

Assets, Contracting and Environmental Management Corporate Services Branch 351 Saint-Joseph Boulevard Gatineau, Quebec J8Z 1T3

October 18, 2013

Solicitation number K2AA0-13-0025

PROJECT TITLE: Characterization and Management of Construction and Demolition Waste in Canada

Dear Madam/Sir:

Environment Canada has a requirement for the services described in the attached "Terms of Reference". We are, as a result, soliciting proposals to perform this work.

If you are interested in providing these services, you must submit three (3) copies of your technical proposal, two (2) copies of your completed signed Offer of Service, and two (2) copies of the former public servant certification no later than 15:00 (local time) on November 27, 2013 to the following office:

Environment Canada (BIDS)
Mailroom
171 Jean-Proulx
Gatineau, Quebec
J8Z 1W5

in accordance with the following procedures:

- 1. Identify the <u>solicitation number</u> **K2AA0-13-0025** on the outside of all proposal/courier envelopes.
- 2. Include the following in your proposal, in sufficient detail for evaluation purposes:
 - (a) a brief statement indicating your understanding of the work;
 - (b) a summary of your related experience;

- (c) a listing of staff (professional, technical, administrative, sub-contractors) who will be assigned to the work, and their respective personal résumés;
- (d) an explanation of the intended approach and/or methodology; and
- (e) contingency plans to be implemented in the event assigned staff become unavailable during the period of the contract.
- 3. Environment Canada requests that bidders provide their bid in separately bound sections as follows:

<u>SECTION I: SUBMIT THREE (3) HARD COPIES OF YOUR TECHNICAL</u> PROPOSAL;

SECTION II: SUBMIT TWO (2) SIGNED HARD COPIES OF THE OFFER OF SERVICE (WHICH REPRESENTS THE FINANCIAL BID).
SECTION III: SUBMIT TWO (2) SIGNED HARD COPIES OF THE FORMER PUBLIC SERVANT CERTIFICATION.

Prices must appear in the Offer of Service (Financial Bid) only. No prices must be indicated in any other section of the bid. Offer of Service must be signed.

Bids must be submitted only to Environment Canada's Mailroom by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted to Environment Canada by facsimile or e-mail will not be accepted.

All questions concerning this project shall be submitted in writing by e-mail: david.anderson@ec.gc.ca

Yours sincerely,

David Anderson
Procurement and Contracting Officer
Materiel and Contract Management Branch

Attachments:

Offer of Service
Former Public Servant Certification
Mandatory Proposal Instructions
Terms of Reference
Evaluation Grid

MANDATORY PROPOSAL INSTRUCTIONS

1. Receipt

The specified office will receive the sealed proposals (including the Offer of Service) or revisions up until the time and date specified in the letter of invitation.

Environment Canada shall no longer accept the Offer of Service/technical portion of the bidders' proposals by facsimile or by electronic mail.

2. Unacceptable Proposals

Proposals received after the closing date and time will not be considered and will be returned unopened.

Proposals <u>NOT</u> submitted with duly completed Offer of Service forms in the format specified by the Department will not be accepted.

Incomplete proposals will be considered non-responsive and rejected.

Any Offer of Service that exceeds the stated ceiling or maximum price, if any, shall be considered non-responsive and rejected.

Any Offer of Service not signed in accordance with the letter of invitation shall be considered non-responsive and rejected.

3. Acceptance

The Department will not necessarily accept the lowest or any of the proposals submitted.

4. Completion

The Offer of Service form must be completed and submitted in the format presented by the Department.

Proposals must be submitted in accordance with these instructions and those contained in the letter of invitation.

It is the proposer's responsibility to ensure his/her complete understanding of the requirements and instructions specified by the Department. Enquiries concerning this solicitation must be submitted in writing to the contracting authority (David Anderson) no later than five (5) working days prior to the bid closing date specified herein to allow sufficient time to provide a response.

5. Reference

The Department of Environment reserves the right, before awarding the Contract, to require the Contractor to submit such evidence of qualifications as it may deem necessary, and will consider evidence concerning the financial, technical and other qualifications and abilities of the contractor.



OFFER OF SERVICE

. Offer submitted by:	(Print or type complete business or corporate name, address, telephone number, fax number)		
	Tel. No	Fax. No	
	E-Mail		

2. I (We), the undersigned, hereby offer to Her Majesty the Queen in Right of Canada, as represented by the Minister of Environment, to furnish all necessary expertise, supervision, materials, equipment and other things necessary to complete, to the entire satisfaction of the Minister or his/her authorized representative, the work as described in the Solicitation package according to the terms and conditions of the Department's service contract for the following prices:

2.1 **Professional Services**:

The following is a breakdown of the Professional Services (show fee structure all-inclusive of profit and overhead).

<u>Category of Personnel</u> <u>Per Diem Rates</u> <u>Number of Days Assigned</u> <u>Total</u>

Fiscal year 1:

Fiscal year 2:

2.2	Administrative	Expenses:

(Courier, long distance calls, reproduction, etc.).

\$_____

2.3 <u>Travel Expenses</u>:

Reimbursable at cost in accordance with the attached Travel Directive, to a financial limitation of \$5,000.00

\$____

My/Our estimate for travel expenses is based upon the following anticipated travel requirements:

2.4 TOTAL PROPOSAL PRICE (Canadian Currency)

Page 4 of 4

- **3.** I (We) agree that the Offer of Service will remain firm for a period of one hundred and twenty (120) calendar days after the tender closing date.
- 4. Payment for professional services and associated costs will be effected upon completion of each phase, submission of invoices detailing the work completed to date and upon confirmation by the departmental representative of the services rendered/deliverables received.

Claims for travel and accommodation expenses will be reimbursed at cost, in accordance with the Travel Directive, after they have been submitted with the aforementioned invoices and supported by receipts, vouchers, or other appropriate documents.

- **5.** I (We) agree to submit herewith the following:
 - a PROPOSAL to undertake the work, indicating an understanding of the objectives and responsibilities, a methodology and a time schedule as it relates to the requirements;
 - (b) a CORPORATE RESUME indicating relevant experience, the proposed personnel for the work team including their curriculum vitae;
 - a list, if applicable, of SUBCONTRACTOR(S) including full names and addresses, portion(s) of work to be subcontracted and relevant firm experience;
 - (d) a duly completed OFFER OF SERVICE, in two copies (2).
 - (e) a duly completed former public servant certification, in two copies (2).
- 6. It is a condition that during the term of the contract all persons engaged in the course of carrying out this contract shall conduct themselves in compliance with the principles of the Conflict of Interest and Post-Employment Code for Public Office Holders. Should an interest be acquired or seem to cause a departure from the principles, the contractor shall declare it immediately to the departmental representative.

OFFERS WHICH DO NOT CONTAIN THE ABOVE-MENTIONED DOCUMENTATION OR DEVIATE FROM THE PRESCRIBED COSTING FORMAT SHALL BE CONSIDERED INCOMPLETE AND NON-RESPONSIVE AND SHALL BE REJECTED.

Dated this	day of	, 2013, at	in the province of	
bv: (Signing C	Officer) Print & Sign		Title	

Former Public Servant Certification - Competitive Requirement

Contracts with 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 with FPS, bidders must provide the information required below.

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

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? Yes () No ()

If so, the Bidder 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, Bidders agree that the successful Bidder'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 <u>Contracting Policy Notice: 2012-2</u> and the <u>Guidelines on the Proactive Disclosure of Contracts</u>.

Work Force Reduction Program

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of a work force reduction program? **Yes** () **No** ()

If so, the Bidder 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 reduction 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 the Goods and Services Tax or Harmonized Sales Tax.

Certification

By submitting a bid, the Bidder certifies that the information submitted by the Bidder is	n
response to the above requirements is accurate and complete.	

Signed	
Date	

TERMS OF REFERENCE

SOLICITATION K2AA0-13-0025

CHARACTERIZATION AND MANAGEMENT OF CONSTRUCTION AND DEMOLITION WASTE IN CANADA

INTELLECTUAL PROPERTY

The Crown has determined that any intellectual property arising from the performance of the Work under the Contract will vest in Canada, on the following grounds:

- 6.4 Where the main purpose of the Crown Procurement Contract, or of the deliverables contracted for, is:
- 6.4.1 To generate knowledge and information for public dissemination.

PURPOSE

The overarching purpose of this work is to gather, consolidate data and provide an analysis of current information concerning the characterization and management of construction, renovation and demolition waste (i.e. C&D waste) in Canada.

C&D waste represents a significant portion of solid waste generated in Canada and it contains substances of interest to the Government of Canada under the Canadian Environmental Protection Act (CEPA) and Chemicals Management Plan, which can pose risks to human health and the environment if improperly managed. There is a need to consolidate what is known about this waste stream and the industries that contribute to its generation in Canada and undertake a more in-depth analysis of C&D waste to better understand the sources of pollution and identify the opportunities and barriers for prevention. Among other things, this work will quantify C&D waste that is currently generated, recovered, and disposed across the country and identify recycling and disposal methods and facilities by province/territory.

This work will support efforts of the Department by improving knowledge of: (1) linkages between C&D waste and substances of interest, (2) current management approaches and best practices for these wastes, (3) Canada's infrastructure and existing secondary markets for C&D waste materials, (4) opportunities for improvement that may exist to support the environmentally sound management of C&D waste, and (5) enhanced resource recovery and economic growth through the creation of green jobs. This work will also better position the Government of Canada to inform and participate in anticipated and emerging domestic and international activities (e.g. under the Canadian Council of Ministers of the Environment and Organization for Economic Cooperation and Development).

BACKGROUND

The term C&D waste refers to a waste stream derived from construction, renovation and demolition activities. It is composed of several types of materials such as glass, corrugated cardboard, plastic, metals, wood, aggregates and other materials (e.g. asphalt roofing products, gypsum/drywall, fiberglass, masonry and tile, co-mingled soil, stumps and brush, porcelain fixtures, arborite, textiles, rubber, asbestos, lath and plaster, etc.). Although construction waste and demolition waste may consist of similar material streams, they emerge from very different processes.

Construction waste refers to wastes and material remnants (e.g. trim scraps) that are derived from the process of building new structures and is often generated in a progressive fashion as single-material waste streams. Demolition waste refers to wastes and material debris that are derived from the process of demolishing existing structures and is often generated in a simultaneous fashion as commingled multi-material waste streams. By comparison, demolition waste generally contains much more concrete and can consist of 20 to 30 times more waste on a per building basis. Renovation waste is generally a hybrid of construction waste and demolition waste and is derived from undertaking improvements and repairs to existing structures.

A significant amount of the solid waste sent to Canadian non-hazardous landfills is comprised of C&D waste. Statistics Canada reported that C&D waste (excluding asphalt, concrete and rubble) accounted for 12% (i.e. 2,816,528 tonnes) of non-hazardous waste disposed in Canada in 2002. In this same year, only 16% (i.e. 536,345 tonnes) of C&D waste generated was recycled. While these figures are somewhat dated, they currently reflect the most complete national picture available. Like other wastes, C&D waste generation is influenced by a number of factors including economic conditions and growth levels, market conditions, population size and density, relevant laws, source reduction initiatives, geographic location, and climatic conditions.

Several materials found in C&D waste are linked to substances of interest interest to the Government of Canada under the Canadian Environmental Protection Act (CEPA) and Chemicals Management Plan, the international community (e.g. Basel Convention, Stockholm Convention, Organization for Economic Cooperation and Development), and other stakeholders. These substances include asbestos, flame retardants, cadmium, wood preservatives, lead, and phthalates (see Annex A for other examples). Several materials are also considered to be readily recyclable (e.g. metal, wood, corrugated cardboard, glass, plastics, brick, tile) and opportunities may exist to further divert these materials from final disposal to support waste diversion through enhanced resource recovery. Other ancillary benefits include reductions for greenhouse gas emissions, and conservation efforts for natural resources.

Nationally, the Canadian Council of Ministers of the Environment (CCME) has already expressed interest with respect to the improved management of C&D waste. Specifically, the CCME Canada-wide Action Plan on Extended Producer Responsibility commits jurisdictions to working towards incorporating construction and demolition materials into operational programs by 2017.

OBJECTIVE

The objective of this work is to prepare a C&D waste foundation report that provides current and comprehensive information concerning the characterization and management of each of the following waste streams in Canada: (1) construction waste; (2) renovation waste; and (3) demolition waste.

Characterization will involve describing each of these C&D waste streams; such as: quantities, compositions and attributes of materials and substances of interest (see Annex A); and potential risks that these wastes and materials may pose to human health and the environment.

Management will involve describing current approaches for managing C&D waste and materials, such as: policies, programs, standards and best practices; how C&D waste and materials are collected, recovered and disposed along with their associated management costs; existing infrastructure and facilities to recover and dispose C&D waste including processing constraints and capacity limitations; existing markets and end uses for recovered C&D materials; recommendations and opportunities for mitigating risk and enhancing resource recovery; and identifying key stakeholder organizations regarding the management of C&D waste.

The primary audience for this document is decision-makers within various levels of Canadian government including federal, provincial/territorial, and regional/municipal government. This document will also provide information that may prove useful to other stakeholder organizations, including construction and demolition industries, industry trade associations, environmental non-government organizations, and academia.

The report must be easy to understand while conveying technical and other issues that need to be addressed in sufficient detail to be of value to the target audience.

STATEMENT OF WORK

The Contractor must prepare a single report that reflects the purpose and objective for this work, which includes the following activities:

CHARACTERIZATION:

- 1. Identify and describe the different types of products and materials found in: (1) construction waste, (2) renovation waste and (3) demolition waste, including the percent composition of materials that are contained within each of these waste streams.
- 2. Validate the presence of and describe substances of interest listed in Annex A (and up to 5 other substances to be selected by the project authority based on advice provided by the Contractor) that are linked to the different types of products and materials found in: (1) construction waste, (2) renovation waste and (3) demolition waste. This includes identifying the quantities, relative composition and presence of substances of interest in construction materials

found in the Canadian marketplace (from literature review) and describing potential risks and problems that these substances may pose to the environment and human health if improperly managed. For the purposes of this work these substances shall include substances of interest to the Government of Canada under the Canadian Environmental Protection Act (CEPA) and Chemicals Management Plan, the international community (e.g. Basel Convention, Stockholm Convention, Organization for Economic Cooperation and Development), and other stakeholders.

- 3. Estimate quantities of (1) construction waste, (2) renovation waste and (3) demolition waste materials that are reused, recycled and disposed in Canada and by province and territory. This includes providing a breakdown of estimated quantities for each type of material found in each of these three waste streams (from activity 1 of the characterization), and providing a description of the methodology, sources of data and limitations of analysis (e.g. assumptions, margin of error).
- 4. Compare quantities of C&D waste (from activity 3 of the characterization) with relevant and available data sources from other OECD countries (e.g. USA, Europe, and Australia).

MANAGEMENT:

- 5. Identify and briefly describe documented environmental and health-related issues that pertain to the management of: (1) construction waste, (2) renovation waste and (3) demolition waste in Canada.
- 6. Identify and describe current approaches and processes to collect, reuse, recycle and dispose products/materials (i.e. at least five, selected with confirmation of project authority) that contain significant amounts of substances of interest (from activity 2 of the characterization) and are found in: (1) construction waste, (2) renovation waste and (3) demolition waste, along with cost, operational challenges and other considerations for each.
- 7. Identify and describe Canada's existing facility infrastructure to recycle and dispose C&D waste and material streams, including processing constraints, capacity limitations and any potential gaps that may exist. This work will include identifying the locations of recycling and disposal facilities on a map of Canada.
- 8. Identify and describe existing markets, economic values and end uses for recovered C&D waste products and materials.
- 9. Identify and propose recommendations and opportunities for improving the management of the C&D waste streams to mitigate risk posed to the environment and human health and to enhance resource recovery
- 10. Identify and briefly describe key stakeholder organizations in Canada, USA and Europe that are interested in the management of C&D waste. Also provide personal contact information from each of these organizations, but as a separate document.

The report must be comprehensive, yet written in a clear, understandable and concise fashion. It must also include an executive summary and visual aids where appropriate (e.g. pictures, schematics, maps, graphs, tables, etc.) that are referenced and described

in sufficient detail within the report. Data sources must be clearly and appropriately referenced throughout the report using a bibliography.

PROJECT TEAM

It is recognized that the skills required to complete this work may not all reside within one organization and therefore team building with multiple specialized experts and expertise may be necessary.

PROJECT DELIVERABLES

The Contractor must submit the following deliverables for this project:

Deliverable #1: a draft table of contents for the report & detailed summary of the methodology and data sources that will be used to quantify C&D waste. The table of contents must identify how the content of the report will be organized. It must be accompanied by a detailed summary of the methodology and data sources that will be used to quantify C&D waste. Environment Canada will provide comments/feedback on Deliverable #1, which must be used in preparing the next Deliverables.

Deliverable #2: a first partial draft report & draft C&D waste contact list. The draft version of the C&D waste contact list (activity #10) must be delivered as a separate document and is not intended for inclusion in draft versions of the report. The first partial draft report must include information associated with activities #1, #2, #3 as described in the Statement of Work. A draft version of the C&D waste contact list (referenced in activity #10) must also be submitted as a separate document. The partial draft reports do not represent separate documents but instead reflect the current status of report throughout its evolution to completion. They are intended to reveal draft information acquired and progress achieved in support of fulfilling specified activities under the Statement of Work. Environment Canada will provide comments/feedback on Deliverable #2, which must be used in preparing the next Deliverables.

Deliverable #3: a second partial draft report. The second partial draft report will include updated content from the first partial draft report and information associated with activities #5, #6 and #7 as depicted in the Statement of Work. The partial draft reports do not represent separate documents but instead reflect the current status of report throughout its evolution to completion. They are intended to reveal draft information acquired and progress achieved in support of fulfilling specified activities under the Statement of Work. Environment Canada will provide comments/feedback on Deliverable #3, which must be used in preparing the next Deliverables.

Deliverable #4: a complete draft final report. The draft version of the report must provide information associated with all ten activities as described in the Statement of Work in a concise format using easy to follow language and visual aids where appropriate. The draft report must incorporate all comments provided by Environment Canada on Deliverables #1, #2 and #3. Environment Canada will provide comments/feedback on the draft report, to be used in preparing the final report.

Deliverable #5: a complete final report. The final version of the report must provide information associated with all elements as described in the Statement of Work in a

concise format using easy to follow language and visual aids where appropriate. All comments/feedback on Deliverable #4 must be incorporated into the final report.

Deliverable #6: a complete final C&D waste contact list. The final version of the C&D waste contact list (activity #10) must be delivered as a separate document and is not intended for inclusion in draft or final versions of the report.

Deliverable #7: a Power Point presentation summarizing the document. Must be provided in electronic format using Microsoft® Office PowerPoint.

The Contractor must provide deliverables #1 to #6 as electronic files in Microsoft® Word and in PDF format. Three (3) bound hard copies of the final report with all graphics in colour must also be provided. All deliverables must be provided in English.

TRAVEL

Travel will be required for two face-to-face meetings in the National Capital Region. The first meeting will be held during the first fiscal year (kick-off meeting) and the second meeting will be held during the second fiscal year. Environment Canada has allotted a maximum of \$5,000 for travel expenses for these two meetings. Reimbursements will be consistent with Treasury Board Secretariat and Federal Government Travel Guidelines.

Additional meetings with Environment Canada will be conducted via conference calls.

PROPOSED SCHEDULE

A project kick-off meeting will be held within two weeks of the contract being awarded. This meeting will be held as a face-to-face meeting.

Submission dates for deliverables under this contract are as follows:

Deliverable #1: within 2 weeks from contract award.

Deliverable #2: within 12 weeks of contract award (but no later than March 28, 2014).

Deliverable #3: within 30 weeks of contract award.

Deliverable #4: within 50 weeks of contract award.

Deliverable #5: within 60 weeks of contract award (but no later than March 9, 2015).

Deliverable #6: within 60 weeks of contract award (but no later than March 9, 2015).

Deliverable #7: within 60 weeks of contract award (but no later than March 9, 2015).

Bidders shall plan on conference calls every two weeks for the duration of the project.

Project Budget

This is multiyear contract. Environment Canada has established funding for this project at a maximum amount of \$100,000 excluding GST/HST and covering the period from date of award to March 9, 2015 broken down as follows:

(The fiscal year for the Government of Canada ends on March 31, and for contracts which span more than one fiscal year, the Contractor will be required to specify the level of effort in fees and expenses achievable between the date of the contract and March 31 of one year as well as April 1 and the end of the contract in subsequent fiscal years).

Fiscal year 1 - from date of award to March 31, 2014 up to a maximum amount of \$30,000, which includes up to a maximum amount of \$2,500 for travel expenses.

Fiscal year 2 - from April 1, 2014 to March 9, 2015 up to a maximum amount of \$70,000, which includes up to a maximum amount of \$2,500 for travel expenses.

Milestone Payment

Fiscal year 1:

10% of the total professional fees will be paid following completion, delivery and acceptance of Deliverable #1.

20% of the total professional fees will be paid following completion, delivery and acceptance of Deliverable #2.

Fiscal year 2:

30% of the total professional fees will be paid following completion, delivery and acceptance of Deliverable #3.

25% of the total professional fees will be paid following completion, delivery and acceptance of Deliverable #4.

15% of the total professional fees will be paid following completion, delivery and acceptance of Deliverables #5, #6 and #7.

PROPOSAL:

The proposal will be evaluated according to the Evaluation of Proposal's Scoring Worksheet. For ease of evaluation, the Contractor is encouraged to prepare the proposal in the following format:

Section 1: Overview and understanding of project requirements

Section 2: Overall research approach, detailed description of the methodology to be used to undertake quantification and analysis, and workplan

Section 3: Project team/project manager's experience

Section 4: Time Allocation, Schedule and costs

1. TECHNICAL COMPONENT

The proposal should include a statement of understanding, not to exceed two pages in length, of the work to be undertaken and why it has been requested. The proposal should present a detailed work plan and describe how the Contractor would carry out the tasks to achieve the project objectives. The proposal should also include a description of the technical approach, methodology, work plan and data sources to be used.

2. COMPANY EXPERTISE COMPONENT

The proposal should identify:

- The professional resources, including the Project Manager and the Senior Team Members, to be assigned to the project and their contribution to the project. (Full resumes should be included in an appendix to the proposal).
- Number of years of experience and expertise of each resource directly relevant to the work, industry and sector.
- Number of years of significant company expertise directly related to the work (for prime and any sub-contractors).
- Daily or hourly rates of the project resources.
- The company's GST/HST registration number or if exempt, proof of exempt status.

3. SCHEDULING COMPONENT

The proposal should include:

- A proposed schedule for deliverables.
- A breakdown of each project task which clearly identifies the time commitments of each member on the project team.
- The allocation of time between experienced and less experienced staff with respect to work involvement.
- The total time commitment of the project team.

Evaluation of Proposals - Scoring Worksheet

The Bidder with the highest combined number of points for technical/management components (70%) and price (30%) will be recommended for award of the contract. The combined total points will be determined using Equation 1 below. The proposal must receive the minimum required number of points as indicated for each criteria and an overall score of 70 points or more to be considered acceptable. If no acceptable bids are received, Environment Canada has the right to not award this contract.

Technical/management components

	Technical Point-Rated Criteria	Score Ranges	Score
A. UNDERSTANDING OF THE REQUEST FOR PROPOSAL	R1. Does the proposal indicate a clear and logical understanding of the Work?	Max: 10	
(MAX: 10 POINTS) MINIMUM REQUIRED: 6 POINTS	The proposal demonstrates the Bidder has a poor understanding of the Work and will not satisfy the Terms of Reference.	2	
	The proposal demonstrates the Bidder has a weak understanding of the Work.	4	
	The proposal indicates that the Bidder has a satisfactory understanding of the Work.	6	
	The proposal indicates that the Bidder has a very good understanding of the Work.	8	
	The proposal clearly indicates the Bidder has an excellent understanding of the Work	10	
B. APPROACH, METHODOLOGY,	R2. Is the approach and methodology well developed, clear and logical?	Max. 20	
WORKPLAN (MAX. 60 POINTS) MINIMUM REQUIRED: 40 POINTS	The approach and methodology are poorly developed and many elements are missing.	4	
	The approach and methodology are weak, lack clarity and a few elements are missing.	8	
	The approach and methodology are satisfactory, clear and the elements are identified.	12	
	The approach and methodology are well		

developed and clear, all the elements are identified however not presented logically.	15
The approach and methodology are sound, efficient and very clear, all the elements are clearly identified and presented logically.	18
The approach and methodology are very well presented, very clear, all the elements are clearly identified and logical.	20
R3. Are the steps identified in the workplan clearly presented?	Max. 20
Steps are missing and challenges are not identified nor addressed.	5
Steps are identified but not well defined and challenges are either not identified nor addressed.	10
Steps are identified, logical and challenges have been identified but not addressed.	15
Steps are clearly identified, logical and challenges have been identified and addressed	18
All the steps in the approach are very clearly identified, logical and challenges are clearly identified and addressed.	20
R4. Does the proposed workplan allocate resources (level of efforts and expertise) in an effective way to meet the stated objectives?	Max: 20
The proposed workplan does not allocate the resources in a way to meet the objectives.	5
The proposed workplan allocates the team expertise but no effectively.	10
The proposed workplan allocates satisfactorily the team expertise to meet the stated objectives.	15
The proposed workplan allocates effectively	18

	the team expertise to meet the stated objectives. The proposed workplan allocates very effectively the resources to meet the stated objectives.	20	
C. PROJECT TEAM EXPERIENCE (MAX. 30 POINTS) MINIMUM REQUIRED: 20 POINTS	For R5 and R6 below, the Bidder should provide a listing of C&D waste projects and other projects relevant to this work that have been completed by the firm and its team personnel in the last 15 years. Each project description should be no more than one (1) page, and, in order to receive points for a project, the description must include all of the following information: I. Project title, client name, industry sector and name(s) of relevant individuals on the Bidder's project team that were involved. II. Planned and actual dollar values. III. Planned start and finish dates and actual start and finish dates. IV. Nature of services provided for the project or study, methodologies and approaches employed. V. Topics addressed. VI. Name of contact to validate information. VII. Lessons learned during project R5. Does the project experience of project team (excluding the Project Manager) make the team well suited to complete the assignment? Points will be		
	awarded as follows for combined, relevant* project team (excluding the Project Manager) experience in the last 15 years:	Max: 15	
	Less than 5 relevant projects	5	
	6 - 7 relevant projects	10	
	More than 8 relevant projects	15	

	R6. Does the Project Manager have the appropriate experience and skill set to manage projects of this nature? Points will be awarded as follows for relevant* experience of the Project Manager in the last 15 years:	Max: 15	
	Less than 3 relevant projects	5	
	4 - 5 relevant projects	10	
	More than 5 relevant projects	15	
	*Note: To be considered "Relevant", the projects must be related to the characterization and management of C&D waste.		
Total Possible Points		100	

Equation 1:

Total Points = <u>Bidder's Rated Score</u> x 70 + <u>Lowest Bidder's Price</u> x 30 Highest Bidder's Rated Score Bidder's Price

Example:

Bidder	Bidder's Rated Score	Bidder's Price	Points for Technical/ Management Components	Points for Price	Total Points
Bidder A	70	\$30,000	(70 ÷ 90) x 70 = 54.4	$(30,000 \div 30,000) \times 30 = 30$	54.4 + 20 = 84.4
Bidder B	85	\$40,000	(85 ÷ 90) x 70 = 66.1	(30,000 ÷ 40,000) x 30 = 22.5	66.1 + 15 = 88.6
Bidder C	90	\$35,000	(90 ÷ 90) x 70 = 70	(30,000 ÷ 35,000) x 30 = 25.7	70 + 17.1 = 95.7*

^{*}In this example, Bidder C will be recommended for award of the contract.

ANNEX A: Substances of interest linked to materials that may be present in C&D waste

Substance of interest	Product/Material Type	
Ammoniacal copper arsenate (ACA)	Treated wood	
Ammoniacal copper zinc arsenate (ACZA)	Treated wood	
Aromatic Azo & Benzidine-based substances	Wood stains and wood floor	Textiles
Asbestos	 Acoustical plaster Adhesives Asphalt floor tile Base Flashing Blown-in insulation Boiler Insulation Breaching insulation Caulking/putties Ceiling Tiles and Lay-in Panels Cement pipes Cement siding Cement wallboard Chalkboards Construction Mastics/ Adhesives Decorative Plaster Ductwork Electric wiring insulation Electric panel partitions Elevator brake shoes Elevator equipment Panels Fire blankets Fire doors Fireproofing materials 	 Flexible fabric connections Flooring backing Heating and electrical ducts High temperature gaskets HVAC duct insulation Joint compounds Laboratory gloves Laboratory hoods Table tops Packing materials Pipe insulation Roofing felt Roofing shingles Spackling compounds Spray-applied Insulation Taping compounds (thermal) Textured paints/ coatings Thermal paper Products Vinyl floor tile Vinyl sheet flooring Cooling towers Vinyl wall coverings Wallboard
Bisphenol-A (BPA)	 epoxy resins used in high performance coatings, electrical-electronic laminates, adhesives, flooring and paving applications, and composites phenolic resins used as durable binders and adhesives in structural wood 	 foam insulation used in a large range a building applications such as roofing, cavity board, external wall board, plasterboard dry lining, systems, wall insulation, floor insulation and as a sarking board,

	panels and as binders in	
	mineral wool insulation in the	
	construction industry	
Boron-containing	Borate mineral mining	Adhesives
substances	 Paints and Coatings 	Rubber
Brominated flame	 Textiles & carpet 	 Plasticiser in paints and
retardants (PBDE,	 Plastic 	cements,
PBB)	 Dielectric fluids in electrical 	 Stabilising adhesives,
	equipment such as	 plastics, flame retardants
	transducers, capacitors, heat	 De-dusting agent
	transfer, hydraulic systems	
	and power supply blocks of	
	fluorescent lamps	
Cadmium	Sealant industrial oils	
Cadmium Certain Organic	Plastic (pigment agent) Mining and minorals	- Plastica
Flame Retardants	Mining and mineralsAdhesives and sealants	PlasticsRubber
Tiame retardants	Paints and coatings	• Rubbei
Chromated copper	Treated wood	
arsenate (CCA)	• Treated Wood	
Cobalt-containing	Glass and Ceramic	Rubber
substances	 Metals (non-ferrous) 	 Paints and coatings and
	 Plastics 	printing ink
Copper	 Treated wood 	
naphthenate		
Creosote	Treated wood	
Dioxins & furans	Plastics	
Hexavalent	 Ferrous metals 	
chromium Hydrogen sulphide	- Cypoum/dravoll	
Internationally	Gypsum/drywall Plastics	Adhesives and sealants
Classified	Rubber	Paint and Coating
substances	• Kubbei	Faint and Coating
Lead	Non-ferrous Lead metal	Lead-based Paint
Methylenediphenyl	Industrial, Commercial,	Polyurethane foam
diisocyanate and	Institutional and housing	 Paints and coatings
diamine substances	construction	 Adhesives and sealants
(MDI/MDA)	 Construction material 	 Plastics
Dantashlassakasa	manufacturing	
Pentachlorophenol (PCP)	Treated wood	
Phthalates	Plastic	Asphalt roofing
. Hillalatoo	Rubber	 Cables, tubing and pipes
	Adhesives and sealants	 Caulk and sealants
	Asphalt	 PVC window frames
Polyaromatic	Asphalt roofing products	specialist paints
hydrocarbons	Asphalt pavement	 coal tar and coal tar
(PAHs)	concrete additives	polyurethane sealers
	231101010 444111100	1 /

	celluloid (plastic)solventswood preservatives and lacquers	epoxy paintsdamp-proofing materialswaterproof membranes
Polyvinylchloride	Plastic	
Selenium-	Metals	Rubber
containing	 Dyes and pigments 	
substances		
Substituted	 Plastics and Rubber 	 Urethane Foam
Diphenyl Amines		
Volatile Organic	 Asphalt, especially cutback 	
Carbons	asphalt concrete	