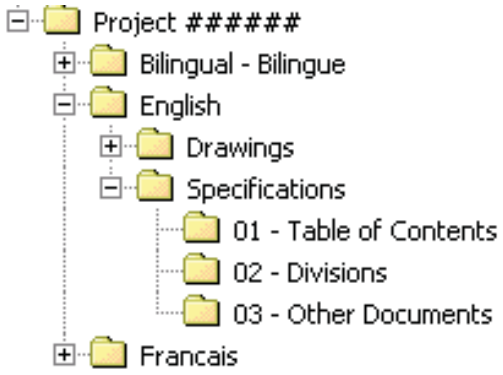
The "*Specifications*" and "*Devis*" folders must have 4th Tier sub-folders created to reflect the various elements of the specifications.

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

Examples of 4th Tier sub-folders for specifications:



or



1.3.1 Naming Convention

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

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

- Y

Where:

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

Example: **02 – Divisions**

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

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

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

2. NAMING CONVENTION FOR PDF FILES

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

2.1 Drawings

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

X### - Y

Where:

X =	The letter or letters from the drawing title block ("*A*" for Architectural or "*ID*" for Interior Design for example) associated with the discipline
### =	The drawing number from the drawing title block (one to three digits)
Y =	**The drawing name from the drawing title block (for bilingual drawings, the name in both English and French is to appear)**
Example:	A001 - First Floor Details

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

The following important points about drawings are to be noted:

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

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

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

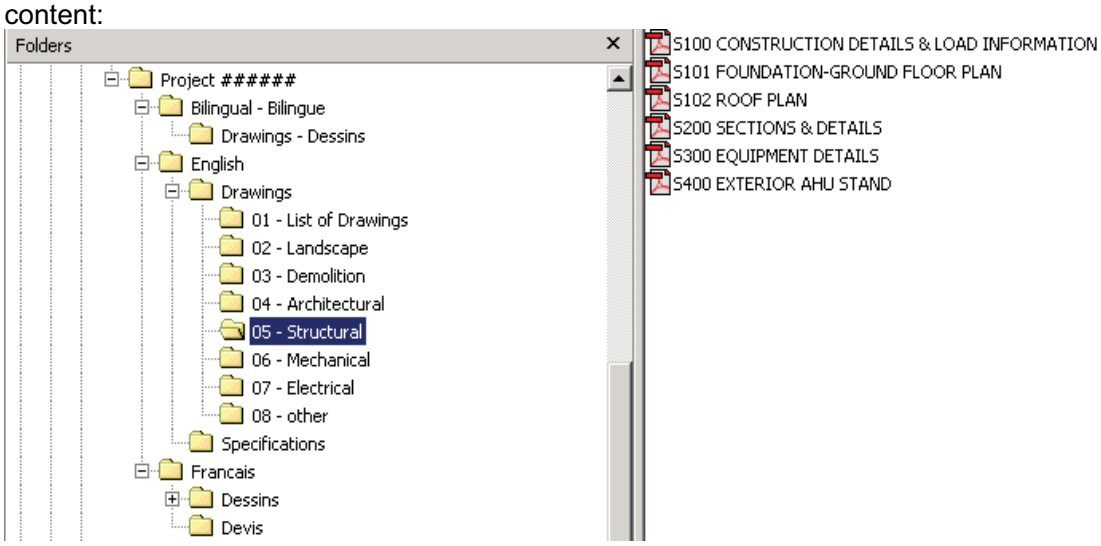
  ## - Y

  Where:

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

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

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



2.2. Specifications

Each Specifications Division must be a separate PDF file and all pages contained in each PDF file must have the same physical size (height, width). The Plans and Specifications Index must also be a separate PDF file. If there are other documents that are part of the Specifications (e.g. Appendix or other) these are to be separate PDF files as well.

2.2.1 Documents other than Specifications Divisions

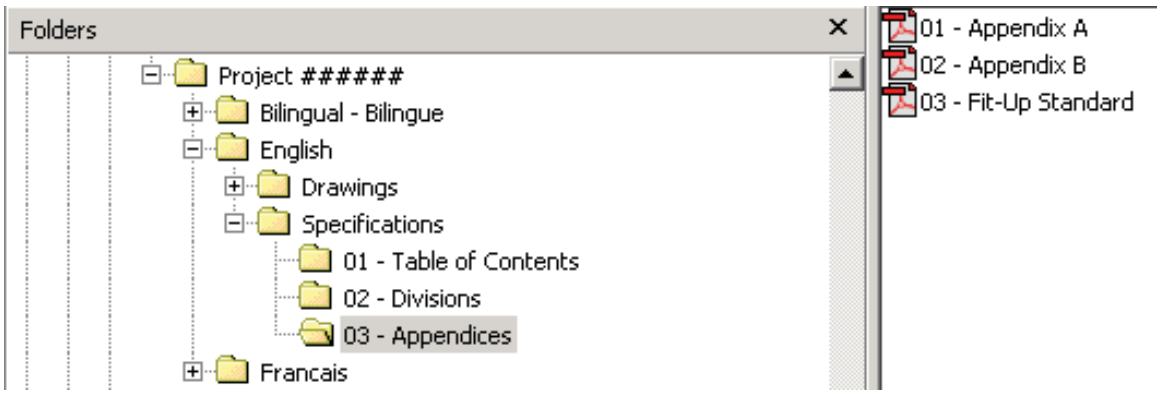
Because PDF files within the Specifications sub-folders are sorted alphanumerically (in ascending order) for both on screen display and printing order, all files that appear in folders other than the "*Divisions*" sub-folder must be named using a number:

- Y

Where:

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

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



2.2.2 Specifications Divisions

The Specifications Divisions must be named as follows:

Division ## - Y

Where:

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

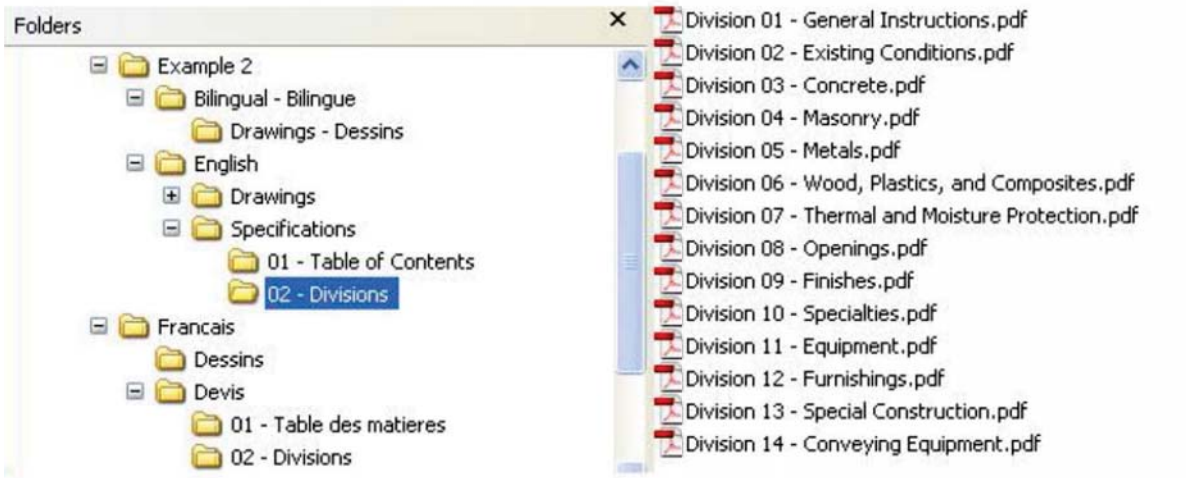
Y = Name of the Specifications Division as per **CSC/CSI MasterFormat™**

Example: Division 05 – Metals

The following important point about specifications is to be noted:

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

Example of a "*Divisions*" sub-folder content:



3. CD-ROM LABEL

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

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

Example:

Project 123456 / Projet 123456
Repair Alexandra Bridge / Réparation du pont Alexandra
Documents for Tender / Documents pour appel d'offres
CD 1 of/de 1

APPENDIX 'E'

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

Issued by:

Real Property Contracting Directorate

PWGSC

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PREFACE

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

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

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

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

1.0 PRINTER DRIVERS

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

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

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

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

2.0 PRINTER CONFIGURATION

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

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

3.0 CREATING PDF FILES

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

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

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

4.0 PDF FILES SETTINGS

4.1 Security

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

4.2 Drawing Orientation

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

4.3 Font Type

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

4.4 Resolution

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

4.5 Scale

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

5.0 SCANNING

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

6.0 FINAL CHECKLIST

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

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

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

7.0 ADDITIONAL INFORMATION

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

Appendix E

Work Monitoring Form

FORMULAIRE DE SURVEILLANCE

IDENTIFICATION DU PROJET	
Promoteur :	Pêches et Océans Canada – Direction des Ports pour petits bateaux
Site :	Big Cove à Harrington Harbour, Québec
Titre du projet :	Projet d'aménagement d'un havre de pêche à Harrington Harbour, Québec
Date de réalisation des travaux :	
Date de réalisation de la surveillance :	
Activité de surveillance réalisée :	☐ Visite sur le terrain lors des travaux ☐ Autre activité de surveillance (spécifier) :

Mesures d'atténuation :	Mesure réalisée						Si non ou N/A, raison :
Préparation et fermeture du chantier, mobilisation et démobilisation							
Doter le chantier de tous les équipements nécessaires pour empêcher la dispersion de déchets dans l'environnement (toilettes chimiques transportables, poubelles, bacs, etc.).		Oui		Non		N/A	
Nettoyer régulièrement le site et disposer les déchets liquides et solides selon les normes et procédures en vigueur.		Oui		Non		N/A	
Faire la preuve de certification des équipements flottants relativement aux espèces envahissantes, en tenant compte de sa provenance.		Oui		Non		N/A	
Établir un plan de Santé/Sécurité et le présenter à tous les employés sur le chantier (réunion de démarrage), en incluant une section environnement pour, entre autres, la gestion des produits dangereux sur le chantier, la présentation des consignes environnementales et vérification de la disponibilité de tous les équipements de sécurité et de prévention environnementale. Assurer un suivi de ce plan tout au long du chantier.		Oui		Non		N/A	
Sécuriser le chantier, délimiter la zone d'entreposage terrestre et la zone des travaux aquatiques, si nécessaire.		Oui		Non		N/A	
Prévoir des mesures pour assurer une navigation sécuritaire autour du site des travaux. Un périmètre de sécurité devra être respecté par les capitaines pour réduire les		Oui		Non		N/A	

risques d'accident.							
Émettre un avis à la navigation via les services de communications et trafic maritimes (SCTM) pour informer les usagers de la période d'exécution et de la zone des travaux.		Oui		Non		N/A	
Nettoyer le site et les environs des retailles, sciures et rebuts qui auraient été échappés, à la fin des travaux. Ces matières devront être ramassées, retirées du site et disposées adéquatement. Si les sciures et rebuts ont pu contaminer le sol ou si des pièces de bois traité ont été entreposées directement sur le sol, procéder à la caractérisation et, si nécessaire, à la décontamination des zones touchées.		Oui		Non		N/A	
Mise en place du brise-lames							
Ne pas déverser les matériaux dans le fond. Effectuer la mise en place de la pierre par une pelle placée sur la barge, pour minimiser la remise en suspension des sédiments.		Oui		Non		N/A	
Utiliser une benne preneuse aux mâchoires le plus étanches possible.		Oui		Non		N/A	
Ouvrir les mâchoires de la benne à proximité du fond pour déposer les matériaux.		Oui		Non		N/A	
Éviter les va-et-vient des remorqueurs à plein régime, sauf lors du déplacement des barges.		Oui		Non		N/A	
Respecter les zones de travaux. Ne pas empiéter à l'extérieur des zones de travaux.		Oui		Non		N/A	
Baliser la zone de travail en milieu terrestre et ne pas circuler avec la machinerie lourde à l'extérieure de cette dernière afin de ne pas endommager la végétation en place.		Oui		Non		N/A	
Relocaliser les embarcations des résidents qui s'ancrent dans la baie.		Oui		Non		N/A	
Respecter l'horaire de travail émis par PPB.		Oui		Non		N/A	
Relocaliser le quai sur branches de bois, à la convenance du propriétaire.		Oui		Non		N/A	

Mise en place des pontons flottants							
Exiger que le bois ne provienne pas de forêts anciennes.		Oui		Non		N/A	
Respecter les recommandations/instructions du fabricant.		Oui		Non		N/A	
Exiger une assurance écrite du fournisseur que le bois traité a été produit en conformité avec les meilleures pratiques de l'industrie (BMP). S'assurer notamment qu'il respecte les critères de rétention adéquats pour le bois qui sera en contact avec le milieu marin.		Oui		Non		N/A	
Exiger que le bois traité à l'ACC ait subi un test à l'acide chromotropique vérifiant que le produit est bien fixé.		Oui		Non		N/A	
Planifier la structure de manière à minimiser les quantités de bois traité en contact avec l'eau. Les surfaces de bois traité sous pression exposées à l'abrasion (par le contact avec des bâtiments de mer ou autres) peuvent par exemple être blindées de bandes de polyéthylène protectrices car ils conserveront leur intégrité plus longtemps.		Oui		Non		N/A	
Inspecter le bois traité au moment de la construction pour vérifier s'il y a des dépôts de surface et s'il est sec. Ne pas utiliser le matériel non conforme ;		Oui		Non		N/A	
Ne pas brosser, nettoyer ou couper du bois traité au-dessus de l'eau ou à proximité de zones écologiques sensibles.		Oui		Non		N/A	
Favoriser la taille et la préfabrication des pièces de bois selon les spécifications voulues avant leur traitement sous pression.		Oui		Non		N/A	
Envisager l'incorporation d'un hydrofuge lors du traitement du bois avec un agent à base d'eau. Un scellant est recommandé pour les structures placées au-dessus de l'eau.		Oui		Non		N/A	
Ne pas utiliser d'attaches trempées et galvanisées à chaud. L'acier inoxydable est recommandé en eau salée.		Oui		Non		N/A	
En aucun temps des produits toxiques ne doivent être appliqués in situ ou lorsque le bois est directement en contact avec le milieu aquatique ou le surplombe.		Oui		Non		N/A	

Examiner avec le fournisseur la possibilité, pour le bois traité à l'ACC, de procéder à une période d'immersion industrielle en bassin pendant 24 ou 48 heures pour éliminer les surplus et éviter les rejets importants qui surviennent au début de la mise en place dans l'eau.		Oui		Non		N/A	
Respecter les recommandations/instructions du fabricant.		Oui		Non		N/A	
Porter des vêtements de protection lors de la manipulation du bois.		Oui		Non		N/A	
Respecter l'horaire de travail émis par PPB.		Oui		Non		N/A	
Mise en place des installations terrestres							
Si des pièces de bois doivent être taillées : - Couper les pièces de bois en milieu terrestre, au-dessus de bâches ou de dispositifs similaires pour recueillir les débris ; - Entreposer les sciures, les copeaux ou autre débris de bois traité dans des conteneurs étanches ou en adoptant des mesures équivalentes qui empêchent le contact avec les eaux de précipitation (voir également entreposage). - Lors des travaux, le sciage, le tronçonnage, le broyage, le déchiquetage ou le redimensionnement du bois traité, les sciures doivent être récupérées, les poussières et les particules en suspension dans l'air doivent être captées et gérées adéquatement, au même titre que le reste du bois traité. - S'assurer que le nettoyage et l'élimination des débris de coupe et autres, résultant de ces travaux, soient réalisés adéquatement et promptement (voir également gestion des déchets).		Oui		Non		N/A	

Si des produits pour le traitement superficiel par badigeonnage aux extrémités de coupe doivent être appliqués sur place : - S'assurer d'abord que le bois est bien sec dans la région d'application. - Ne pas appliquer de produits préservation lorsqu'il pleut. - Aménager les aires de travail de manière à éviter les rejets dans l'environnement autour de l'installation (y compris dans le sol et les plans d'eau). - Appliquer les retouches en milieu terrestre et travailler au-dessus de bâches ou de dispositifs similaires pour prévenir les déversements ou les gouttes qui pourraient être répandues dans l'environnement. - Laisser un temps de séchage adéquat avant de finaliser la mise en place des pièces de bois dans le milieu terrestre.		Oui		Non		N/A	
Prendre en considération la présence potentielle de l'halénie de Brenton dans le choix d'emplacement du trottoir et du stationnement.		Oui		Non		N/A	
Éviter d'empiéter à l'extérieur des zones de travail, afin de préserver la végétation attenante.		Oui		Non		N/A	
Respecter les recommandations/instructions du fabricant.		Oui		Non		N/A	
Porter des vêtements de protection lors de la manipulation du bois.		Oui		Non		N/A	
Respecter l'horaire de travail émis par PPB.		Oui		Non		N/A	
Activités de dragage/excavation des sédiments							
Utiliser une benne preneuse aux mâchoires le plus étanches possible.		Oui		Non		N/A	
Sensibiliser les opérateurs d'équipement de dragage de porter une attention particulière afin de ne pas remettre inutilement les sédiments en suspension en effectuant des mouvements brusques ou en nivelant le fond par pivotement de la benne.		Oui		Non		N/A	
Cesser les activités de dragage lorsque les conditions météorologiques ne sont pas favorables pour empêcher la dispersion des matières draguées ou en suspension hors de l'aire de travail.		Oui		Non		N/A	
Lors du remplissage de la barge, le godet de la drague devra être descendu le plus bas possible sur la barge.		Oui		Non		N/A	

Éviter la surverse de la barge où sont contenus les sédiments dragués.		Oui		Non		N/A	
Advenant la présence d'un important nuage de turbidité se dispersant hors du secteur des travaux, ralentir les activités de dragage ou espacer les périodes de dragage dans le temps.		Oui		Non		N/A	
Respecter la zone de dragage. Ne pas empiéter à l'extérieur de la zone des travaux.		Oui		Non		N/A	
Limiter dans le temps la réalisation des travaux, afin de réduire les impacts autant au niveau du paysage que de l'accessibilité de la baie.		Oui		Non		N/A	
Relocaliser les embarcations des résidents qui s'ancrent dans la baie.		Oui		Non		N/A	
Gestion des matériaux dragués/excavés							
Éviter de déposer les déblais près d'une source d'eau potable, près d'un milieu aquatique d'eau douce ou de tout autre habitat sensible à l'accroissement de la salinité.		Oui		Non		N/A	
Entreposage des matériaux							
S'assurer que les chalands sont étanches.		Oui		Non		N/A	
Éviter de trop remplir les barges pour prévenir les surverses de sédiments.		Oui		Non		N/A	
Faire inspecter le bois par une tierce partie et obtenir le certificat d'assurance qualité.		Oui		Non		N/A	
Lors de la réception, inspecter le bois traité pour vérifier s'il y a des dépôts en surface et s'il est sec. Refuser le matériel non conforme et demander un remplacement au fournisseur. Ne pas accepter un retraitement du même bois.		Oui		Non		N/A	
Maintenir les inventaires de bois traité au plus bas niveau possible.		Oui		Non		N/A	
Sélectionner le lieu d'entreposage en fonction des caractéristiques du milieu environnant (accessibilité, dimension de l'emplacement, distance par rapport aux milieux sensibles, etc.).		Oui		Non		N/A	

Placer l'aire d'entreposage à une distance d'au moins 30 m des zones écologiquement vulnérables et cours d'eau et à une distance d'au moins 3 m des fossés de drainage. Choisir un terrain plat ou sur une pente de moins de 10 %.		Oui		Non		N/A	
Ne pas entreposer le bois traité près d'une source d'eau potable.		Oui		Non		N/A	
Entreposer le bois traité sur une membrane étanche et le recouvrir d'une toile protectrice pour le protéger des intempéries lorsqu'il n'est pas utilisé ou, dans la mesure du possible, construire une structure temporaire au-dessus du lieu d'entreposage du bois traité. Si le bois traité est entreposé directement sur le sol, prévoir la nécessité de caractériser l'aire d'entreposage avant et après les travaux ainsi que, si nécessaire la décontamination des sols. Privilégier des surfaces de perméabilité limitée, comme de l'argile et de la terre compactée, de l'asphalte ou du béton loin des eaux de surface.		Oui		Non		N/A	
Inspecter la zone d'entreposage pour s'assurer qu'il n'y a pas d'évidence de lessivage de produits chimiques de traitement		Oui		Non		N/A	
Entreposer les produits de traitement superficiel dans des contenants étanches, bien fermés et identifiant les matières. S'ils doivent être entreposés temporairement, les contenants devraient être placés dans des endroits stables et à l'abri du choc des véhicules, à une distance d'au moins 30 m des cours d'eau et protégés des intempéries.		Oui		Non		N/A	
Si possible, entreposer la pierre dans le secteur du futur stationnement ou dans un secteur créant le moins d'impact possible à la végétation.		Oui		Non		N/A	
Éviter d'excéder la zone identifiée pour l'entreposage.		Oui		Non		N/A	
Entreposer les matériaux afin de ne pas perturber la circulation des habitants.		Oui		Non		N/A	
Transport par voie maritime							
Éviter des pertes au cours du transport en ayant une barge étanche pour le transport des sédiments.		Oui		Non		N/A	
Éviter le transport lorsque les conditions météorologiques sont défavorables pour empêcher tout risque d'accident.		Oui		Non		N/A	

Effectuer le déplacement par remorqueurs à basse vitesse, pour assurer la sécurité pendant les travaux.		Oui		Non		N/A	
Optimiser les déplacements des équipements pour minimiser le nombre d'allers-retours, tout en évitant de trop remplir les barges pour éviter les surverses et les accidents.		Oui		Non		N/A	
Émettre un avis à la navigation pour informer les usagers de la période d'exécution et de la zone des travaux.		Oui		Non		N/A	
Coordonner au maximum le déplacement des équipements entre les sites de transbordement et le site des travaux pour éviter un engorgement des secteurs.		Oui		Non		N/A	
Charger et décharger les bateaux avec attention pour éviter d'endommager les surfaces de bois traité.		Oui		Non		N/A	
Recouvrir les chargements de bois traité d'une toile pour éviter qu'ils ne soient exposés à la pluie ou la neige.		Oui		Non		N/A	
Transport par voie terrestre							
Réaliser le transport des matériaux dans des conteneurs ou des camions à benne étanche (particulièrement pour le transport des rebuts de bois traité), recouverts d'une bâche.		Oui		Non		N/A	
Respecter le Code de sécurité routière ainsi que les limites de vitesse (les camionneurs).		Oui		Non		N/A	
Récupérer les matériaux échappés lors du chargement et nettoyer le secteur.		Oui		Non		N/A	
Charger et décharger les camions avec attention pour éviter d'endommager les surfaces de bois traité.		Oui		Non		N/A	
Recouvrir les chargements d'une toile pour éviter qu'ils ne soient exposés à la pluie ou la neige.		Oui		Non		N/A	
Gestion des déchets (matières résiduelles et débris de construction)							
Disposer tous les déchets en respectant la réglementation et ne pas brûler ou enfouir les déchets sur place.		Oui		Non		N/A	
Ne pas bruler le bois traité.		Oui		Non		N/A	
Aucun rejet de débris ne sera tolérer dans l'eau.		Oui		Non		N/A	

Récupérer les poussières et les particules en suspension dans l'air et gérer adéquatement, au même titre que le reste du bois traité, lors des travaux, le sciage, le tronçonnage, le broyage, le déchiquetage ou le redimensionnement du bois traité.		Oui		Non		N/A	
Éliminer tous les débris, recoupes et copeaux de bois traité dans un lieu d'enfouissement qui gère ses eaux de lixiviation ou détenant les autorisations pour ce type de matière résiduelle.		Oui		Non		N/A	
Présence et utilisation de la machinerie							
Utiliser de la machinerie en bon état de fonctionnement (entretien régulier), propre et les moteurs arrêtés lorsqu'elle est inutilisée.		Oui		Non		N/A	
Limiter dans le temps la réalisation des travaux.		Oui		Non		N/A	
Respecter l'horaire de travail émis par PPB.		Oui		Non		N/A	
Préconiser des équipements terrestres et aquatiques utilisant une huile végétale biodégradable de type HF spécialement conçue pour ces types d'engin.		Oui		Non		N/A	
Avoir sur le site des travaux une trousse d'intervention en cas d'accident afin d'être en mesure de circonscrire le déversement.		Oui		Non		N/A	
Les employés devraient avoir reçu une formation pour être en mesure d'intervenir en cas de déversement.		Oui		Non		N/A	
Maintenir en tout temps un accès à la baie. Délimiter l'aire des travaux à l'aide de bouées et émettre un avis à la navigation dans les médias locaux pour informer le public de la période d'exécution et de la zone des travaux.		Oui		Non		N/A	
Présence et utilisation des matières dangereuses							
Interdit d'évacuer des hydrocarbures, des solvants, des diluants ou toutes substances dangereuses dans les cours d'eau, les égouts pluviaux et sanitaires.		Oui		Non		N/A	
Aucun rejet de matières dangereuses ne sera toléré (huiles et eaux usées		Oui		Non		N/A	
Veiller à ce que toutes les matières dangereuses destinées à l'élimination soient gérées en conformité avec la réglementation en vigueur (produits de		Oui		Non		N/A	

préservation du bois							
Mesures d’urgence et de prévention des incidents (accidents environnementaux et défaillances)							
La machinerie sera en bon état, propre et inspectée afin de ne présenter aucune fuite.		Oui		Non		N/A	
Préconiser des équipements terrestres et aquatiques utilisant une huile végétale biodégradable de type HF spécialement conçue pour ces types d'engin.		Oui		Non		N/A	
L’entrepreneur devra identifier les risques de déversement des substances toxiques qui seront utilisées ou entreposées pendant la durée des travaux. Il devra prévoir des mesures de prévention et de sécurité, de même que le plan d'urgence qui serait adopté en cas de déversement.		Oui		Non		N/A	
Les employés devraient avoir reçu une formation pour être en mesure d’intervenir en cas de déversement.		Oui		Non		N/A	
Manipuler les hydrocarbures avec soin, entreposer avec précaution (au minimum à 30 mètres de la rive) et éliminer de façon convenable afin de prévenir les déversements accidentels dans l'eau.		Oui		Non		N/A	
Avant le début des travaux, le responsable de chantier identifiera une aire d’entretien de la machinerie, d’entreposage et de manipulation des matières dangereuses. Ce site doit être au moins à 30 m de la rive ou d’un cours d’eau. Effectuer l’entretien des véhicules et le plein de carburant à une distance minimale de 30 mètres de la rive. L’entretien se fera au quai commercial de TC.		Oui		Non		N/A	
Lors du ravitaillement de la machinerie en carburant, toutes les mesures sont prises pour minimiser les risques de déversement accidentel (stabilisation des équipements et des engins avant de procéder, présence d’une trousse complète d’intervention en cas de déversement de produits pétroliers, etc.).		Oui		Non		N/A	
Avoir, tout au long des travaux, une trousse d’urgence de récupération des produits (spill kit), afin d’être en mesure de circonscrire le déversement.		Oui		Non		N/A	
Advenant un bris des équipements / déversement accidentel, les mesures d'urgence appropriées seront appliquées afin de contrôler la situation et, le cas échéant, le bris sera réparé immédiatement. La zone touchée et contaminée par les		Oui		Non		N/A	

substances toxiques sera contenue, nettoyée et le matériel contaminé sera enlevé et conduit à un site autorisé via une firme spécialisée.							
En cas de déversement, rapporter immédiatement l'incident aux autorités responsables et intervenir rapidement. Contacter les services d'urgence d'EC (1-866-283-2333) et/ou de la Garde côtière canadienne (GCC) en milieu marin (1-800-363-4735), le MDDELCC en milieu terrestre (1-866-694-5454) et le surveillant de chantier.		Oui		Non		N/A	
En cas de déversement en milieu aquatique, les eaux contaminées seront confinées et récupérées par une firme spécialisée et acheminées vers un centre de traitement approuvé par le MDDELCC. En cas de déversement terrestre, les hydrocarbures devront être récupérées et les sols contaminés disposés conformément à la réglementation en vigueur.		Oui		Non		N/A	
Afin de prévenir tout incident provenant de l'utilisation ou de l'entreposage de l'ACC :							
Informer les travailleurs des précautions à prendre.		Oui		Non		N/A	
Adopter des bonnes pratiques pour minimiser les quantités utilisées.		Oui		Non		N/A	
Éponger les excès de produits et disposer adéquatement les absorbants utilisés.		Oui		Non		N/A	
Manipuler les contenants sur des surfaces planes et non poreuses, où il sera possible de récupérer les quantités déversées.		Oui		Non		N/A	
Manipuler avec soin et entreposer avec précaution (si possible, à une distance d'au moins 30 mètres du plan d'eau).		Oui		Non		N/A	
Maintenir bien fermés les contenants lorsque non utilisés.		Oui		Non		N/A	
Éliminer les résidus et quantités excédentaires de façon conforme, afin de prévenir les déversements accidentels : contenants étanches, bien fermés et identifiant les matières. S'ils doivent être entreposés temporairement, les contenants devraient être placés dans des endroits stables et à l'abri du choc des véhicules, à une distance d'au moins 30 m des cours d'eau et protéger les contenants des intempéries.		Oui		Non		N/A	

Interdire tout rejet, déversement ou enfouissement sur le site de ces matières, des résidus et des contenants vides.		Oui		Non		N/A	
Si les travaux se déroulent en période hivernale, ne pas jeter à l'eau la neige souillée provenant des aires de travail. Identifier le site de dépôt à neige pouvant être utilisé par l'entrepreneur.		Oui		Non		N/A	
Récupérer toute quantité déversée, même minime, contenir la zone contaminée, nettoyer et enlever le matériel contaminé ou revêtements souillés par le contaminant et les gérer conformément à la réglementation en vigueur. - après un déversement d'importance, échantillonner les sols ou le substrat du secteur où il a eu lieu pour s'assurer de la complète réhabilitation du secteur.		Oui		Non		N/A	
Veiller à ce que toutes les matières dangereuses destinées à l'élimination soient gérées selon la réglementation en vigueur (produits de préservation du bois, contenants vides, sciures et résidus de bois, sols souillés, etc.).		Oui		Non		N/A	

Commentaires (observations sur le terrain, mauvaise gestion des déchets, présence d'huiles usées, fuites sur la machinerie, travaux réalisés non pris en compte dans l'évaluation environnementale, etc. - tout détail n'étant pas mentionné dans les mesures d'atténuation) :

RÉALISATION DE LA SURVEILLANCE
Préparé par: **Date:** **Titre :** **Organisme :** **No de tél. :**
Je certifie que les renseignements fournis ci-dessus sont exacts et complets et qu'ils correspondent à mon interprétation des travaux. Signature : Date :

RÉALISATION DE LA SURVEILLANCE
Préparé par: Date: Titre : Organisme : No de tél. :
Je certifie que les renseignements fournis ci-dessus sont exacts et complets et qu'ils correspondent à mon interprétation des travaux. Signature : Date :

<u>Note</u> : **Ce formulaire de surveillance du respect des mesures d'atténuation, <u>ou un rapport équivalent</u> complété par le surveillant de chantier devra être acheminé à TPSGC et au MPO-PPB à la fin des travaux.**