

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Travaux publics et Services gouvernementaux
Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7^{ème} étage
Montréal
Québec
H5A 1L6
FAX pour soumissions: (514) 496-3822

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

**Proposal To: Public Works and Government
Services Canada**

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

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

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

Comments - Commentaires

Title - Sujet Test Lab. Causeway Bridge Nuns' Isl	
Solicitation No. - N° de l'invitation 53000-130004/B	Date 2013-06-13
Client Reference No. - N° de référence du client 53000-13-0004	
GETS Reference No. - N° de référence de SEAG PW-\$MTC-350-12335	
File No. - N° de dossier MTC-3-36027 (350)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-07-04	
Time Zone Fuseau horaire Heure Avancée de l'Est HAE	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Arcand, Geneviève	Buyer Id - Id de l'acheteur mtc350
Telephone No. - N° de téléphone (514) 496-3873 ())	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: LES PONTS JACQUES CARTIER ET CHAMPLAIN INCORPOREE Société des Ponts Jacques-Cartier et Champlain inc. Pont de l'Île des Soeurs Québec Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Travaux publics et Services gouvernementaux Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7^{ème} étage
Montréal
Québec
H5A 1L6

Delivery Required - Livraison exigée	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

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File No. - N° du dossier

MTC-3-36027

Buyer ID - Id de l'acheteur

mtc350

CCC No./N° CCC - FMS No/ N° VME

53000-13-0004

Testing Laboratory Services

Highway 15, Construction of a temporary causeway bridge between Nuns' Island and the island of Montreal.

Testing Laboratory Services Highway 15, Construction of a temporary causeway between Nuns' Island and the island of Montréal

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PART 1 - GENERAL INFORMATION

1. BuyandSell.gc.ca/tenders

To obtain more information, in particular on how to be informed of any AMENDMENTS to this request for proposal, visit Tenders Frequently Asked Questions on BuyandSell.gc.ca/Tenders, under the item "Tender notifications and amendments".

2. Security Requirement

There is no security requirement associated with this bid solicitation.

3. Terms of Reference

As part of the Construction of a causeway bridge between Nun's Island and Montréal Island, the request for proposal is raised for the services of a testing laboratory. Services are required from July 22nd, 2013 to June 30th, 2015 approximately. The Terms of Reference, of Section 3, fully detail the requirements.

4. Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

5. Trade Agreements

This solicitation is not subject to any Agreements.

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation 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.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2013-06-01) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2. Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and at the following place:

Bid Receiving Unit
Public Works and Government Services Canada (PWGSC)
800 de la Gauchetière West, room 7300
Place Bonaventure, South-East Portal
Montréal, Qué H5A 1L6

Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

3. Former Public Servant

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 in Part 5 of this document.

4. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority (genevieve.arcand@pwgsc-tpsgc.gc.ca) no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

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

5. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the Province of Québec.

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

6. Limitation of Submissions

1. A Bidder may not submit more than one proposal. This limitation also applies to the persons or entities in the case of a joint venture. If more than one proposal is received from a Bidder (or, in the case of a joint venture, from the persons or entities), all such proposals shall be rejected and no further consideration shall be given.
2. A joint venture is defined as an association of two or more parties which combine their money, property, knowledge, skills, time or other resources in a joint business enterprise agreeing to share the profits and the losses and each having some degree of control over the enterprise.
3. An arrangement whereby Canada contracts directly with a prime consultant who may retain sub-consultants or specialist consultants to perform portions of the services is not a joint venture arrangement. A sub-consultant or specialist consultant may, therefore, be proposed as part of the Consultant Team by more than one Bidder. The Bidder warrants that it has written permission from such sub-consultant or specialist consultant to propose their services in relation to the services to be performed.
4. Notwithstanding paragraph 3. above, in order to avoid any conflict of interest, or any perception of conflict of interest, a Bidder shall not include in its submission another Bidder as a member of its consultant team, as a sub-consultant or specialist consultant.
5. Any joint venture entered into for the provision of professional services or other services must be in full compliance with the requirements of any provincial or territorial law pertaining thereto in the Province or Territory in which the project is located.

7. Reference Documents

During the bidding period, potential bidders may access the construction bidding documents "Construction of Temporary Causeway Bridge between Nuns' Island and Montreal", which are available on BuyandSell.gc.ca/Tenders under solicitation number 53000-130001.

8. Fairness Monitoring

This solicitation is under the supervision of a Fairness Monitor.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (6 hard copies)

Section II: Financial Bid (2 hard copies + 1 electronic copy)

Section III: Certifications (2 hard copies)

Section IV: Financial Statements (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with Section 5 - Basis of Payment. The total amount of Applicable Taxes must be shown separately. Submit in a separate sealed envelope with the Name of Bidder, Name of Project, PWGSC Solicitation Number, and the words "PRICE PROPOSAL FORM" typed on the outside of the envelope.

The electronic version (excel format) of Section 5 – Basis of Payment is available upon request from :

Genevieve Arcand
Supply Specialist
Genevieve.arcand@pwgsc-tpsgc.gc.ca

Section III: Certifications

Bidders must submit the certifications required under Part 5.

Section IV : Financial Statement

In accordance with clause A9033T Financial Capability of Part 4 – Evaluation Process and Basis of Selection, article 1.2 Financial Evaluation, bidders are requested to provide with their bid : Audited financial statements, if available, or the unaudited financial statements (prepared by the Bidder's outside accounting firm, if available, or prepared in-house if no external statements have been prepared) for the Bidder's last three fiscal years.

Provide one copy, in a separate envelop marked "FINANCIAL STATEMENT" and the name of the bidder.

For consortium, provide the financial statements of each member of the consortium, as well as the consortium agreement showing the responsibilities (in percentage) of each member.

Only the successful bidder's financial statements will be analyzed.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. EVALUATION PROCEDURES

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

1.1 Financial Evaluation

SACC Manual Clause A0220T (2013-04-25), Evaluation of Price
SACC Manual Clause A9033T (2012-07-16) Financial Capability

2. BASIS OF SELECTION

2.1 Requirement for Proposal Format

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

- Submit one (1) bound original plus five (5) bound copies of the proposal
- Paper size should be - 216mm x 279mm (8.5" x 11")
- Minimum font size - 11 point Times or equal
- Minimum margins - 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 **forty-five (45)** pages.

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

- Covering letter
- Consultant Team Identification
- Declaration/Certifications Form (Part 5 of this solicitation)
- Front page of the RFP
- Front page of revision(s) to the RFP
- Price Proposal Form (Section 5)
- Proof of ISO standard 9001.208 certification
- Certificates of registration, accreditation and authorization and others as required to perform the inspections, specimen collections, analyses and tests required under the Contract

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

3 EVALUATION CRITERIA

3.1 MANDATORY CRITERIA

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 Consultant and its subcontractors shall be certified under the latest version of ISO standard 9001:2008.

3.2 RATED CRITERIA

3.2.1 Experience and knowledge of the Bidder in the field specific to the contract.

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

Select a maximum of 5 projects undertaken within the last 8 years. Joint venture submissions are not to exceed the maximum number of projects. Only the first 5 projects listed in sequence will receive consideration and any others will receive none as though not included.

Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives should include a discussion of the approach to meet the intent, design challenges and resolutions.
- If the project is not completed, indicate the percentage of completion
- 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

The Bidder must possess the knowledge on the above projects. Past project experience from entities other than the Bidder will not be considered in the evaluation unless these entities form part of a joint venture Bidder.

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

3.2.2 Achievements of Key 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 bidder 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 staff member, select a maximum of 3 projects undertaken within the last 8 years. Only the first 3 projects listed in sequence will receive consideration and any others will receive none as though not included.

Key personnel and minimum years of experience required:

Key personnel	Years of experience required	Description of entire requirement located in Section 3
Project Engineer	15 years in design or monitoring and in quality assurance on construction work	3.03.4.2.1
Assistant Project Engineer	15 years in design or monitoring and quality assurance on construction work.	3.03.4.2.2
Senior Engineer in cement concrete	15 years in verifying concrete mix formulas and supervising the collection of samples and core samples	3.03.4.2.3
Senior Engineer in bituminous pavement and waterproof membrane	15 years in verifying bituminous mix formulas and waterproof membranes	3.03.4.2.4
Senior Engineer in steel elements	15 years in verifying the tensile, compressive and shear characteristics of steel elements	3.03.4.2.5
Senior Engineer in stripping, paint and other coatings on steel	<ul style="list-style-type: none"> • NACE certified, materials specialist • 15 years in verifying stripping products, galvanic/resin and epoxy/urethane paint systems, galvanization and metallic coatings and supervision the collection of samples. 	3.03.4.2.6
Senior Engineer in non-destructive testing of steel	<ul style="list-style-type: none"> • certified level 3 welding inspector in accordance with standard CSA W178.2-F08, Certification of Welding Inspectors, OR CAN/CGSB-48.9712-2006/ISO 9712:2005 standard, Qualification and Certification of Non-Destructive Testing Personnel, materials specialist • 15 years in verifying the welds of steel assemblies and supervising tests 	3.03.4.2.7
Senior Engineer in pavement foundation work	15 years in verifying granulometry and water content in crushed aggregates and supervising the collection of samples	3.03.4.2.8
Senior Engineer in Environmental work	15 years in analyzing the characteristics of toxic and leachable substances and supervising the collection of soil samples.	3.03.4.2.9

Information that should be supplied for each staff member:

- professional accreditation, OIQ's inscription number
- accomplishments/achievements/awards
- relevant experience, expertise, number of years experience
- role, responsibility and degree of involvement of individual in past projects. If the project is not completed, indicate the percentage of completion

If a key personnel does not meet the minimum years of experience stated in article 3.02.2.2 of Section 3 – Terms of Reference, the bidder will receive a not of 0 for that key personnel.

3.2.3 Understanding of the Project

The bidder 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:

- Significant issues, challenges and constraints and privilege means to reach the contract's objectives
- Project schedule and cost. Review schedule and cost information and assess risk management elements that may affect the project

3.2.4 Scope of Services:

The bidder 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
- Material resources
- Work Plan - detailed breakdown of work tasks and deliverables
- Quality assurance program
- Project schedule - proposed major milestone schedule
- Risk management strategy

3.2.5 Management of Services:

The Bidder 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 bidder is also to identify sub-consultant disciplines and specialists required to complete the consultant team.

If the Bidder 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:

- 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	Weight Factor
3.2.1 Experience and knowledge of the Bidder in the field specific to the contract	2.5
3.2.2 Achievements of Key Personnel on Projects	
• Project Engineer	12
• Assistant Project Engineer	10
• Cement Concrete Engineer	7.5
• Bituminous Pavement and Waterproof Membrane Engineer	7.5
• Steel Elements Engineer	7.5
• Stripping, paint and other coatings on steel Engineer	7.5
• Non Destructive testing on steel Engineer	7.5
• Pavement Foundation Engineer	7.5
• Environmental Engineer	7.5
3.2.3 Understanding of the Project	8
3.2.4 Scope of Services	12
3.2.5 Management of Services	3
Technical Rating	100

Generic Evaluation Table

Evaluation Board members will evaluate the strengths and weaknesses of the Bidder'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 an excellent understanding of the requirements.
	Weaknesses cannot be corrected	Generally doubtful that weaknesses can be corrected	Weaknesses can be corrected	No significant weaknesses	No apparent weaknesses
	Bidder do not possess qualifications and experience	Bidder lacks qualifications and experience	Bidder has an acceptable level of qualifications and experience	Bidder is qualified and experienced	Bidder is highly qualified and experienced
	Team proposed is not likely able to meet requirements	Team does not cover all components or overall experience is weak	Team covers most components and will likely meet requirements	Team covers all components - some members have worked successfully together	Strong team - has worked successfully together on comparable projects
	Sample projects not related to this requirement	Sample projects generally not related to this requirement	Sample projects generally related to this requirement	Sample projects directly related to this requirement	Leads in sample projects directly related to this requirement
	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results

To be considered further, bidders must achieve a minimum Technical Rating of seventy (70) points out of the hundred (100) points available as specified above.

No further consideration will be given to bidders not achieving the pass mark of seventy (70) points.

4 PRICE OF SERVICES

All price proposal envelopes corresponding to responsive proposals which have achieved the pass mark of seventy (70) points will be opened upon completion of the technical evaluation.

If a least three bids are deemed receivable, 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 are skipped.

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

5 TOTAL SCORE

Total Scores will be established in accordance with the following:

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

The Bidder 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 bidder submitting the lower price for the services will be selected.

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6 SUBMISSION REQUIREMENTS - CHECKLIST

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

Team Identification	
Certifications	Part 5 of the RFP, completed and signed
Proposal	One (1) original and 5 copies
Front page of the RFP	Signed
Front page(s) of any solicitation amendment	Signed

In a separate envelope (Financial Bid):

Price Proposal form (Section 5)	One (1) original completed, a copy and one electronic version
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In a separate envelope (Financial Statement):

Bidder's Financial Statements	One (1) copy
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PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications, to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

In such case where the bidder is a consortium, each member of the consortium must provide the certifications and related documentation. Reproduce as needed.

1. Mandatory Certifications Required Precedent to Contract Award

1.1 Code of Conduct and Certifications - Related documentation

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

Complete list of each individual who are currently directors of the bidder.

Provide surnames and given names of each directors

Bidder : _____

Director :

2. Additional Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

2.1 Federal Contractors Program - Certification

1. The Federal Contractors Program (FCP) requires that some suppliers, including a supplier who is a member of a joint venture, bidding for federal government contracts, valued at \$200,000 or more (including Applicable Taxes), make a formal commitment to implement employment equity. This is a condition precedent to contract award. If the Bidder, or, if the Bidder is a joint venture and if any member of the joint venture, is subject to the FCP, evidence of its commitment must be provided before the award of the Contract.

Suppliers who have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

2. If the Bidder does not fall within the exceptions enumerated in 3.(a) or (b) below, or does not have a valid certificate number confirming its adherence to the FCP, the Bidder must fax (819-953-8768) a copy of the signed form LAB 1168, Certificate of Commitment to Implement Employment Equity, to the Labour Branch of HRSDC.
3. The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- a. () is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- b. () is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- c. () is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC (having not bid on requirements of \$200,000 or more), in which case a duly signed certificate of commitment is attached;
- d. () is subject to the FCP, and has a valid certificate number as follows: _____ (e.g. has not been declared an ineligible contractor by HRSDC).

Further information on the FCP is available on the HRSDC Web site.

2.2 Former Public Servant

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.

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 Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

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 Applicable Taxes.

2.3 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

2.4 Education and Experience

2.4.1 SACC Manual clause A3010T (2008-08-16) Education and Experience

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement applicable to this Contract.

2. Terms of Reference

Services must be completed in accordance with the Terms of Reference of Section 3.

3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract 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.

3.1 General Conditions

2010B (2013-04-25), General Conditions - Professional Services (Medium Complexity) apply to and form part of the Contract.

3.2 Definition

In this document and in all clauses and conditions identified by number, date and title s set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>), the word "Contractor" must be replaced by "Consultant".

In Section 3 – Terms of Reference, the word "Contractor" means the Construction Contractor and not the Consultant.

4. Term of Contract

Services will be delivered from xxx to xxx. *(to be completed upon contract award)*

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Geneviève Arcand, ing.
Supply Specialist
Public Works and Government Services Canada
Acquisitions Branch
800 rue de la Gauchetière West, room 7300
Place Bonaventure, South-East Portal
Montréal (Que) H5A 1L6

Telephone: (514) 496-3873
Facsimile: (514) 496-3822

Solicitation No. - N° de l'invitation
53000-130004/B
Client Ref. No. - N° de réf. du client
53000-13-0004

Amd. No. - N° de la modif.
File No. - N° du dossier
MTC-3-36027

Buyer ID - Id de l'acheteur
mtc350
CCC No./N° CCC - FMS No./N° VME

E-mail address: Genevieve.arcand@pwsc-tpsgc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Consultant must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

5.2 Departmental Representative

The Departmental Representative for the Contract is:

Name: *_(to be completed upon contract award)_*_____

Title: _____

Organization: _____

Address: _____

Telephone : _____

Facsimile: _____

E-mail address: _____

The Departmental Representative is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Departmental Representative, however the Departmental Representative has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.3 Consultant's Representative

Name: *_(to be completed upon contract award)_*_____

Title: _____

Organization: _____

Address: _____

Telephone : _____

Facsimile: _____

E-mail address: _____

6. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Consultant has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

7. Payment

7.1 Basis of Payment

The Consultant will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Section 5 , to a limitation of expenditure of \$_____ ((insert the amount at contract award). Customs duties are included and Applicable Taxes are extra.

7.2 Limitation of Expenditure

1. Canada's total liability to the Consultant under the Contract must not exceed \$ _____ .
Customs duties are included and Applicable Taxes are extra.
2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Consultant unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Consultant must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Consultant must notify the Contracting Authority in writing as to the adequacy of this sum:
 - a. when it is 75 percent committed, or
 - b. four (4) months before the contract expiry date, or
 - c. as soon as the Consultant considers that the contract funds provided are inadequate for the completion of the Work,
whichever comes first.
3. If the notification is for inadequate contract funds, the Consultant must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Consultant does not increase Canada's liability.

7.3 Multiple Payments

SACC Manual clause H1001C (2008-05-12) Multiple Payment

7.4 SACC Manual Clauses

SACC Manual clause A9117C (2007-11-30) T1204 – Direct Request from Client Department

8. Invoicing Instructions

- 8.1 The Contractor must submit, to Ministerial Representative and to the Contracting Authority a claim for payment using forms of Annex C - Consultant's Progress Claim and Progress of Work, "Time Tracking Sheet" and Expenditures Tracking Sheet
- 8.2 The Contractor must not submit claims until all work identified in the claim is completed

9. Certifications

9.1 Compliance

Compliance with the certifications and related documentation provided by the Consultant in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Consultant does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Consultant in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

9.2 **SACC Manual Clauses**

SACC Manual clause A3015C (2008-12-12) Certifications

10. **Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____.

11. **Priority of Documents**

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

- (a) the Articles of Agreement;
- (b) the general conditions 2010B (2013-04-25) Professional Services;
- (c) Section 3 – Terms of Reference;
Annex A General Layout – Temporary Causeway Bridge
Annex B General Layout – Champlain Bridge and Approaches
Annex C: Consultant's Progress Claim and Progress Estimate
Annex D Timesheet
Annex E Contract Management Report
- (d) Section 5 – Basis of Payment
- (e) the Consultant's bid dated _____ (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award: “, as clarified on _____” or “, as amended on _____” and insert date(s) of clarification(s) or amendment(s)*)

12. **Notices**

1. Any notice, request, direction, consent, decision, or other communication that is required to be given or made by either party pursuant to the Agreement, shall be in writing, and shall be deemed to have been effectively given when:
 - a. served personally, on the day it is delivered;
 - b. forwarded by registered mail, on the day the postal receipt is acknowledged by the other party; or
 - c. forwarded by facsimile, e-mail or other electronic means of transmission at the time of transmission.
2. The address of either party, or the person authorized to receive notices, may be changed by notice in the manner set out in this provision.

13. **Insurances**

13.1 **Commercial General Liability Insurance**

1. The Consultant must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$5,000,000 per accident or occurrence and in the annual aggregate.
2. The Commercial General Liability policy must include the following:

- a. Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Consultant's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
- b. The policy shall insure the Jacques Cartier and Champlain Bridges Incorporated as an additional Insured, with respect to liability arising out of the operations of the Consultant with regard to the work.
- c. Bodily Injury and Property Damage to third parties arising out of the operations of the Consultant.
- d. Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Consultant and/or arising out of operations that have been completed by the Consultant.
- e. Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
- f. Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
- g. Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
- h. Employees and, if applicable, Volunteers must be included as Additional Insured.
- i. Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
- j. Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
- k. Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
- l. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
- m. Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to:

Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042,
Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to:

Senior General Counsel,
Civil Litigation Section,
Department of Justice

234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Consultant's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Consultant's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

13.2 Professional Liability

1. The Professional Liability insurance coverage shall be in an amount usual for the nature and scope of the Services but, shall have a limit of liability of not less than \$5,000,000 per claim, and be continually maintained from the commencement of performance of the Services until five (5) years after their completion.
2. The policy shall insure the Jacques Cartier and Champlain Bridges Incorporated as an additional Insured, with respect to liability arising out of the operations of the Consultant with regard to the work.
3. The following provision must be incorporated into the conditions of the Consultant's Professional Liability insurance coverage: "Notice of Cancellation of Insurance Coverage: The Insurer agrees to give the Contracting Authority at least thirty (30) days' prior written notice of any policy cancellation and before making any adverse material changes."

13.3 Automobile Liability Insurance

1. The Consultant must obtain Automobile Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$5,000,000 per accident or occurrence.
2. The policy shall insure the Jacques Cartier and Champlain Bridges Incorporated as an additional Insured, with respect to liability arising out of the operations of the Consultant with regard to the work.
3. The policy must include the following:
 - a. Third Party Liability - \$5,000,000 Minimum Limit per Accident or Occurrence
 - b. Accident Benefits - all jurisdictional statutes
 - c. Uninsured Motorist Protection
 - d. Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.



Les Ponts Jacques Cartier et Champlain Incorporée
The Jacques Cartier and Champlain Bridges Incorporated
Canada

**HIGHWAY 15, CONSTRUCTION OF TEMPORARY
CAUSEWAY-BRIDGE, CONSULTANT SERVICES, TESTING
LABORATORY (2013-2015)**

SECTION 3

TERMS OF REFERENCE

CONTRACT NO. 61898

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SECTION 3 TERMS OF REFERENCE

3.01 PURPOSE

- 3.01.1 This Contract consist of providing, on request, test laboratory services to carry out quality assurance for work involving concreting, asphalt paving and waterproof membrane, fabrication of steel elements, paint stripping, non-destructive testing of steel, road foundations, excavation of contaminated soil, environmental monitoring and other construction work (hereinafter referred to as "Construction Work" or the "Construction Contract") performed in connection with the construction of the new temporary Île des Soeurs causeway-bridge during the period 2013 to 2015, the general layout of which is shown in the General Layout in Annex A attached hereto.
- 3.01.1.1.1 For information purposes, the Construction Contract consists in building a temporary road to include vehicle traffic lanes, a lane reserved for public transit and a multi-use path, building a temporary viaduct, modification of an existing viaduct and construction of a multi-use passage. The Construction Work includes but is not limited to structural work, landscaping, drainage, paving, installing safety elements, horizontal signage, overhead signage, lighting and implementation of an intelligent transportation systems, as well as environmental protection measures during the work and maintaining traffic flow and temporary signage during the work.
- 3.01.1.2 The Champlain Bridge Corridor, which includes the Champlain Bridge, Highway 15 and the Nun's Island Bridge, is managed by the Jacques Cartier and Champlain Bridges Inc. (JCCBI). The general design is shown in the General Layout in Annex B attached hereto.
- 3.01.1.3 The Construction Contract is one of a number of construction contracts managed by a JCCBI representative (hereinafter referred to as the "Departmental Representative"). The Departmental Representative will manage the interfaces among all the construction sites and will coordinate all JCCBI work. The Consultant will report to the Departmental Representative in connection with the performance of the professional services set out in this Contract.

3.02 DEFINITIONS

- 3.02.1 In this Call for Proposals, the term "Contractor" means the Contractor hired to perform the Construction Work.
- 3.02.2 For the supervision of the Construction Work at the job site, Canada generally uses the services of consultants, referred to in these Terms of Reference as "Departmental Representative."

3.03 SERVICES TO BE SUPPLIED

- 3.03.1 Under authority of the Departmental Representative, the testing laboratory (referred to herein as "the Consultant") will be responsible for performing the tests requested and the services described below as required for performing quality assurance of the work described below.

3.03.1.1 Services relating to cement concrete work

- 3.03.1.1.1 The Consultant services relating to cement concrete work consist generally in but are not limited to:
- 3.03.1.1.1.1 attending coordination meetings and discussions with the Departmental Representative as requested;
 - 3.03.1.1.1.2 verifying compliance of the Contractor's cement concrete mix with the provisions of its Contract;
 - 3.03.1.1.1.3 performing quality controls on concrete delivered to the job site, including but not limited to the following tests:
 - 3.03.1.1.1.3.1 measuring slump and slump loss on freshly mixed concrete;
 - 3.03.1.1.1.3.2 measuring entrained air in new concrete and repair concrete;
 - 3.03.1.1.1.3.3 measuring the temperature of freshly mixed concrete;
 - 3.03.1.1.1.3.4 site trial batch testing for repair concrete;
 - 3.03.1.1.1.3.5 measuring the spread diameter of self-levelling concrete;
 - 3.03.1.1.1.3.6 all other relevant tests;
 - 3.03.1.1.1.4 performing visual quality control at the job site;
 - 3.03.1.1.1.5 examining surfaces and works prior to concrete placement;
 - 3.03.1.1.1.6 collecting samples at the job site, at the Contractor's supplier facility or at any other location as determined by the Departmental Representative for laboratory testing;
 - 3.03.1.1.1.7 besides other tasks, collecting at the job site six (6) cylindrical samples of concrete for laboratory compression testing. In general terms, compression testing of cylindrical concrete samples will be conducted as follows:
 - 3.03.1.1.1.7.1 two (2) tests within three (3) days after sample collection;
 - 3.03.1.1.1.7.2 two (2) tests within seven (7) days after sample collection;
 - 3.03.1.1.1.7.3 two (2) tests within 28 days after sample collection;
 - 3.03.1.1.1.7.4 or as requested by the Departmental Representative;
 - 3.03.1.1.1.8 performing the following tests on repair concrete:
 - 3.03.1.1.1.8.1 compressive strength on samples collected prior to placement;
 - 3.03.1.1.1.8.2 as applicable, as requested by the Departmental Representative, tests of adhesion, plastic shrinkage and resistance to freeze/thaw cycles in accordance with the performance criteria set out in the specifications;

- 3.03.1.1.1.9 performing tests relating to crack sealing work:
 - 3.03.1.1.1.9.1 measuring the “Shore D” hardness and compressive strength on samples of ultrafine Portland cement grout collected during injection;
 - 3.03.1.1.1.10 monitoring the placement and finishing of concrete:
 - 3.03.1.1.1.10.1 the Consultant shall verify that the work is performed in accordance with the specifications and drawings of the Contractor’s Construction Contract and trade practice;
 - 3.03.1.1.1.11 after each visit, delivering at the site a legible written report to the Departmental Representative describing the services performed at the job site by the Consultant;
 - 3.03.1.1.1.12 sending a written report to the Departmental Representative on each compression test, first by fax or electronic mail within 24 hours after the test, and then sending the original to him or her by mail within seven (7) days after the test. The e-mail addresses of the persons concerned will be provided after the Contract is awarded.
- 3.03.1.2 Services relating to bituminous pavement and waterproof membrane work
 - 3.03.1.2.1 The Consultant services relating to bituminous pavement and waterproof membrane work generally consist in but are not limited to the following:
 - 3.03.1.2.1.1 attending coordination meetings and discussions with the Departmental Representative as requested;
 - 3.03.1.2.1.2 verifying compliance the Contractor’s bituminous mix formula with the provisions of its Contract;
 - 3.03.1.2.1.3 performing adhesion tests on the waterproof membrane and bituminous pavement system;
 - 3.03.1.2.1.4 performing quality control on job site work;
 - 3.03.1.2.1.5 informing the Departmental Representative at the job site when a lane can be re-opened to traffic after the placement of bituminous pavement;
 - 3.03.1.2.1.6 collecting samples for evaluation of the compaction and thickness of bituminous pavement and waterproof membrane;
 - 3.03.1.2.1.7 after each visit, delivering at the site a legible written report to the Departmental Representative describing the services performed at the job site by the Consultant;

- 3.03.1.2.1.8 performing complete analysis of samples of freshly mixed bituminous concrete and determining the grade of bitumen;
- 3.03.1.2.1.9 performing gyratory shear press tests;
- 3.03.1.2.1.10 performing rutting resistance tests on bituminous pavement;
- 3.03.1.2.1.11 sending a written report to the Departmental Representative on each test completed, first by fax or electronic mail within 24 hours after the test, and then sending the original to him or her by mail within seven (7) days after the test.
- 3.03.1.3 Services relating to the fabrication and assembly work of steel components
 - 3.03.1.3.1 The Consultant services relating to the fabrication and assembly of steel components generally consist in but are not limited to the following:
 - 3.03.1.3.1.1 attending coordination meetings and discussions with the Departmental Representative as requested;
 - 3.03.1.3.1.2 performing tensile and shear tests on high-strength bolts provided by the Departmental Representative;
 - 3.03.1.3.1.3 performing relevant physical tests on steel components identified by the Departmental Representative from a lot supplied by the Contractor, unless steel test certificates are provided for all parts in stock;
 - 3.03.1.3.1.4 performing relevant non-destructive tests on steel components identified by the Departmental Representative from a lot supplied by the Contractor;
 - 3.03.1.3.1.5 after each visit, delivering at the site a legible written report to the Departmental Representative describing the services performed at the job site by the Consultant;
 - 3.03.1.3.1.6 sending a written report to the Departmental Representative on each test performed, first by fax or electronic mail within 24 hours after the test, and sending the original to him or her by regular mail within seven (7) days after the test.
 - 3.03.1.4 Services relating to stripping and paint work
 - 3.03.1.4.1 The Consultant services relating to stripping and paint work generally consist in but are not limited to the following:
 - 3.03.1.4.1.1 attending coordination meetings and discussions with the Departmental Representative as requested;
 - 3.03.1.4.1.2 collecting samples of and analyzing the granulometry of the sand used for sandblasting cleaning;
 - 3.03.1.4.1.3 at the plant or job site, performing controls on the steel surfaces to be prepared for and on the application of paint on steel elements identified by the Departmental Representative;
 - 3.03.1.4.1.4 validating the conformity of ambient conditions during painting operations;
 - 3.03.1.4.1.5 collecting samples and detecting in the laboratory the presence of solvents in paint;
 - 3.03.1.4.1.6 after each visit, delivering at the site a legible written report to the Departmental

Representative describing the services performed at the job site by the Consultant;

3.03.1.4.1.7 sending a written report to the Departmental Representative on each test performed, first by fax or electronic mail within 24 hours after the test, and then sending the original to him or her by mail within seven (7) days after the test. Providing technical assistance as requested during the execution of Construction Work by the Contractor and submitting relevant reports as applicable.

3.03.1.5 Services relating to non-destructive testing of steel

3.03.1.5.1 The Consultant services relating to non-destructive testing of steel generally consist in but are not limited to the following:

3.03.1.5.1.1 attending coordination meetings and discussions with the Departmental Representative as requested;

3.03.1.5.1.2 performing relevant non-destructive testing (visual, liquid penetrant, magnetic particle, radiographic and ultrasound inspections) on steel assembly welds identified by the Departmental Representative;

3.03.1.5.1.3 verifying the conformity of galvanized and metal-coated components;

3.03.1.5.1.4 performing non-destructive testing as applicable on steel components identified by the Departmental Representative from stock supplied by the Contractor;

3.03.1.5.1.5 after each visit, delivering at the site a legible written report to the Departmental Representative describing the services performed at the job site by the Consultant;

3.03.1.5.1.6 sending a written report to the Departmental Representative on each test performed, first by fax or electronic mail within 24 hours after the test, and then sending the original to him or her by mail within seven (7) days after the test;

3.03.1.6 Description of services relating to pavement foundations

3.03.1.6.1 The Consultant services relating to trackfilling operations and granular subbases work generally consist in but are not limited to the following:

3.03.1.6.1.1 verifying the compactness of granular borrow material against the Construction Contract specifications during backfilling operations;

3.03.1.6.1.2 verifying the compactness of granular sub-base or base course material against the construction specifications during foundation work;

3.03.1.6.1.3 collecting samples of crushed aggregate and verifying the granulometry against the Construction Contract specifications during the base course work;

3.03.1.6.1.4 performing visual quality control at the job site;

3.03.1.6.1.5 approving the finished surfaces listed below before the start of placement of materials in the subsequent course:

3.03.1.6.1.5.1 compacted loose soil;

3.03.1.6.1.5.2 compacted borrow material;

3.03.1.6.1.5.3 compacted crushed aggregate, for the sub-base and base courses.

3.03.1.7 Description of services relating to environmental work

- 3.03.1.7.1 The Consultant services relating to the excavation of contaminated soils by the Contractor generally consist in but are not limited to the following:
- 3.03.1.7.1.1 reading Canada's studies on the condition of the soils involved in the Construction Work, a list of which will be provided to the Consultant after the Contract is awarded;
 - 3.03.1.7.1.2 doing audits as requested relating to the Contractor's Environmental Protection Plan;
 - 3.03.1.7.1.3 monitoring as requested the excavation work and the setting aside and identification of contaminated soils by the Contractor;
 - 3.03.1.7.1.4 as requested,, ensuring that the Contractor complies with all requirements set out in subsection 3.02.5 – *Environmental Protection* of the Construction Contract;
 - 3.03.1.7.1.5 collecting samples and performing the laboratory chemical analysis of samples of contaminated soils from the excavation site as appropriate;
 - 3.03.1.7.1.6 collecting samples and performing the laboratory chemical analysis of samples of contaminated water from the excavation site as appropriate;
 - 3.03.1.7.1.6.1 after each visit, delivering at the site a legible written report to the Departmental Representative describing the services performed at the job site by the Consultant;
 - 3.03.1.7.1.6.2 delivering a written report to Canada on each test performed, first by fax or electronic mail within 24 hours after the test, and then sending the original to him or her by mail within seven (7) days after the test.
- 3.03.1.8 Producing reports as requested relating generally to job site issues. Analyzing the options and making recommendations in the form of a brief study report on the issues concerned.
- 3.03.1.9 Consultant services generally shall be planned in advance based on the Contractor's weekly plans. A schedule shall be agreed on case by case basis when requests are submitted to the Departmental Representative.

3.03.2 **Collaboration with Departmental Representative**

- 3.03.2.1 Unless otherwise specified, the Consultant shall work under the direction of the Departmental Representative, and all reports, certificates and other documents prepared by the Consultant concerning technical matters shall be submitted directly to the Departmental Representative. The Consultant at all times shall give his or her complete collaboration to the Departmental Representative.
- 3.03.2.2 On each job site visit, the Consultant's technician shall complete and get the Departmental Representative to sign the Timesheet form, a model of which is provided in Annex D.
- 3.03.2.3 In order to facilitate communication, all members of the Consultant's personnel shall have a cellular telephone when they are assigned to the job site. The Consultant shall ensure that the Departmental Representative has the cellphone numbers of all Consultant representatives.

3.03.3 **Services excluded**

3.03.3.1 The Consultant shall not be responsible for the services listed below, except as expressly requested by the Departmental Representative:

3.03.3.1.1 supervising Construction Work completed by the Contractor;

3.03.3.1.2 measuring work performed by the Contractor;

3.03.3.1.3 surveying materials delivered to the job site by the Contractor.

3.03.4 **Resources required**

3.03.4.1 Titles and qualifications

When calculating the number of years of relevant experience for the positions listed below, years devoted to acquiring a post-graduate master's or doctoral degree relevant to the Contract may be included, up to a maximum of one (1) year for a master's degree and two (2) years for a doctoral degree.

3.03.4.1.1 Senior Engineer

The Senior Engineer shall have at least 15 years of experience and a university degree in his or her field of specialization or an at least equivalent combination of education and experience. The Senior Engineer shall be a member in good standing of or be licensed by the Ordre des ingénieurs du Québec [order of engineers of Quebec], and shall have the knowledge and ability to develop, approve and coordinate work plans in order to achieve objectives in cost, quality and scheduling. The Senior Engineer directly supervises other engineers and specialists and is able to carry out complex and difficult assignments.

3.03.4.1.2 Intermediate Engineer

The Intermediate Engineer shall have at least seven years of relevant experience and shall be a member in good standing of or be licensed by the Ordre des ingénieurs du Québec [order of engineers of Quebec]. He or she shall have the knowledge and ability to execute a variety of work assignments according to pre-determined procedures. The Intermediate Engineer performs independent studies as an aid to decision making and must use the available information advisedly. The Intermediate Engineer refers unusual or complex decisions to the Senior Engineer.

3.03.4.1.3 Senior Technician

The Senior Technician shall have at least 10 years of relevant experience and a post-secondary collegial diploma in his or her field of specialization or an at least equivalent combination of education and experience. The Senior Technician plans, organizes and coordinates a part of a project requiring the application of extensive technical knowledge.

3.03.4.2 The Consultant shall supply all the human resources required to execute the Contract. These resources include but are not limited to the positions outlined below.

3.03.4.2.1 Project Engineer

- 3.03.4.2.1.1 The Project Engineer bears full responsibility for delivery of the Consultant services.
- 3.03.4.2.1.2 The Project Engineer is the only person authorized to represent the Consultant; all reports, certificates and other documents prepared by the Consultant in execution of the Contract shall bear his or her signature.
- 3.03.4.2.1.3 The Project Engineer also shall be authorized to receive, on behalf of the Consultant, any notice, authorization, order, directive, decision or other communication which may be given to the Consultant under the Contract.
- 3.03.4.2.1.4 The Project Engineer shall have the following qualifications at a minimum:
 - 3.03.4.2.1.4.1 be a Senior Engineer having at least 15 years of experience in design or supervision and in quality assurance on related construction work;
 - 3.03.4.2.1.4.2 have the knowledge and ability required to adequately assume the responsibilities and obligations entailed in executing the Contract.
- 3.03.4.2.1.5 The Project Engineer has to be rapidly reachable to resolve technical and administrative problems requiring immediate attention.

3.03.4.2.2 Assistant Project Engineer

- 3.03.4.2.2.1 Under the direct supervision of the Project Engineer, the Assistant Project Engineer is responsible for the day-to-day coordination of the delivery of the Consultant services.
- 3.03.4.2.2.2 The Assistant Project Engineer shall assist the Project Engineer in all technical and administrative activities under the Contract. However, the Assistant Project Engineer cannot be substituted for the Project Engineer, who is the only person authorized to engage in official communication with the Canada. The Assistant Project Engineer nonetheless may act as Senior Engineer, irrespective of the field or fields of specialization.
- 3.03.4.2.2.3 The Assistant Project Engineer shall have the following qualifications at a minimum:
 - 3.03.4.2.2.3.1 be a Senior Engineer, having at least 15 years of relevant experience in design or supervision and in quality assurance on related construction work;
 - 3.03.4.2.2.3.2 have the knowledge and ability required to adequately assume the responsibilities and obligations entailed in executing the Contract.
- 3.03.4.2.2.4 The Assistant Project Engineer has to be reachable without delay at any time by a simple telephone call, seven (7) days a week and 24 hours a day. In the event of an emergency, the Assistant Project Engineer shall ensure that he or she or a member of his or her team is able to arrive at the job site within approximately one (1) hour.

3.03.4.2.3 Personnel required: concrete work

- 3.03.4.2.3.1 Personnel assigned to quality assurance for concrete work operations shall consist of:

- 3.03.4.2.3.1.1 a Senior Engineer who is a materials specialist and qualified to perform the services described in clause 3.03.1.1, including but not limited to verifying concrete mix formulas and supervising the collection of samples and core samples;
- 3.03.4.2.3.1.2 the person or persons assigned to quality assurance for concrete mixes and concrete placement at the job site shall be Senior Technicians and specialists in materials and in quality assurance of concrete work (at the job site or plant), including the collection of samples and core samples and relevant expertise in concrete mixes and placement by mobile plant;
- 3.03.4.2.3.1.3 laboratory staff qualified to perform all the relevant tests and analysis as required.
- 3.03.4.2.4 Personnel required: bituminous pavement and waterproof membrane work
- 3.03.4.2.4.1 The personnel assigned to quality assurance for the placement of bituminous pavement and waterproof membranes shall consist of:
 - 3.03.4.2.4.1.1 a Senior Engineer who is a materials specialist and qualified to perform the services described in clause 3.03.1.2, including but not limited to verifying bituminous mix formulas and waterproof membranes and supervising the collection of samples and core samples;
 - 3.03.4.2.4.1.2 the person or persons assigned to quality assurance for the placement of bituminous pavement and waterproof membranes at the job site shall be Senior Technicians, specialists in materials and in the placement of bituminous pavement and waterproof membranes and in the collection of samples and core samples;
 - 3.03.4.2.4.1.3 laboratory staff qualified to perform all the relevant tests and analyses as required.
- 3.03.4.2.5 Personnel required: fabrication and assembly of steel elements
- 3.03.4.2.5.1 The personnel assigned to quality assurance for the fabrication and assembly of steel elements shall consist of:
 - 3.03.4.2.5.1.1 a Senior Engineer who is a materials specialist and qualified to perform the services described in clause 3.03.1.3, including but not limited to verifying the tensile, compressive and shear characteristics of steel elements;
 - 3.03.4.2.5.1.2 the person or persons assigned to quality assurance during the fabrication and assembly of steel elements shall be Senior Technicians and specialists in materials and in the verification of the tensile, compressive and shear characteristics of steel elements;
 - 3.03.4.2.5.1.3 laboratory staff qualified to perform all the relevant tests and analysis as required.
- 3.03.4.2.6 Personnel required: stripping and applying paint and other coatings on steel
- 3.03.4.2.6.1 The personnel assigned to quality assurance for stripping and applying paint and other coatings on steel shall consist of:

- 3.03.4.2.6.1.1 a Senior Engineer who is certified by NACE, materials specialist, and qualified to perform the services described in clause 3.03.1.4, including but not limited to verifying stripping products, galvanic/resin and epoxy/urethane paint systems, galvanization and metallic coatings, and supervising the collection of samples;
 - 3.03.4.2.6.1.2 the person or persons assigned to quality assurance during stripping and painting work at the job site or plant shall be Senior Technicians and specialists in the application of galvanic/resin and epoxy/urethane paint systems and in the verification of the thickness of galvanic and metallic coatings and shall be certified by NACE;
 - 3.03.4.2.6.1.3 laboratory staff qualified to perform all the relevant tests and analysis as required.
- 3.03.4.2.7 Personnel required: non-destructive testing of steel
- 3.03.4.2.7.1 The personnel assigned to non-destructive testing on steel for quality assurance of welding and galvanic and metallic coatings work shall consist of:
 - 3.03.4.2.7.1.1 a Senior Engineer who is a certified level 3 welding inspector in accordance with standard CSA W178.2-F08, Certification of Welding Inspectors, or CAN/CGSB-48.9712-2006/ISO 9712:2005 standard, Qualification and Certification of Non-Destructive Testing Personnel, materials specialist, and qualified to perform the services described in clause 3.03.1.5, including but not limited to verifying the welds of steel assemblies and supervising tests;
 - 3.03.4.2.7.1.2 the person or persons assigned to quality assurance during the welding of steel assemblies work shall be Senior Technicians and specialists in materials and in non-destructive testing for ultrasound, radiography, magnetic particle and liquid penetrant tests, and shall be a certified level 2 welding inspector in accordance with standard CSA W178.2-F08, Certification of Welding Inspectors, or CAN/CGSB-48.9712-2006/ISO 9712:2005 standard, Qualification and Certification of Non-Destructive Testing Personnel;
 - 3.03.4.2.7.1.3 laboratory staff qualified to perform all the relevant tests and analysis as required.
- 3.03.4.2.8 Personnel required: pavement foundation work
- 3.03.4.2.8.1 The personnel assigned to quality assurance for pavement foundations work shall consist of:
 - 3.03.4.2.8.1.1 a Senior Engineer who is a materials specialist and qualified to perform the services described in clause 3.03.1.6, including but not limited to verifying the compactness of foundation materials, verifying granulometry and water content in samples of crushed aggregate, and supervising the collection of samples;

- 3.03.4.2.8.1.2 the person or persons assigned to quality assurance during the placement of pavement foundations at the job site shall be a Senior Technician who is a materials specialist and qualified to verify the compactness of foundation materials and to collect samples;
- 3.03.4.2.8.1.3 laboratory staff qualified to perform all the relevant tests and analysis as required.
- 3.03.4.2.9 Personnel required: environmental work
- 3.03.4.2.9.1 The personnel assigned to quality assurance for environmental work shall consist of:
 - 3.03.4.2.9.1.1 a Senior Engineer who is a specialist in the management of contaminated soils which may contain waste materials and hazardous waste materials, and qualified to perform the services described in clause 3.03.1.7, including but not limited to analyzing the characteristics of toxic and leachable substances and supervising the collection of soil samples;
 - 3.03.4.2.9.1.2 the person or persons assigned to environmental work during the excavation and setting aside of contaminated soils shall be Senior Technicians who are specialists in environmental work and have at least 10 years of experience in the supervision of contaminated soils excavation, chemical analysis and the collection of samples of contaminated soil.

3.03.5 **Logistics**

- 3.03.5.1 The Consultant shall supply all the physical resources required to perform the Contract. These resources include but are not limited to the following:
 - 3.03.5.1.1 all apparatus and equipment required to perform the services at the job site, plant, laboratory or other location;
 - 3.03.5.1.2 all accessory apparatus and equipment required, such as drilling equipment, generators, coring equipment, saws, scales, etc.;
 - 3.03.5.1.3 all products, materials and consumables used in the performance of the services;
 - 3.03.5.1.4 all vehicles and other means required for the transport, loading and offloading of apparatus, equipment, samples, core samples, cylinders, materials, devices and other items;
 - 3.03.5.1.5 all vehicles and other means required for transporting personnel;
 - 3.03.5.1.6 all cellular telephones and other communication devices required by the Consultant's personnel to perform the services;
 - 3.03.5.1.7 all equipment and materials needed for the safety of its personnel and the public and for compliance with the requirements of applicable safety laws and regulations.

3.03.6 Accreditation

3.03.6.1 The Consultant and its subcontractors shall be certified under the latest version of ISO 9001:2008 standard and shall hold all certificates of registration, accreditation and authorization and others as required to perform the inspections, sample collections, analysis and tests required under the Contract in accordance with the specified standards.

3.03.7 Services provided by Canada

3.03.7.1 Canada will not provide to the Consultant any labour, materials, equipment or tools.

3.04 CONSULTANT SERVICES SCHEDULE

3.04.1 The Consultant shall commence provision of its services on August 1, 2013, or on the day following receipt of written notice of the award of the Contract by Canada, whichever comes later.

3.04.2 Construction Work shall be executed mainly during the period from August 2013 to June 2015.

3.04.3 Construction Work will potentially be performed according to a specific schedule so that the Consultant must be available at any time of the day or night and on any day of the week.

3.04.4 Unless indicated otherwise, all services required under this Contract shall be completed on or before June 30, 2015.

3.05 SUPPLEMENTARY CONDITIONS

3.05.1 Independence and absence of conflict of interest

3.05.1.1 The Consultant shall remain independent at all times and shall avoid any situation in which it may derive a personal benefit, whether direct or indirect, actual or potential. Without limiting the scope of the foregoing, the Consultant shall not have any interest, be it financial or otherwise, with the Contractor, any member of the consortium which constitutes the Contractor, or a subcontractor or a supplier of the Contractor.

3.05.1.2 The Consultant shall avoid any situation in which it is in a conflict of interest.

3.05.1.3 Immediately upon realizing that its independence is at risk or that it is in a conflict of interest situation, the Consultant shall advise Canada thereof and ask Canada if it authorizes the Consultant to continue with its Contract. Canada will then decide what action is to be taken in view of the circumstances.

3.05.1.4 The Consultant's obligations under clauses 3.05.1.1, 3.05.1.2 and 3.05.1.3 above apply also to any subcontractor hired by the Consultant to perform part of its Contract.

3.05.2 Safety measures

3.05.2.1 Without restricting in any way the requirements prescribed by manufacturers of materials and by the various codes and laws governing workplace health and safety, the Consultant shall supply all protective and safety devices and take all actions necessary to safeguard its employees and those of the Departmental Representative, Canada as well as the public.

- 3.05.2.2 The Consultant shall comply with all applicable provisions of the provincial Code and the *Canada Labour Code* (health and safety) relating to workplace health and safety.
- 3.05.2.3 Before commencing performance, the Consultant shall be aware of the accident prevention practices in effect on the property of JCCBI, and shall enforce those practices which apply to the professional services to which this document relates. Documentation on these practices will be provided to the Consultant at the startup meeting.
- 3.05.2.4 At the job site, the Contractor shall provide quality control and shall assume the responsibility of principal contractor within the meaning of the *Act respecting occupational health and safety* of Quebec. The Consultant shall, with respect to the delivery of its own services, comply with the Contractor's workplace health and safety and accident prevention program.
- 3.05.2.4.1 The Consultant however may be required to perform services outside the job site, in which case it shall comply with the applicable prevention and safety program;
- 3.05.2.5 If a worker is required to work in what can be considered a closed area or confined space within the meaning of the *Safety code for the construction industry* of Quebec (R.R.Q., c. S-2.1, r.6, section 3.2.1 – Work in a closed area) and the *Canada Occupational Health and Safety Regulations, Part XI – Confined spaces*, the Consultant shall so advise the Departmental Representative in advance and provide him or her with information concerning work procedures, contaminant monitoring and emergency procedures. Personnel required to work in a closed area/confined space shall have received the relevant training and certification prior to the inspection.
- 3.05.2.5.1 The Consultant shall submit to Canada for review its own procedure for work in closed areas/confined spaces prior to the commencement of work and shall provide all equipment prescribed in its procedure.
- 3.05.2.5.2 The Consultant shall prepare and ensure the enforcement and continuance of a prevention and safety program and the enforcement of the procedures for work in closed areas/confined spaces.
- 3.05.2.6 The Consultant shall ensure that no damage is caused to the property of JCCBI or to public or private property.
- 3.05.2.7 Employees of and visitors to the Consultant are prohibited from parking private vehicles on the property of JCCBI except in places designated by the Departmental Representative.
- 3.05.3 Environmental protection**
- 3.05.3.1 The Consultant shall comply with all applicable federal, provincial, municipal or other laws, regulations, codes, orders, directives and policies respecting environmental protection.
- 3.05.3.2 The Consultant shall take all measures necessary to protect the environment and to avoid all forms of pollution.
- 3.05.4 Protecting existing utilities and equipment**
- 3.05.4.1 Various utilities are installed in the areas where the Construction Work will take place. These utilities include:

- 3.05.4.1.1 Commission des services électriques de Montréal [Montreal electric power authority];
- 3.05.4.1.2 Bell Canada: communication lines;
- 3.05.4.1.3 Vidéotron, Telus Communications (Québec) and others: communication lines;
- 3.05.4.1.4 Hydro-Québec and Câble Axion Digitel: electric power and communication lines;
- 3.05.4.1.5 Ministère des transports du Québec (MTQ) [Quebec department of transport]: power and communication lines;
- 3.05.4.1.6 Verdun borough: power lines, drains and bicycle path.
- 3.05.4.2 The Consultant shall at all times take the measures required to adequately protect utilities and equipment in or near its work area from damage, loss or service outage.
- 3.05.4.3 Any damage, loss or service outage arising out of or resulting from the Consultant's activities or a lack of protection shall be immediately repaired or replaced by the owner of said facilities or by Canada at the expense of the Consultant.
- 3.05.5 Subcontracting**
 - 3.05.5.1 More generally, the Consultant shall be able to provide all the services that are the subject of this Contract. However, the Consultant may subcontract-out certain expert services or special tests.
 - 3.05.5.2 The Consultant shall indicate on the Technical Proposal Form (section 4) the Contract activities that it intends to subcontract-out and the name and qualifications of each subcontractor.
 - 3.05.5.3 During execution of the Contract, if for reasons beyond the Consultant's control it must subcontract with suppliers other than those named in its technical proposal, the Consultant shall submit a written request to Canada to replace the subcontractors concerned. This request shall identify the proposed supplier for the subcontract, its qualifications and the services that the Consultant intends to subcontract to it.
- 3.05.6 Requests for information**
 - 3.05.6.1 All requests for information concerning the Contract or the Construction Work from any print or electronic media or from persons not involved in the Construction Contracts shall be forwarded to Canada without delay.
- 3.05.7 Signs**
 - 3.05.7.1 With the exception of signs for identification purposes as required by legislation or by the Contract, the Consultant shall not be permitted to post any sign, advertisement or poster on the property of JCCBI without the prior written authorization of JCCBI.
- 3.05.8 Advertising**
 - 3.05.8.1 If the Consultant wishes to make an advertisement relating to the Contract, it shall first submit the proposal to Canada for approval. Without restricting the scope of the foregoing, this paragraph applies to all advertising media, such as radio, television, newspapers, magazines and other printed matter, be it on the property of JCCBI or elsewhere. It also applies to visits to the job site and presentations on the Internet.

3.06 METHOD OF REMUNERATION

- 3.06.1 Remuneration for professional services provided by the Consultant may be determined on an hourly rate basis for the number of hours worked, a unit price basis or a cost-plus basis. The Consultant shall refer to the Pricing Table for the applicable method of remuneration.
- 3.06.2 The amounts entered in the 6th column of the Pricing Table, headed "Total price," shall include but shall not be limited to all costs for labour, equipment, materials, writing reports, physical resources and incidental expenses, as well as expenses for travel, meals and accommodation incurred in providing any services for the applicable items in accordance with trade practice and with the Contract, except where a specific item is provided for expenses;
- 3.06.2.1 unless indicated otherwise, all labour elements that constitute a payment item or part of a payment item shall include but shall not be limited to:
- 3.06.2.1.1 the base salary of the employee;
 - 3.06.2.1.2 increases in the base salary where applicable;
 - 3.06.2.1.3 any premiums, indemnities and allowances, including premiums for hours of overtime work, except items for 4, 50 and 96 – *Senior technicians*;
 - 3.06.2.1.4 payroll taxes;
 - 3.06.2.1.5 employee benefits (or any benefit having monetary value), including costs related to group insurance plans and supplementary retirement plans;
 - 3.06.2.1.6 lost or unproductive time, including time spent in travel, waiting and failed tests;
 - 3.06.2.1.7 costs related to the supply, operation and maintenance of equipment, apparatus, tools, instruments, accessories, clothing, safety devices and other devices used for personnel in providing the services;
 - 3.06.2.1.8 personnel travel costs, except those covered by items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.2.1.9 insurance costs, including general liability insurance, automobile liability insurance, marine liability insurance (if applicable), professional liability insurance and employment injury insurance as indicated in this Contract;
 - 3.06.2.1.10 costs related to the use of information processing equipment and associated hardware and software by personnel in providing the services;
 - 3.06.2.1.11 costs for administrative support, including secretarial services for the preparation of reports, reproduction of documents and communication costs;
 - 3.06.2.1.12 overhead;
 - 3.06.2.1.13 all other costs related to the provision of services under the Contract by the Consultant's personnel, including general job site expenses;
 - 3.06.2.1.14 all equipment, tools, clothing and devices required by the Consultant's personnel for the provision of services under the Contract;

- 3.06.2.1.15 profit.
- 3.06.2.2 Unless otherwise indicated, all equipment elements that constitute a payment item or part of a payment item shall include but shall not be limited to:
 - 3.06.2.2.1 costs for loading, offloading, transporting, installing, uninstalling, cleaning or other elements, irrespective of the location where they are incurred;
 - 3.06.2.2.2 all fuels (or other forms of energy) and lubricants required to operate equipment;
 - 3.06.2.2.3 all equipment maintenance to keep equipment in good repair and operating order;
 - 3.06.2.2.4 costs for the replacement of faulty or worn parts, including normal wear and tear;
 - 3.06.2.2.5 costs related to the supply of equipment operators;
 - 3.06.2.2.6 costs related to any loss or damage of equipment;
 - 3.06.2.2.7 equipment insurance costs;
 - 3.06.2.2.8 all taxes, levies and fees, be they local, municipal, provincial or federal, charged in respect of equipment during the period of use for purposes of the Contract;
 - 3.06.2.2.9 general job site expenses;
 - 3.06.2.2.10 overhead;
 - 3.06.2.2.11 profit.
- 3.06.2.3 Unless otherwise indicated, all elements of material that constitute a payment item or part of a payment item shall include but shall not be limited to:
 - 3.06.2.3.1 the purchase price of the material;
 - 3.06.2.3.2 all taxes, levies and fees charged on the material, be they local, municipal, provincial or federal;
 - 3.06.2.3.3 costs for loading, offloading, transporting, packing or other elements;
 - 3.06.2.3.4 costs related to any loss or damage of materials;
 - 3.06.2.3.5 insurance costs;
 - 3.06.2.3.6 general job site expenses;
 - 3.06.2.3.7 overhead;
 - 3.06.2.3.8 profit.
- 3.06.3 The Consultant shall submit to Canada for approval the price of any new category of work not provided for in the Pricing Table before undertaking any new work. Canada reserves the right to call for proposals from other test laboratories for any category of work not provided for in the Pricing Table and to have such new work performed by another Consultant.

- 3.06.4 Where remuneration is to be made on a cost-plus basis, the following provisions shall apply:
- 3.06.4.1 costs will be paid based on cost plus 10% markup for overhead and profit plus 5% for coordination costs, for a total of 15%.
- 3.06.5 The payment items for this Contract are as described below.
- 3.06.5.1 Items 1, 47 and 93 – Project Engineer
- 3.06.5.1.1 These items shall be remunerated based on an hourly rate for the number of hours actually worked by the Project Engineer assigned to the Contract as directed by the Departmental Representative.
- 3.06.5.1.2 The hourly rates bid for these items shall include all elements required for the performance of the duties of the Project Engineer, including but not limited to the following:
- 3.06.5.1.2.1 costs for secretarial services and drawings for the preparation of reports and forms;
- 3.06.5.1.2.2 the time and travel expenses of the Project Engineer, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*.
- 3.06.5.1.3 The work of the Project Engineer, as directed by the Departmental Representative, consists in but is not limited to attending meetings, preparing studies and reports, commenting on mix formulas, providing technical opinions, preparing weekly and monthly forms, and submitting all reports to the Departmental Representative as required. The Project Engineer also shall coordinate the technical personnel assigned to the job site or plant, as well as the laboratory tests.
- 3.06.5.1.4 These items shall not include the engineering services included in items 7 to 43, 53 to 89 and 99 to 135.
- 3.06.5.2 Items 2, 48 and 94 – Assistant Project Engineer
- 3.06.5.2.1 These items shall be remunerated based on an hourly rate for the number of hours actually worked by the Assistant Project Engineer assigned to the Contract as directed by the Departmental Representative.
- 3.06.5.2.2 The hourly rates bid for these items shall include all elements required for the performance of the duties of Assistant Project Engineer, including but not limited to the following:
- 3.06.5.2.2.1 costs for secretarial services and drawings for the preparation of reports and forms;
- 3.06.5.2.2.2 the time and travel expenses of the Assistant Project Engineer, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*.

- 3.06.5.2.3 The work of the Assistant Project Engineer consists in but is not limited to assisting the Project Engineer. Accordingly, the Assistant Project Engineer, as directed by the Departmental Representative, shall be required to attend meetings, aid in preparing studies and reports, aid in commenting on mix formulas and on technical opinions, and aid in preparing weekly and monthly forms and other reports to be submitted to the Departmental Representative. The Assistant Project Engineer also shall participate in the coordination of the technical personnel assigned to the job site or plant, as well as the laboratory tests.
- 3.06.5.2.4 These items shall not include the engineering services included in items 7 to 43, 53 to 89 and 99 to 135.
- 3.06.5.3 Items 3, 49 and 95 – Senior Engineers
- 3.06.5.3.1 These items will be remunerated based on an hourly rate for the number of hours actually worked by Senior Engineers assigned to the Contract for road foundations, for cement concrete, for bituminous pavement and waterproof membranes, for steel elements, for stripping, painting and other coatings on steel, for non-destructive testing of steel (certified in accordance with *CAN/CGSB 48.9712-2006/ISO 9712:2005 or CSA W178.2-F08*), and for environmental matters as directed by the Departmental Representative. The same hourly rate shall apply to all Senior Engineers for each of the years 2013, 2014 and 2015.
- 3.06.5.3.2 The hourly rates bid for these items shall include all elements required for the performance of the duties of Senior Engineer, including but not limited to the following:
- 3.06.5.3.2.1 costs for secretarial services and drawings for the preparation of reports and forms;
- 3.06.5.3.2.2 the time and travel expenses of the Senior Engineers, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*.
- 3.06.5.3.3 The work of the Senior Engineers, as directed by the Departmental Representative, consists in but is not limited to preparing studies and reports and providing technical opinions on matters related to cement concrete, bituminous pavement, characteristics of metals and other fields.
- 3.06.5.3.4 These items shall not include the engineering services included in items 7 to 43, 53 to 89 and 99 to 135.
- 3.06.5.4 Items 4, 50 and 96 – Senior Technicians
- 3.06.5.4.1 These items shall be remunerated based on an hourly rate for the number of hours actually worked by Senior Technicians assigned to the Contract for road foundations, for cement concrete, for bituminous pavement and waterproof membranes, for steel elements, for stripping, painting and other coatings on steel, and for environmental matters as directed by the Departmental Representative. The same hourly rate shall apply to all Senior Technicians assigned to each position for each of the years 2013, 2014 and 2015.

- 3.06.5.4.2 The hourly rates bid for these items shall include all elements required for the performance of the duties of Senior Technicians for cement concrete, for bituminous pavement and waterproof membranes, for steel elements, for stripping, painting and other coatings on steel, and for environmental matters, assigned to provide services at the job site or plant, including but not limited to the following:
- 3.06.5.4.2.1 the provision of instruments required to inspect the quality of work, such as thermometers, instruments for measuring the specific gravity of fluids, slump test cones and other instruments as required, and the time and travel expenses of the Senior Technicians, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.4.2.2 the equipment and materials required.
- 3.06.5.4.3 The work of the Senior Technicians for cement concrete, bituminous pavement and waterproof membranes, steel elements, stripping, painting and other coatings on steel, and environmental matters, as directed by the Departmental Representative, consists in but is not limited to inspecting the quality of work by means of tests at the job site or plant or other tasks that they are assigned to.
- These technicians shall also collect samples and core samples and submit to the Departmental Representative relevant comments regarding the work in progress.
- 3.06.5.4.4 These items shall not include the engineering services included in items 7 to 43, 53 to 89 and 99 to 135.
- 3.06.5.5 Items 5, 51 and 97 – Senior Technicians – Overtime
- 3.06.5.5.1 These items will be remunerated based on an hourly rate for the number of hours actually worked overtime by Senior Technicians assigned to services at the job site or plant for road foundations, for cement concrete, for bituminous pavement and waterproof membranes, for steel elements, for stripping, painting and other coatings on steel, and for environmental matters as directed by the Departmental Representative. The same hourly rate shall apply to all Senior Technicians assigned to each position for each of the years 2013, 2014 and 2015.
- 3.06.5.5.2 Overtime means hours worked on the weekend (between Friday midnight and 5 a.m. Monday) or on holidays.
- 3.06.5.5.3 The hourly rates applicable for these items shall represent the hourly rates for Item 4 – *Senior Technicians* (for year 2013) or Item 50 – *Senior Technicians* (for year 2014) or Item 96 – *Senior Technicians* (for year 2015), as applicable, multiplied by 1.5. The hourly rates shall include all elements described in clause 3.06.5.44 Items 4, 50 and 96 – *Senior Technicians*.
- 3.06.5.5.4 These items shall not include the engineering services included in items 7 to 43, 53 to 89 and 99 to 135.

3.06.5.6 Items 6, 52 and 98 – Senior Technicians – Non-destructive testing of steel

3.06.5.6.1 These items will be remunerated based on an hourly rate for the number of hours actually worked by Senior Technicians assigned to services at the job site or plant for non-destructive testing of steel (certified in accordance *with CAN/CGSB 48.9712-2006/ISO 9712:2005 or CSA W178.2-F08*) as directed by the Departmental Representative. The same hourly rate shall apply to all Senior Technicians assigned to each position for each of the years 2013, 2014 and 2015.

3.06.5.6.2 The hourly rates bid for these items shall include all elements required for the performance of the duties of Senior Technicians for non-destructive testing of steel assigned to provide services at the job site or plant, including but not limited to the following:

3.06.5.6.2.1 the provision of equipment required to inspect the quality of work, using magnetic particle, liquid penetrant, radiography or ultrasound tests, and other equipment as required, and the time and travel expenses of the Senior Technicians for non-destructive testing of steel, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

3.06.5.6.2.2 the equipment and materials required.

3.06.5.6.3 The work of Senior Technicians for non-destructive testing of steel, as directed by the Departmental Representative, consists in but is not limited to qualitative inspections by non-destructive testing of work involving the cutting, piercing, assembly and welding of steel elements at the job site or plant, or other tasks that they are assigned to. These technicians shall also collect samples, as applicable, and submit to the Departmental Representative relevant comments regarding the work in progress.

3.06.5.6.4 These items shall not include the engineering services included in items 7 to 43, 53 to 89 and 99 to 135.

3.06.5.7 Items 7, 53 and 99 – Test of compressive strength of cylindrical concrete samples

3.06.5.7.1 Tests of the compressive strength of cylindrical concrete samples shall be measured for payment purposes according to the number of tests, for the number of compression tests performed under the Contract.

3.06.5.7.2 The unit prices bid for these items shall include but shall not be limited to the following:

3.06.5.7.2.1 all labour, equipment and materials required to perform the laboratory testing of the compressive strength of a concrete cylinder in accordance with *CAN/CSA-A23.2-9C, Compressive Strength of Cylindrical Concrete Samples*, during regular working hours and overtime hours on Saturdays, Sundays or holidays;

3.06.5.7.2.2 supplying the standard mould;

3.06.5.7.2.3 curing;

3.06.5.7.2.4 preparing the cylinder for testing;

3.06.5.7.2.5 time and travel expenses to pick up the cylinder at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

- 3.06.5.7.2.6 preparing the test report;
- 3.06.5.7.2.7 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.7.2.8 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.8 Items 8, 54 and 100 – Preservation of cylinder for subsequent testing (as required)
 - 3.06.5.8.1 Preservation of cylinders of cement concrete for subsequent testing (as required) shall be measured for payment purposes based on the unit number of cylinders preserved.
 - 3.06.5.8.2 The preservation period of a cylinder of cement concrete shall vary from one to 48 months.
 - 3.06.5.8.3 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.8.3.1 all labour, equipment and materials required to preserve the cylinder;
 - 3.06.5.8.3.2 supplying the standard mould;
 - 3.06.5.8.3.3 curing of the cylinder;
 - 3.06.5.8.3.4 time and travel expenses to pick up the cylinder at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*.
- 3.06.5.9 Items 9, 55 and 101 – Test of compressive strength of concrete core samples
 - 3.06.5.9.1 Tests of the compressive strength of concrete core samples shall be measured for payment purposes based on the number of tests, for the number of compression tests performed under the Contract.
 - 3.06.5.9.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.9.2.1 all labour, equipment and materials required to perform the laboratory testing of the compressive strength of concrete core samples in accordance with CAN/CSA-A23.2-14C, *Obtaining and Testing Drilled Cores For Compressive Strength Testing*, during regular working hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.9.2.2 preparing the ends of the core sample for testing by sawing;
 - 3.06.5.9.2.3 time and travel expenses to pick up core samples at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.9.2.4 preparing the test report;
 - 3.06.5.9.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
 - 3.06.5.9.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.

3.06.5.10 Items 10, 56 and 102 – Compression testing of three mortar cubes

3.06.5.10.1 Compression testing of a set of three mortar cubes shall be measured for payment purposes based on the number of compression tests of sets of three mortar cubes, for the number of compression tests performed under the Contract.

3.06.5.10.2 The unit prices bid for these items shall include but shall not be limited to the following:

3.06.5.10.2.1 all labour, equipment and materials required to perform the laboratory testing of the compressive strength of a set of three mortar cubes in accordance with CAN/CSA-A5/A8/A362-93, *Portland Cement – Blended Hydraulic Cement* or ASTM C109 / C109M – 11a *Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Samples)*, during regular working hours and overtime hours on Saturdays, Sundays or holidays;

3.06.5.10.2.2 preparing the set of three (3) cubes of mortar for testing;

3.06.5.10.2.3 curing the set of three (3) cubes of mortar;

3.06.5.10.2.4 time and travel expenses to pick up the set of three cubes of mortar at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

3.06.5.10.2.5 preparing the test report;

3.06.5.10.2.6 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;

3.06.5.10.2.7 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.

3.06.5.11 Items 11, 57 and 103 – Determination of relative density and absorptivity of coarse aggregate

3.06.5.11.1 Determination of the relative density and absorptivity of coarse aggregate shall be measured for payment purposes based on the number of analyses, for the number of analyses of relative density and absorptivity of coarse aggregate performed under the Contract.

3.06.5.11.2 The unit prices bid for these items shall include but shall not be limited to the following:

3.06.5.11.2.1 all labour, equipment and materials required to perform the laboratory analysis of the relative density and absorptivity of a sample of coarse aggregate in accordance with BNQ-2560-067, *Granulats – Détermination de la densité et de l'absorptivité du gros granulat* [Quebec standard 2560-067 – determination of relative density and absorptivity of coarse aggregate], during regular working hours and overtime hours on Saturdays, Sundays or holidays;

3.06.5.11.2.2 preparing the sample for analysis;

3.06.5.11.2.3 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.4 Items 44, 90 and 136 – *Long-range travel expenses*;

3.06.5.11.2.4 preparing the analysis report;

- 3.06.5.11.2.5 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
- 3.06.5.11.2.6 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.12 Items 12, 58 and 104 – Chloride ion penetration test per ASTM C-1202-10
- 3.06.5.12.1 Tests of chloride ion penetration in accordance with ASTM C-1202-10, *Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration* shall be measured for payment purposes based on the number of tests, for the number of penetration tests performed under the Contract.
- 3.06.5.12.2 The unit prices bid for these items shall include but shall not be limited to the following:
- 3.06.5.12.2.1 all labour, equipment and materials required to perform the laboratory testing of chloride ion penetration in accordance with ASTM C-1202-10, *Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration*, during regular working hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.12.2.2 preparing the sample for chloride ion penetration testing;
- 3.06.5.12.2.3 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.12.2.4 preparing the test report;
- 3.06.5.12.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.12.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.13 Items 13, 59 and 105 – Determination of water-soluble chloride ion content in hardened grout or concrete
- 3.06.5.13.1 Determination of water-soluble chloride ion content in hardened grout or concrete shall be measured for payment purposes based on the number of tests, for the number of tests of water-soluble chloride ion content performed under the Contract.
- 3.06.5.13.2 The unit prices bid for these items shall include but shall not be limited to the following:
- 3.06.5.13.2.1 all labour, equipment and materials required to perform the laboratory testing of the water-soluble chloride ion content in hardened grout or concrete in accordance with CAN/CSA-A23.2-4B, *Sampling and determination of water-soluble chloride ion content in hardened grout or concrete*, during regular working hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.13.2.2 preparing the sample for determination of water-soluble chloride ion content;
- 3.06.5.13.2.3 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.13.2.4 preparing the test report;

- 3.06.5.13.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.13.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.14 Items 14, 60 and 106 – Compression testing of mortar/epoxy capsule
- 3.06.5.14.1 Compression testing of mortar/epoxy capsules shall be measured for payment purposes based on the number of tests, for the number of compression tests performed under the Contract.
- 3.06.5.14.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.14.2.1 all work required to perform the compression test on a mortar/epoxy capsule (cylindrical container 3 cm in diameter and 5 cm in length, such as a cylindrical 35 mm photographic film can);
 - 3.06.5.14.2.2 all labour, equipment and materials required to perform the compression test on a mortar/epoxy capsule in accordance with ASTM D-695M-08, Standard Test Method for Compressive Properties of Rigid Plastics, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.14.2.3 curing the sample, which shall be kept in a humid environment from removal from the job site until the test;
 - 3.06.5.14.2.4 time and travel expenses to pick up the capsule at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.14.2.5 preparing the test report;
 - 3.06.5.14.2.6 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
 - 3.06.5.14.2.7 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.15 Items 15, 61 and 107 – Testing core samples by tensile load (epoxy and mortar)
- 3.06.5.15.1 Tests of core samples by tensile load (epoxy and mortar) shall be measured for payment purposes based on the number of tests, for the number of tensile load tests performed under the Contract.
- 3.06.5.15.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.15.2.1 all work required to perform the tensile load test on core samples (epoxy and mortar);
 - 3.06.5.15.2.2 all labour, equipment and materials required to perform the tensile load test on core samples (epoxy and mortar) in accordance with CAN/CSA-A23.2-6B, Method of Test to Determine Adhesion by Tensile Load, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.15.2.3 curing the sample, which shall be kept in a humid environment from removal from the job site until the test;

- 3.06.5.15.2.4 time and travel expenses to pick up the core sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.15.2.5 preparing the test report;
- 3.06.5.15.2.6 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.15.2.7 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.16 Items 16, 62 and 108 – Determining petrographic number of aggregates
- 3.06.5.16.1 Determination of the petrographic number of aggregates shall be remunerated based on an hourly rate for the number of hours actually worked by the Senior Engineer assigned to determine petrographic numbers.
- 3.06.5.16.2 The unit prices bid for these items shall include but shall not be limited to the following:
- 3.06.5.16.2.1 all labour, equipment and materials required to perform laboratory tests to determine the petrographic number of aggregates in accordance with BNQ 2560-900, *Granulats – Détermination du nombre pétrographique* [Quebec standard 2560-900, aggregates – determining petrographic number], during regular workings hours and overtime hours on Saturday, Sunday or holidays;
- 3.06.5.16.2.2 time and travel expenses to pick up the aggregate at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.16.2.3 preparing the test report;
- 3.06.5.16.2.4 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.16.2.5 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.17 Items 17, 63 and 109 – Resistance of concrete to rapid freeze/thaw cycles
- 3.06.5.17.1 Testing the resistance of concrete to rapid freeze/thaw cycles shall be measured for payment purposes based on the number of tests, for the number of resistance tests performed under the Contract.
- 3.06.5.17.2 The unit prices bid for these items shall include but shall not be limited to the following:
- 3.06.5.17.2.1 all labour, equipment and materials required to test the resistance of concrete or mortar to rapid freeze/thaw cycles in accordance with ASTM C666/C666M-03(2008), Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing (1 prism, 300 cycles), during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.17.2.2 time and travel expenses to pick up the prism at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.17.2.3 preparing the test report;

- 3.06.5.17.2.4 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.17.2.5 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.18 Items 18, 64 and 110 – Scaling resistance of concrete surfaces to de-icing salts
 - 3.06.5.18.1 Testing the scaling resistance of concrete surfaces to de-icing salt shall be measured for payment purposes based on the number of tests, for the number of resistance tests performed under the Contract.
 - 3.06.5.18.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.18.2.1 all labour, equipment and materials required to perform tests of the scaling resistance of concrete surfaces to de-icing salts (50 cycles per test sample) in accordance with ASTM C-672M-03, *Standard Test Method for Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals*, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.18.2.2 time and travel expenses to pick up the test sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.18.2.3 preparing the test report;
 - 3.06.5.18.2.4 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
 - 3.06.5.18.2.5 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.19 Items 19, 65 and 111 – Microscopical determination of parameters of the air-void system in hardened concrete
 - 3.06.5.19.1 Microscopical determination of parameters of the air-void system in hardened concrete shall be measured for payment purposes based on the number of tests, for the number of microscopical determination tests performed under the Contract.
 - 3.06.5.19.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.19.2.1 all labour, equipment and materials required to perform the microscopical determination of parameters of the air-void system in a plate of hardened concrete in accordance with ASTM C-457-11, *Standard Test Method for Microscopical Determination of Parameters of the Air-Void System in Hardened Concrete*, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.19.2.2 preparing the concrete slab, including sawing, polishing and testing;
 - 3.06.5.19.2.3 time and travel expenses to pick up the plate at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.19.2.4 preparing the test report;

- 3.06.5.19.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.19.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.20 Items 20, 66 and 112 – Testing core sample of bituminous concrete (gross relative density and thickness measurement)
 - 3.06.5.20.1 Tests on core samples of bituminous concrete (gross relative density and thickness measurement) shall be measured for payment purposes based on the number of tests, for the number of tests on core samples of bituminous concrete performed under the Contract.
 - 3.06.5.20.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.20.2.1 all labour, equipment and materials required to perform the laboratory testing of core samples of bituminous concrete (gross relative density and thickness measurement) in accordance with NQ 2300-040, *Mélanges bitumineux – Détermination de la densité brute de mélanges bitumineux compactés* [Quebec standard 2300-040, bituminous mixtures – determination of gross density of compacted bituminous mixtures], during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.20.2.2 time and travel expenses to pick up the core sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.20.2.3 preparing the core sample for testing;
 - 3.06.5.20.2.4 preparing the test report;
 - 3.06.5.20.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
 - 3.06.5.20.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.21 Items 21, 67 and 113 – Complete analysis of (type I) bituminous concrete mix
 - 3.06.5.21.1 Complete analyses of (type I) bituminous concrete mixes shall be measured for payment purposes based on the number of analyses, for the number of complete analyses performed under the Contract.
 - 3.06.5.21.2 The unit prices bid for these items shall include but shall not be limited to the following:

- 3.06.5.21.2.1 all labour, equipment and materials required to perform the complete laboratory analysis of (type I) bituminous concrete mixes in accordance with NQ 2300-040, *Mélanges bitumineux – Détermination de la densité brute de mélanges bitumineux compactés* [Quebec standard 2300-040, bituminous mixtures – determination of gross density of compacted bituminous mixtures]; NQ 2300-045, *Mélanges bitumineux – Détermination de la densité maximale* [Quebec standard 2300-045, bituminous mixtures – determination of maximum density]; NQ 2300-060, *Mélanges bitumineux – Méthode « Marshall » de détermination de la résistance à la déformation d'éprouvettes* [Quebec standard 2300-060, bituminous mixtures – Marshall method for determination of test sample resistance to deformation]; NQ 2300-100, *Mélanges bitumineux – Détermination de la teneur en bitume* [Quebec standard 2300-100, bituminous mixtures – determination of bitumen content]; NQ 2300-110, *Mélanges bitumineux – Détermination de la masse du filler dans le produit de l'extraction* [Quebec standard 2300-110, bituminous mixtures – determination of filler mass in extraction product]; and NQ 2300-350, *Mélanges bitumineux – Analyse granulométrique des granulats* [Quebec standard 2300-350, bituminous mixtures – analysis of grain size distribution of aggregate], during regular workings hours and overtime hours on Saturdays, Sundays or holidays. The analysis shall include grain size distribution, bitumen content, percentage of filler, Rice relative density, gross relative density, Marshall stability, and creep;
- 3.06.5.21.2.2 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.21.2.3 preparing the analysis report;
- 3.06.5.21.2.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
- 3.06.5.21.2.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.22 Items 22, 68 and 114 – Analysis of grade of bitumen used in bituminous concrete
- 3.06.5.22.1 Analyses of the grade of bitumen used in bituminous concrete shall be measured for payment purposes based on the number of analyses, for the number of analyses of bitumen grade performed under the Contract.
- 3.06.5.22.2 The unit prices bid for these items shall include but shall not be limited to the following:
- 3.06.5.22.2.1 all labour, equipment and materials required to perform the laboratory analysis of the grade of bitumen used in bituminous concrete, during regular workings hours and overtime hours on Saturday, Sunday or holidays;
- 3.06.5.22.2.2 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.22.2.3 preparing the analysis report;
- 3.06.5.22.2.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;

3.06.5.22.2.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.

3.06.5.23 Items 23, 69 and 115 – Testing for rutting resistance

3.06.5.23.1 Tests to determine the rutting resistance of bituminous concrete shall be measured for payment purposes based on the number of tests, for the number of rutting resistance laboratory tests performed under the Contract.

3.06.5.23.2 The unit prices bid for these items shall include but shall not be limited to the following:

3.06.5.23.2.1 determining the procedure for performing the test;

3.06.5.23.2.2 all labour, equipment and materials required to perform the laboratory testing of a sample of bituminous concrete in accordance with AFNOR P 98-253-1, *Déformation permanente des mélanges hydrocarbonés; Partie 1: Essai d'orniérage* [French standard P 98-253-1, permanent deformation of bituminous mixtures, part 1 – rutting test] and AFNOR P 98-250-2, *Préparation des mélanges hydrocarbonés; Partie 2: Compactage des plaques* [French standard P 98-250-2, preparation of bituminous mixtures, part 2 – compacting plates], during regular workings hours and overtime hours on Saturdays, Sundays or holidays;

3.06.5.23.2.3 preparing the sample for testing;

3.06.5.23.2.4 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

3.06.5.23.2.5 preparing the test report;

3.06.5.23.2.6 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;

3.06.5.23.2.7 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.

3.06.5.24 Items 24, 70 and 116 – Testing bituminous concrete mixture with gyratory shear tester LC26-003

3.06.5.24.1 Tests of bituminous concrete mixtures with a gyratory shear tester LC26-003 shall be measured for payment purposes based on the number of tests, for the number of tests using a gyratory shear tester performed under the Contract.

3.06.5.24.2 The unit prices bid for these items shall include but shall not be limited to the following:

3.06.5.24.2.1 all labour, equipment and materials required to perform the laboratory testing of a sample of bituminous concrete using a gyratory shear tester, including measurement of maximum density, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;

3.06.5.24.2.2 preparing the sample for testing;

3.06.5.24.2.3 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

- 3.06.5.24.2.4 preparing the test report;
- 3.06.5.24.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.24.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.25 Items 25, 71 and 117 – Testing adhesion of waterproof membrane and bituminous concrete system
 - 3.06.5.25.1 Testing the adhesion of waterproof membrane and bituminous concrete systems shall be measured for payment purposes based on the number of tests, for the number of adhesion tests performed under the Contract.
 - 3.06.5.25.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.25.2.1 determining the procedure for performing the test;
 - 3.06.5.25.2.2 all equipment and materials required at the job site, including materials to be installed prior to the placement of the waterproof membrane and bituminous concrete, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.25.2.3 all labour, equipment and materials required to perform adhesion tests on the waterproof membrane and bituminous concrete system;
 - 3.06.5.25.2.4 time and travel expenses to go to the job site, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.25.2.5 preparing the test report;
 - 3.06.5.25.2.6 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
 - 3.06.5.25.2.7 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.26 Items 26, 72 and 118 – Laboratory testing of soil compaction
 - 3.06.5.26.1 Laboratory tests of soil compaction shall be measured for payment purposes based on the number of tests, for the number of compaction tests performed under the Contract.
 - 3.06.5.26.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.26.2.1 all labour, equipment and materials required to perform the laboratory testing of soil compaction in accordance with ASTM D-698-07e1, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort, during regular workings hours and overtime hours on Saturdays, Sundays or holidays.
 - 3.06.5.26.2.2 determining a reference curve (maximum dry density) for each test of borrow fill;
 - 3.06.5.26.2.3 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

- 3.06.5.26.2.4 preparing the test report;
- 3.06.5.26.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.26.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.27 Items 27, 73 and 119 – Aggregate – Determination of water content by drying
- 3.06.5.27.1 The determination of water content in aggregate on receipt by drying shall be measured for payment purposes based on the number of analyses, for the number of analyses of water content performed under the Contract.
- 3.06.5.27.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.27.2.1 all labour, equipment and materials required to perform laboratory testing for the determination of water content in aggregate on receipt by drying in accordance with *BNQ-2560-200, Granulats – Détermination par séchage de la teneur en eau* [Quebec standard 2560-200, aggregate – determination of water content by drying], during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.27.2.2 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.27.2.3 preparing the analysis report;
 - 3.06.5.27.2.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
 - 3.06.5.27.2.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.28 Items 28, 74 and 120 – Moisture density gauge
- 3.06.5.28.1 Use of moisture density gauges shall be remunerated based on days of use, for the number of days during which the moisture density gauge assigned to the job site was actually used.
- 3.06.5.28.2 The unit prices bid for this item shall include but shall not be limited to the provision of a moisture density gauge and all accessories required to perform tests at the job site, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.29 Items 29, 75 and 121 – Grain size distribution analysis of sub-base or base material
- 3.06.5.29.1 Grain size distribution analyses of sub-base or base material shall be measured for payment purposes based on the number of analyses, for the number of grain size distribution analyses performed under the Contract.
- 3.06.5.29.2 The unit prices bid for these items shall include but shall not be limited to the following:

- 3.06.5.29.2.1 all labour, equipment and materials required to perform the laboratory analysis of grain size distribution on a sample of sub-base or base material in accordance with ASTM D-422-63 (2007), Standard Test Method for Particle-Size Analysis of Soils, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.29.2.2 determining a grain size curve for each grain size analysis;
- 3.06.5.29.2.3 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.29.2.4 preparing the analysis report;
- 3.06.5.29.2.5 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
- 3.06.5.29.2.6 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.30 Items 30, 76 and 122 – Grain size analysis of borrow aggregate
- 3.06.5.30.1 Grain size analyses of borrow aggregate shall be measured for payment purposes based on the number of analyses, for the number of grain size analyses performed under the Contract.
- 3.06.5.30.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.30.2.1 all labour, equipment and materials required to perform the laboratory analysis of grain size distribution on a sample of borrow aggregate in accordance with ASTM D-422-63 (2007), Standard Test Method for Particle-Size Analysis of Soils, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.30.2.2 determining a grain size curve for each grain size analysis;
 - 3.06.5.30.2.3 time and travel expenses to pick up the sample at the job site or the plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.30.2.4 preparing the analysis report;
 - 3.06.5.30.2.5 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
 - 3.06.5.30.2.6 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.31 Items 31, 77 and 123 – Core drilling crew
- 3.06.5.31.1 The core drilling crew shall be remunerated based on the number of 8-hour days at the job site, for the number of 8-hour days during which the core drilling crew assigned to the job site actually worked.
- 3.06.5.31.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.31.2.1 all labour required, including but not limited to the operator and his or her helper;

- 3.06.5.31.2.2 supplying a core drill with truck, core drill rods and all accessories required (including generator and diamond drills) to take core samples of soil at the job site, to a depth not exceeding 5 m, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.31.2.3 time and travel expenses for core drilling, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.31.2.4 verbally reporting core drilling results to the Departmental Representative at the job site;
- 3.06.5.31.2.5 preparing the core drilling report;
- 3.06.5.31.2.6 sending the core drilling report to the Departmental Representative by fax or e-mail within 24 hours of coring;
- 3.06.5.31.2.7 sending the original core drilling report to the Departmental Representative by regular mail within seven (7) days of coring.
- 3.06.5.32 Items 32, 78 and 124 – Tensile testing of anchor pins at job site
- 3.06.5.32.1 Tensile testing of anchor pins at the job site shall be measured for payment purposes based on the number of tests, for the number of tensile tests performed under the Contract.
- 3.06.5.32.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.32.2.1 all labour, equipment and materials required to perform tensile testing of anchor pins at the job site in accordance with Annex E of CAN/CSA-A23.3-04, *Design of Concrete Structures*, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.32.2.2 time and travel expenses to perform the tests, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.32.2.3 preparing the test report;
 - 3.06.5.32.2.4 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
 - 3.06.5.32.2.5 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.33 Items 33, 79 and 125 – Elongation testing of structural steel and reinforcing steel
- 3.06.5.33.1 Elongation testing of structural steel and reinforcing steel shall be measured for payment purposes based on the number of tests, for the number of elongation tests performed under the Contract.
- 3.06.5.33.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.33.2.1 all work required to prepare and work the sample for steel elongation testing. Steel pieces shall be 25 mm or less in thickness, and reinforcing steel bars shall be size 25M or smaller;

- 3.06.5.33.2.2 all labour, equipment and materials required to perform steel elongation testing (determination of ultimate tensile strength, elastic limit and percentage elongation) in accordance with CAN/CSA-G40.20/G40.21-F04, (R2009) *Rolled or Welded Structural Quality Steel/Structural Quality Steels*; ASTM E8/E8M-08, *Standard Test Methods for Tension Testing of Metallic Materials*; ASTM A370-08b, *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*; and ASTM A615M-09b, *Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement*, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.33.2.3 interpreting the results and preparing tables of test results, including photographs of the sample;
- 3.06.5.33.2.4 preparing the test report;
- 3.06.5.33.2.5 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
- 3.06.5.33.2.6 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.33.3 The pieces of steel will be delivered to the Consultant's premises by the personnel of the Departmental Representative.
- 3.06.5.34 Items 34, 80 and 126 – Core drilling machine
- 3.06.5.34.1 Supply of a core drilling machine shall be measured for payment purposes based on the number of hours, for the number of hours during which the core drilling machine was actually used.
- 3.06.5.34.2 The unit prices bid for these items shall include but shall not be limited to the following: supplying the core drilling machine, core drill rods and all accessories required (including generator and diamond drills) to take core samples of existing concrete at the job site in accordance with CAN/CSA-A23.2-14C, *Obtaining and Testing Drilled Cores For Compressive Strength Testing*, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.35 Items 35, 81 and 127 – Brass mould with platens and securing devices for collecting cubes of mortar
- 3.06.5.35.1 Supply of a brass mould with platens and securing devices for collecting cubes of mortar shall be remunerated based on the number of months, for the number of months during which the brass mould with platens and securing devices was actually used at the job site.
- 3.06.5.35.2 The unit prices bid for these items shall include but shall not be limited to supplying a brass mould and all the accessories required to collect cubes of mortar at the job site. The mould shall be in good condition and shall conform to the applicable standards.
- 3.06.5.36 Items 36, 82 and 128 – Toughness (Charpy) testing of plate steel sample
- 3.06.5.36.1 Toughness (Charpy) tests shall be measured for payment purposes based on the number of tests, for the number of toughness tests performed under the Contract.

- 3.06.5.36.2 The unit prices bid for these items shall include but shall not be limited to the following:
- 3.06.5.36.2.1 all labour, materials, equipment and consumables required to perform toughness (Charpy) testing on a metallic piece in accordance with ASTM E23 - 07ae1, *Standard Test Methods for Notched Bar Impact Testing of Metallic Materials* and ASTM A370 – 11a, *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.36.2.2 calibration;
 - 3.06.5.36.2.3 preparing the piece for testing;
 - 3.06.5.36.2.4 time and travel expenses to go to the job site or plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.36.2.5 preparing the test report;
 - 3.06.5.36.2.6 sending the test report to the Departmental Representative by fax or e-mail within 24 hours after the test;
 - 3.06.5.36.2.7 sending the original test report to the Departmental Representative by regular mail within seven (7) days after the test.
- 3.06.5.37 Items 37, 83 and 129 – Chemical analysis of plate steel sample
- 3.06.5.37.1 Chemical analyses of plate steel samples shall be measured for payment purposes based on the number of analyses, for the number of chemical analyses performed under the Contract.
 - 3.06.5.37.2 The unit prices bid for these items shall include but shall not be limited to the following:
 - 3.06.5.37.2.1 all labour, materials, equipment and consumables required to perform chemical analyses on metallic pieces in accordance with ASTM E415 – 08, *Standard Test Method for Atomic Emission Vacuum Spectrometric Analysis of Carbon and Low-Alloy Steel* and ASTM E350 - 95(2005)e1, *Standard Test Methods for Chemical Analysis of Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron*, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.37.2.2 calibration;
 - 3.06.5.37.2.3 preparing the piece for analysis;
 - 3.06.5.37.2.4 time and travel expenses to go to the job site or plant, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.37.2.5 preparing the analysis report;
 - 3.06.5.37.2.6 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
 - 3.06.5.37.2.7 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.

3.06.5.38 Items 38, 84 and 130 – Determination of C₁₀-C₅₀ petroleum hydrocarbon content in soil

3.06.5.38.1 Determination of C₁₀-C₅₀ petroleum hydrocarbon content shall be measured for payment purposes based on the number of analyses, for the number of analyses performed under the Contract.

3.06.5.38.2 The chemical analyses shall be performed by a laboratory accredited for the parameters analyzed by the Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs [department of sustainable development, environment, wildlife and parks] of Quebec for the parameters analyzed.

3.06.5.38.3 The unit prices bid for these items shall include but shall not be limited to the following:

3.06.5.38.3.1 all labour, equipment and materials required to perform laboratory analyses to determine C₁₀-C₅₀ petroleum hydrocarbon content, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;

3.06.5.38.3.2 preparing the sample for analysis and time and travel expenses to pick up the sample at the job site, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

3.06.5.38.3.3 characterizing the sample and preparing the analysis report;

3.06.5.38.3.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;

3.06.5.38.3.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.

3.06.5.39 Items 39, 85 and 131 – Determination of polycyclic aromatic hydrocarbon (PAH) content in soils

3.06.5.39.1 Determination of polycyclic aromatic hydrocarbon (PAH) content shall be measured for payment purposes based on the number of analyses, for the number of analyses performed under the Contract.

3.06.5.39.2 The chemical analyses shall be performed by a laboratory accredited for the parameters analyzed by the Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs [department of sustainable development, environment, wildlife and parks] of Quebec.

3.06.5.39.3 The unit prices bid for these items shall include but shall not be limited to the following:

3.06.5.39.3.1 all labour, equipment and materials required to perform laboratory analyses to determine polycyclic aromatic hydrocarbon (PAH) content, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;

3.06.5.39.3.2 preparing the sample for analysis and time and travel expenses to pick up the sample at the job site, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;

- 3.06.5.39.3.3 characterizing the sample and preparing the analysis report;
- 3.06.5.39.3.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
- 3.06.5.39.3.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.40 Items 40, 86 and 132 – Determination of metals content (Ag, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn and Zn) in soils
- 3.06.5.40.1 Determination of metal contents (Ag, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn and Zn) shall be measured for payment purposes based on the number of analyses, for the number of analyses performed under the Contract.
- 3.06.5.40.2 The chemical analyses shall be performed by a laboratory accredited for the parameters analyzed by the Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs [department of sustainable development, environment, wildlife and parks] of Quebec.
- 3.06.5.40.3 The unit prices bid for these items shall include but shall not be limited to:
 - 3.06.5.40.3.1 all labour, equipment and materials required to perform the laboratory determination of metal contents (Ag, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn and Zn), during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
 - 3.06.5.40.3.2 preparing the sample for analysis and time and travel expenses to pick up the sample at the job site, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
 - 3.06.5.40.3.3 characterizing the sample and preparing the analysis report;
 - 3.06.5.40.3.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
 - 3.06.5.40.3.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.41 Items 41, 87 and 133 – Determination of volatile organic compound (VOC) content in soils
- 3.06.5.41.1 Determination of volatile organic compound (VOC) content shall be measured for payment purposes based on the number of analyses, for the number of analyses performed under the Contract.
- 3.06.5.41.2 The chemical analyses shall be performed by a laboratory accredited for the parameters analyzed by the Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs [department of sustainable development, environment, wildlife and parks] of Quebec.
- 3.06.5.41.3 The unit prices bid for these items shall include but shall not be limited to:
 - 3.06.5.41.3.1 all labour, equipment and materials required to perform the laboratory determination of volatile organic compound (VOC) content, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;

- 3.06.5.41.3.2 preparing the sample for analysis and time and travel expenses to pick up the sample at the job site, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.41.3.3 characterizing the sample and preparing the analysis report;
- 3.06.5.41.3.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
- 3.06.5.41.3.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.42 Items 42, 88 and 134 – Analyses of samples of waste materials for characteristics of toxic and leachable materials
- 3.06.5.42.1 Determination of metals (As, Ba, B, Cd, Cr, Hg, Pb, Se), total fluorides, nitrates (N) + nitrites (N), and nitrites (N-NO₂-) content shall be measured for payment purposes based on the number of analyses, for the number of analyses performed under the Contract.
- 3.06.5.42.2 The chemical analyses shall be performed by a laboratory accredited for the parameters analyzed by the Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs [department of sustainable development, environment, wildlife and parks] of Quebec in accordance with Regulation respecting hazardous materials(R.R.Q., CQ-2,r32)
- 3.06.5.42.3 The unit prices bid for these items shall include but shall not be limited to:
- 3.06.5.42.3.1 all labour, equipment and materials required to perform the laboratory determination of metals (As, Ba, B, Cd, Cr, Hg, Pb, Se), total fluorides, nitrates (N) + nitrites (N), and nitrites (N-NO₂-) content, during regular working hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.42.3.2 preparing the sample for analysis and time and travel expenses to pick up the sample at the job site, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.42.3.3 characterizing the sample and preparing the analysis report;
- 3.06.5.42.3.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
- 3.06.5.42.3.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.43 Items 43, 89 and 135 – Water samples Analysis
- 3.06.5.43.1 Determination of content of ammoniacal nitrogen, of suspended matter, of mineral oils and greases, of polycyclic aromatic hydrocarbons (PAH), of metals (Al, Ag, As, Ba, Cd, Cr, Co, Cu, Sn, Fe, Mn, Mo, Ni, Pb, Se, Zn), and of chlorides in water shall be measured for payment purposes based on the number of analyses, for the number of analyses performed under the Contract.

- 3.06.5.43.2 The chemical analyses shall be performed by a laboratory accredited for the parameters analyzed by the Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs [department of sustainable development, environment, wildlife and parks] of Quebec in accordance with the *Règlement 2008-47 sur l'assainissement des eaux de la Communauté métropolitaine de Montréal (CMM)* for disposal in rainwater sewers.
- 3.06.5.43.3 The unit prices bid for these items shall include but shall not be limited to:
- 3.06.5.43.3.1 all labour, equipment and materials required to perform the laboratory determination of the content of ammoniacal nitrogen, of suspended matters, of mineral oils and greases, of polycyclic aromatic hydrocarbons (PAH), of metals (Al, Ag, As, Ba, Cd, Cr, Co, Cu, Sn, Fe, Mn, Mo, Ni, Pb, Se, Zn), and of chlorides in water, during regular workings hours and overtime hours on Saturdays, Sundays or holidays;
- 3.06.5.43.3.2 preparing the sample for analysis and time and travel expenses to pick up the sample at the job site, subject to clause 3.06.5.44 Items 44, 90 and 136 – *Long-range travel expenses*;
- 3.06.5.43.3.3 characterizing the sample and preparing the analysis report;
- 3.06.5.43.3.4 sending the analysis report to the Departmental Representative by fax or e-mail within 24 hours after the analysis;
- 3.06.5.43.3.5 sending the original analysis report to the Departmental Representative by regular mail within seven (7) days after the analysis.
- 3.06.5.44 Items 44, 90 and 136 – Long-range travel expenses
- 3.06.5.44.1 Expenses for travel beyond a 50-km radius from the former Champlain Bridge toll station shall be measured for payment purposes by the kilometre, for the number of round-trip kilometres actually travelled by employees of the Consultant as directed by the Departmental Representative, in accordance with the provisions of the Contract.
- 3.06.5.44.2 The unit prices bid for these items shall include but shall not be limited to the following:
- 3.06.5.44.2.1 all expenses incurred by a member of the Consultant's personnel when, as directed by the Departmental Representative, that member travels from the job site offices to a place located outside a 50-km radius from the former Champlain Bridge toll station, provided that the travel is in a private vehicle or a vehicle rented by the Consultant. Excluded from this provision are expenses for travel between the job site offices and the permanent offices of the Consultant;
- 3.06.5.44.2.2 all the expenses excluding the time spent by the employee in the said travel.

3.06.5.45 Items 45, 91 and 137 – Miscellaneous expenses

3.06.5.45.1 These items are intended for the reimbursement of expenses incurred by the Consultant for labour, equipment, materials and subcontractors with the approval of Canada to perform services at the job site which are accessory to its services and which are not covered by any of Items 1 to 43 for the year 2013, 47 to 89 for the year 2014 or 93 to 135 for the year 2015, such as the temporary use of an excavator or hydraulic breaker, minor job site formwork and concrete placement, installing plates at the job site, etc.

3.06.5.45.2 Payment of these expenses will be at cost plus 15% markup.

3.06.5.45.3 The markup covers overhead, administration, profit and coordination.

3.06.5.45.4 All requests for reimbursement shall include the relevant substantiating documents.

3.06.5.45.5 An allocation of \$15,000.00 for 2013, \$15,000.00 for 2014 and \$2,500.00 for 2015 is provided by Canada for these items. Any of these allocations may be used in whole or in part.

3.06.5.46 Items 46, 92 and 138 – On-demand laboratory services

3.06.5.46.1 The Consultant may be directed by Canada to supply various laboratory services on an on-demand basis. On-demand laboratory services shall be paid at the rates and unit prices bid at Items 1 to 43 for 2013, 47 to 89 for 2014 and 93 to 135 for 2015.

3.06.5.46.2 An allocation of \$7,500.00 for 2013, \$10,000.00 for 2014 and \$2,500.00 for 2015 is provided by Canada for these items. Any of these allocations may be used in whole or in part.

3.06.5.46.3 Reports prepared by the Consultant concerning these items shall be submitted as follows:

3.06.5.46.3.1 analysis report sent to the Departmental Representative by fax or e-mail within 24 hours of the analysis;

3.06.5.46.3.2 original analysis report sent to the Departmental Representative by regular mail within 14 days after the analysis.

3.06.5.46.4 The Consultant shall at all times be able to demonstrate to Canada that any expense incurred by it is justified and that the price paid is fair and reasonable, notably by calling for competitive bids as appropriate, given the amount of the expense and the circumstances.

3.06.5.46.5 The Consultant shall notify Canada in writing when its internal accounting indicates that 80% of the amount allocated for each of these items has been reached.

3.06.5.46.6 The specific tests performed for these items shall enable the Consultant to submit results, failing which the tests shall not be invoiced and will not be paid for.

3.06.5.46.7 The hourly rates and unit prices (invoiced) for 2013 shall be fixed for the entire period involved, i.e., from August 2013 to March 31, 2014. The hourly rates and unit prices (invoiced) for 2014 shall be fixed for the entire period involved, i.e., from April 1, 2014, to March 31, 2015. The hourly rates and unit prices (invoiced) for 2015 shall be fixed for the entire period involved, i.e., from April 1, 2015, to June 30, 2015.

3.07 INVOICING

3.07.1 Invoices shall be submitted on a monthly basis, as work progresses. Invoices shall be submitted using the form entitled "*Consultant's Progress Claim and Progress Estimate*", shown in Annex C, which shall be prepared by Canada based on the Pricing Table. Invoices shall include time and expense logsheets.

3.07.1.1 The supporting documents showing the hours completed shall include but shall not be limited to the information required to complete the "*Timesheet*", to be supplied by Canada, shown in Annex D.

3.07.1.2 The Consultant shall submit an estimate of the progress of the Contract every week on the Contract Management Report form, to be supplied by Canada, shown in Annex E. This form shall be submitted to Canada by electronic mail.

3.07.2 No payment shall be made in respect of any invoice that reflects a change in personnel not approved beforehand by Canada.

3.07.3 No additional work or additional expenses shall be undertaken unless agreed to in writing by the Consultant and Canada before the said work is done or the said expense is incurred. Consequently, no payment shall be made in respect of any additional work performed or any additional expense incurred unless the said work or expense is authorized by Canada in writing.

3.07.4 The Consultant shall notify Canada in writing when its internal accounting indicates that 50% of the amount of its financial proposal for each year has been reached.

3.07.5 The Consultant also shall notify Canada in writing when its internal accounting indicates that 75% of the amount of its financial proposal for each year has been reached.

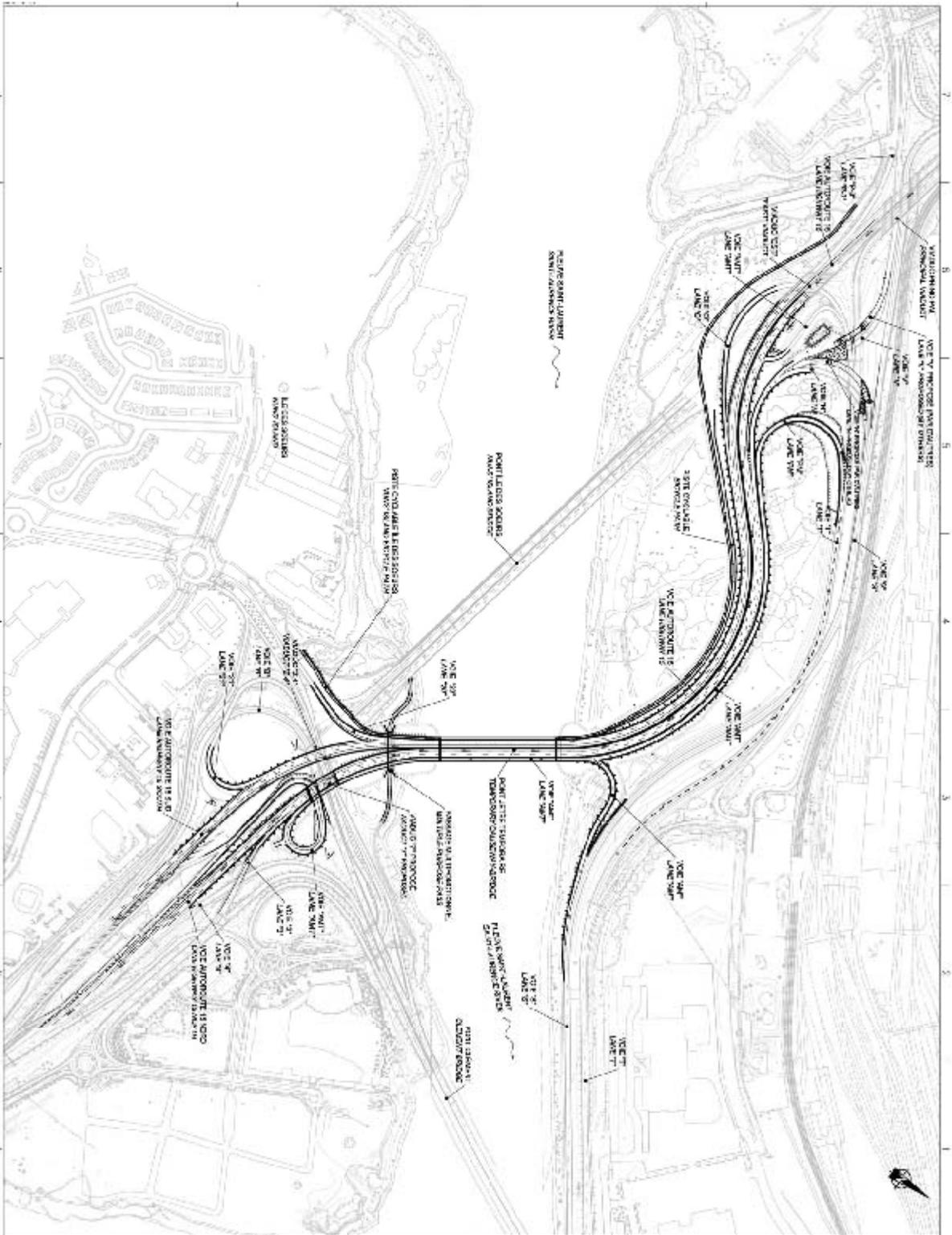
3.07.6 Changes in service pricing

3.07.6.1 No amount prescribed in the Contract for reimbursable expenses, services or fees shall be changed unless agreed to by Canada and the Consultant. If the parties cannot come to an agreement, Canada shall determine the amount of the change and adjust the price of the services.

END OF SECTION

ANNEX A

GENERAL LAYOUT – TEMPORARY CAUSEWAY-BRIDGE



ANNEX B

GENERAL LAYOUT – CHAMPLAIN BRIDGE AND APPROACHES

APPENDIX C

CONSULTANT'S PROGRESS CLAIM AND PROGRESS ESTIMATE

NOM DE L'ADJUDICATAIRE	SUCCESSFUL BIDDER
1234 Boul. ABC	1234 Any Street
Ville (Québec)	City, Quebec
VALIDER CE NUMÉRO AVAN	VALIDATE THIS NUMBER BEFORE
LES PONTS JACQUES CARTIER ET CHAMPLAIN INC	JACQUES CARTIER AND CHAMPLAIN BRIDGES INC.
NOM DE L'INGÉNIEUR	ENGINEER'S NAME
À VENIR	TO FOLLOW
0,00 \$	\$0.00



DEMANDE D'ACCOMPTE ET D'AVANCEMENT DES TRAVAUX DU CONSULTANT
CONSULTANTS PROCESS QUANTITATIVE PROGRESS ESTIMATE

Client		Activité par contrat N° / Activité par contrat N°/XXX				Équipement N° / Processus/ma N° /						
NON DE L'ADJUDICATAIRE						Période de démarrage / Période de fin : A / B / C						
Pos N°	Description	Quantité	Unité	Valeur	Prix	PÉRIODE DE DÉBUT / PÉRIODE DE FIN		TOTAL ESTIMÉ / PRODUIT		TOTAL ESTIMÉ / PRODUIT		
		(Quantité)	(Unité)			(Quantité)	(Valeur)	(Quantité)	(Valeur)	(Quantité)	(Valeur)	
1	Charge de surveillance	SD	00	Heure	- \$	0	- \$	0	- \$	00	-	- \$
2	Inspecteur senior	SD	00	Heure	- \$	0	- \$	0	- \$	00	-	- \$
3	Inspecteur intermédiaire	SD	00	Heure	- \$	0	- \$	0	- \$	00	-	- \$
4	Kit diagnostic	SD	00	kit	- \$	0	- \$	0	- \$	00	-	- \$
5	Pegs	SD	00	unité	- \$	0	- \$	0	- \$	00	-	- \$
6	Photographies (Utrons)	SD	00	unité	- \$	0	- \$	0	- \$	00	-	- \$
7	Adhésifs	SD	00	feuille	- \$	0	- \$	0	- \$	00	-	- \$

Version 1.1 2019-11-15

NOM DE L'ADJUDICATAIRE	SUCCESSFUL BIDDER
Chargé de surveillance	Lead supervisor
Inspecteur senior	Senior inspector
Inspecteur intermédiaire	Intermediate inspector
Kilométrage	Distance (km)
Repas	Meals
Photographies (12 photos)	Photographs (12)
Autres dépenses	Other expenses
S/O	N/A
Heure	hour
km	km
unité	unit
Forfait	All-inclusive
À VENIR	TO FOLLOW

<u>FEUILLE DE COMPILATION DES HEURES</u>	<u>TIME LOG SHEET</u>
PÉRIODE DU : #VALEUR! AU À VENIR #VALEUR!	PERIOD FROM ... TO TO FOLLOW ...
Consultant	Consultant
NOM DE L'ADJUDICATAIRE	SUCCESSFUL BIDDER
Autorisé par le Contrat No XXXXX	Authorized by Contract No. XXXXX
État d'avancement	Progress estimate
Poste	Item
Désignation	Particulars
Nom	Name
Taux horaire de base	Base hourly rate
Taux horaire majoré	Hourly rate including premium
Cumulatif Précédent	Previous cumulative amount
Semaine se terminant le :	Week ending:
Total de la période	Total for period
Total cumulatif	Cumulative total
Montant période	Amount for period
Montant cumulatif	Cumulative amount
Chargé de surveillance	Lead supervisor
Sous total :	Subtotal:
Inspecteur senior	Senior inspector

SECTION 3

CONTRACT NO.: 61898

TERMS OF REFERENCE

JUNE 10

ANNEX C

Sous total :	Subtotal:
Inspecteur intermédiaire	Intermediate inspector
Sous total :	Subtotal:

FEUILLE DE COMPILATION DES DÉPENSES

PÉRIODE DU: #VALEUR! AU À VENIR #VALEUR!

Consultant: NOM DE L'ADJUDICATAIRE			Autorisé par le Contrat No XXXXX						État d'avancement / Progress estimée 1						
Poste	Désignation	Nom Employé	Cumulatif Précédent	Détail de la période					Facturé dans la semaine se terminant le :					Total de la période	Cumulatif à date
				Description	Pièce	Date dispensée	Unité	Quantité	#VALEUR!	#VALEUR!	#VALEUR!	#VALEUR!	À VENIR		
1,0	Chargé de surveillance		0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
	Sous total :		0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$ (*)	
2,0	Inspecteur senior		0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
	Sous total :		0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$ (*)	
3,0	Inspecteur intermédiaire		0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
			0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$
	Sous total :		0,00 \$						0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$	0,00 \$ (*)	

<u>FEUILLE DE COMPILATION DES DÉPENSES</u>	<u>EXPENSES LOG SHEET</u>
PÉRIODE DU : #VALEUR! AU À VENIR #VALEUR!	PERIOD FROM ... TO TO FOLLOW ...
Consultant	Consultant
NOM DE L'ADJUDICATAIRE	SUCCESSFUL BIDDER
Autorisé par le Contrat No XXXXX	Authorized by Contract No. XXXXX
État d'avancement	Progress estimate
Poste	Item
Désignation	Particulars
Nom Employé	Employee name
Cumulatif Précédent	Previous cumulative amount
Détail de la période	Detail of period
Description	Description
Pièce	Piece
Date dépensée	Date spent
Unité	Unit
Quantité	Quantity
Total de la période	Total for period
Cumulatif à date	Cumulative to date
Chargé de surveillance	Lead supervisor
Sous total :	Subtotal:

SECTION 3
TERMS OF REFERENCE

ANNEX C

CONTRACT NO.: 61898

JUNE 10

Inspecteur senior	Senior inspector
Sous total :	Subtotal:
Inspecteur intermédiaire	Intermediate inspector
Sous total :	Subtotal:

APPENDIX D
TIMESHEET

FEUILLE DE TEMPS

Nom du Laboratoire d'essais								Instructions: 1) La feuille de temps doit être signée par le Surveillant ou le Représentant du Propriétaire au chantier à tous les jours pour être valide.
Nom de l'employé								
Catégorie de l'employé (Ingénieur, Technicien, Préposé, ...)								
Numéro de Contrat du Propriétaire	Date de l'action (aa/mm/jj)	Jour	Heure d'arrivée	Heure de départ	Durée (Heure)	Description de l'activité	Signature du Surveillant ou du Représentant du Propriétaire (PJCCI)	
Total :								

<u>FEUILLE DE COMPILATION DES HEURES</u>	<u>TIME LOG SHEET</u>
PÉRIODE DU : #VALEUR! AU À VENIR #VALEUR!	PERIOD FROM ... TO TO FOLLOW ...
Consultant	Consultant
NOM DE L'ADJUDICATAIRE	SUCCESSFUL BIDDER
Autorisé par le Contrat No XXXXX	Authorized by Contract No. XXXXX
État d'avancement	Progress estimate
Poste	Item
Désignation	Particulars
Nom	Name
Taux horaire de base	Base hourly rate
Taux horaire majoré	Hourly rate including premium
Cumulatif Précédent	Previous cumulative amount
Semaine se terminant le :	Week ending:
Total de la période	Total for period
Total cumulatif	Cumulative total
Montant période	Amount for period
Montant cumulatif	Cumulative amount
Chargé de surveillance	Lead supervisor
Sous total :	Subtotal:
Inspecteur senior	Senior inspector
Sous total :	Subtotal:

SECTION 3
TERMS OF REFERENCE

ANNEX D

CONTRACT NO.: 61898

JUNE 10

Inspecteur intermédiaire	Intermediate inspector
Sous total :	Subtotal:

APPENDIX E
CONTRACT MANAGEMENT REPORT

Contract Management Report



Contrat 61420 / Pont Champlain et approches, Services de laboratoire d'essais (2010)

**RAPPORT DE GESTION CONTRACTUELLE
2010-XX-XX**

DATE D'ÉMISSION :	2010-XX-XX	% BUDGET RÉALISÉ	
PÉRIODE DÉBUTANT LE :	2010-XX-XX	#REF!	
PÉRIODE FINISSANT LE :	2010-XX-XX		
PÉRIODE N° :	1		

Période départ	2010-XX-XX
Période courante	2010-XX-XX
Nombre de période	1

POSTE	DÉSIGNATION	RÉALISÉ	CUMULÉ	RÉALISÉ AU	BUDGET 2009			BUDGET NON UTILISÉ	% RÉALISÉ	PRIX UNITAIRE	HONORAIRES RÉALISÉS AU
		(PÉRIODE)	PRÉCÉDENT	2010-XX-XX	UNITÉS	QUANTITÉS AUTORISÉES	MONTANT				
MAIN-D'ŒUVRE											
	INGÉNIEUR DE PROJET										
1											
	TOTAL	0		0	Heure	275	- \$	275	0%		- \$
	INGÉNIEUR DE PROJET ADJOINT										
2											
	TOTAL	0		0	Heure	325	- \$	325	0%		- \$
	INGÉNIEURS SENIORS										
3.0											
3.1											
3.2											
3.3											
3.4											
3.5											
	TOTAL	0		0	Heure	800	- \$	800	0%		- \$
	TECHNICIENS SENIORS										
4.0											
4.1											
4.2											
4.3											
4.4											
	TOTAL	0		0	Heure	1750	- \$	1 750	0%		- \$
	TECHNICIENS SENIORS - ESSAIS NON DESTRUCTIFS SUR ACIER										
5.0											
5.1											
5.2											
5.3											
5.4											
	TOTAL	0		0	Heure	400	- \$	400	0%		- \$
	ESSAIS SUR MATÉRIAUX	(Essais)	(Essais)	(Essais)		(Essais)		(Essais)			
6	Essai en compression d'un cylindre de béton			0	Essai	750	- \$	750	0%		- \$
7	Conservation d'un cylindre pour essai éventuel (au besoin)			0	Unité de cylindre conservé	1	- \$	1	0%		- \$
8	Essai en compression sur carotte de béton			0	Essai	10	- \$	10	0%		- \$
9	Essai en compression d'un ensemble de trois (3) cubes de coulis			0	Essai d'ensemble de 3 cubes de coulis	120	- \$	120	0%		- \$
10	Détermination de la densité relative et de l'absorptivité du gros granulat			0	Analyse	5	- \$	5	0%		- \$
11	Essai de perméabilité aux ions chlorure selon la norme ASTM C-1202			0	Essai	1	- \$	1	0%		- \$
12	Détermination de la teneur en ions chlorure hydrosolubles dans le béton ou le coulis durci			0	Essai	5	- \$	5	0%		- \$
13	Essai en compression d'une capsule de coulis/époxy			0	Essai	1	- \$	1	0%		- \$
14	Essai de traction directe sur carotte (époxy et coulis)			0	Essai	1	- \$	1	0%		- \$
15	Détermination du nombre pétrographique des granulats			0	Heure	1	- \$	1	0%		- \$
16	Résistance du béton aux cycles de gel et de dégel rapides			0	Essai	1	- \$	1	0%		- \$
17	Résistance à l'écaillage des surfaces de béton aux sels déglacants			0	Essai	1	- \$	1	0%		- \$
18	Détermination microscopique des caractéristiques du réseau de vides d'air du béton durci			0	Essai	1	- \$	1	0%		- \$
19	Essai sur carotte de béton bitumineux (densité relative brute et mesure d'épaisseur)			0	Essai	3	- \$	3	0%		- \$
20	Analyse complète du mélange (type I) de béton bitumineux			0	Analyse	3	- \$	3	0%		- \$
21	Analyse du grade de bitume utilisé dans le béton bitumineux			0	Analyse	3	- \$	3	0%		- \$
22	Essai de résistance à la formation d'ornières			0	Essai	3	- \$	3	0%		- \$
23	Essai sur le mélange de béton bitumineux à la presse de cisaillement giratoire LC26-003			0	Essai	3	- \$	3	0%		- \$
24	Essai d'adhérence du système de membrane d'étanchéité et de béton bitumineux			0	Essai	5	- \$	5	0%		- \$
25	Nucléodensimètre			0	Journée	15	- \$	15	0%		- \$
26	Équipe de forage			0	Journée de huit (8) heures	2	- \$	2	0%		- \$
27	Essai de traction sur goujon d'ancrage au chantier			0	Essai	15	- \$	15	0%		- \$
28	Test d'élongation de l'acier de charpente et de l'acier d'armature			0	Essai	6	- \$	6	0%		- \$
29	Carotteuse			0	Heure	10	- \$	10	0%		- \$
30	Moule en taiton avec plaques et serres pour le prélèvement de cubes de coulis			0	Mois	1	- \$	1	0%		- \$
31	Analyse chimique de résidus de sable			0	Analyse	1	- \$	1	0%		- \$
32	Analyse de détection de solvants dans la peinture			0	Analyse	1	- \$	1	0%		- \$
33	Essai de résilience (Charpy) sur échantillon d'acier en plaque			0	Essai	100	- \$	100	0%		- \$
34	Analyse chimique sur échantillon d'acier en plaque			0	Analyse	6	- \$	6	0%		- \$
35	Frais de déplacement éloigné			0	km	2250	- \$	2 250	0%		- \$
36	Frais divers			0	Provision	10000	- \$	10 000	0%		- \$
Préparé par :										SOUS-TOTAL	- \$
										TAXES	- \$
										TOTAL	- \$

SECTION 3

CONTRACT NO.: 61898

TERMS OF REFERENCE

JUNE 10

ANNEX E

<u>FEUILLE DE COMPILATION DES DÉPENSES</u>	<u>EXPENSES LOG SHEET</u>
PÉRIODE DU : #VALEUR! AU À VENIR #VALEUR!	PERIOD FROM ... TO TO FOLLOW ...
Consultant	Consultant
NOM DE L'ADJUDICATAIRE	SUCCESSFUL BIDDER
Autorisé par le Contrat No XXXXX	Authorized by Contract No. XXXXX
État d'avancement	Progress estimate
Poste	Item
Désignation	Particulars
Nom Employé	Employee name
Cumulatif Précédent	Previous cumulative amount
Détail de la période	Detail of period
Description	Description
Pièce	Piece
Date dépensée	Date spent
Unité	Unit
Quantité	Quantity

SECTION 3
TERMS OF REFERENCE

ANNEX E

CONTRACT NO.: 61898

JUNE 10

Total de la période	Total for period
Cumulatif à date	Cumulative to date
Chargé de surveillance	Lead supervisor
Sous total :	Subtotal:
Inspecteur senior	Senior inspector
Sous total :	Subtotal:
Inspecteur intermédiaire	Intermediate inspector
Sous total :	Subtotal:

5.02 Price Table

YEAR 2013

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Item	Designation	Unit of Measurement	Unit Price*	Estimated Quantity	Total Price**
1	Project Engineer	Hour	\$	400	\$
2	Assistant Project Engineer	Hour	\$	225	\$
3	Senior Engineers	Hour	\$	400	\$
4	Senior Technicians	Hour	\$	2200	\$
5	Senior Technicians - Overtime	Hour	\$	400	\$
6	Senior Technicians - Non-destructive testing of steel	Hour	\$	960	\$
7	Compression testing of a concrete cylinder	Test	\$	200	\$
8	Preservation of a cylinder for future testing (as needed)	Cylinder Unit	\$	5	\$
9	Concrete core compression testing	Test	\$	5	\$
10	Compression testing on a set of three (3) grout cubes	Testing on Set of 3 Grout Cubes	\$	50	\$
11	Determination of the relative density and absorptivity of the coarse aggregate	Analysis	\$	25	\$
12	Chloride ion penetration testing in accordance with ASTM standard C-1202-10	Test	\$	10	\$
13	Determination of water-soluble ion content in concrete or hardened grout	Test	\$	10	\$
14	Compression testing on a grout/epoxy capsule	Test	\$	10	\$
15	Direct tensile bond test on concrete core (epoxy and grout)	Test	\$	10	\$
16	Determination of the petrographic number of the aggregates	Hour	\$	10	\$
17	Resistance of concrete to rapid freeze-thaw cycles	Test	\$	5	\$
18	Resistance to scaling of concrete surfaces due to de-icing salts	Test	\$	5	\$
19	Microscopical determination of air-void system parameters in hardened concrete	Test	\$	5	\$
20	Bituminous concrete core testing (gross relative density and thickness measurement)	Test	\$	1	\$
21	Complete analysis of the (Type 1) bituminous concrete mixture	Analysis	\$	1	\$
22	Analysis of the bitumen grade used in the bituminous concrete	Analysis	\$	1	\$
23	Testing of resistance to the formation of ruts	Test	\$	1	\$
24	LC26-003 Gyrotory shear press testing on the bituminous concrete mixture	Test	\$	1	\$
25	Adhesion testing of the waterproofing membrane system and the bituminous concrete	Test	\$	1	\$
26	Laboratory testing of soil density	Test	\$	50	\$
27	Aggregates - Determination of water content by drying	Analysis	\$	50	\$
28	Nuclear density testing device	Day	\$	150	\$
29	Sieve analysis of the upper or lower base material	Analysis	\$	50	\$
30	Sieve analysis of granular borrow material	Analysis	\$	50	\$
31	Drilling team	Eight (8)-Hour Day	\$	5	\$
32	On-site traction testing on anchor pin	Test	\$	125	\$

5.02 Price Table (cont.)

33	Elongation testing of the structural steel and reinforcing steel	Test	\$	5	\$
34	Core drill	Hour	\$	40	\$
35	Brass mold with plates and clamps for making grout cubes	Mois	\$	5	\$
36	Charpy impact testing on steel plate sample	Test	\$	10	\$
37	Chemical analysis of a sample steel plate	Analysis	\$	5	\$
38	Determination of C ₁₀ -C ₅₀ petroleum hydrocarbon content	Analysis	\$	600	\$
39	Determination of polycyclic aromatic hydrocarbon (PAH) content	Analysis	\$	600	\$
40	Determinaton of metal content (Ag, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn and Zn)	Analysis	\$	600	\$
41	Determination of volatile organic compound (VOC) content - soil	Analysis	\$	25	\$
42	Analyses of samples of waste materials for characteristics of toxic and leachable materials	Analysis	\$	75	\$
43	Analyses of samples of water	Analysis	\$	30	\$
44	Remote travel expenses	km	\$	10000	\$
45	Miscellaneous expenses	Net Cost Markup (Allowance)	-	-	\$ 15 000.00
46	Laboratory services upon request	Allowance (see Specifications)	-	-	\$ 7 500.00

A = Sub-Total Year 2013: \$

YEAR 2014

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Item	Designation	Unit of Measurement	Unit Price*	Estimated Quantity	Total Price**
47	Project Engineer	Hour	\$	500	\$
48	Assistant Project Engineer	Hour	\$	350	\$
49	Senior Engineers	Hour	\$	425	\$
50	Senior Technicians	Hour	\$	4000	\$
51	Senior Technicians - Overtime	Hour	\$	475	\$
52	Senior Technicians - Non-destructive testing of steel	Hour	\$	500	\$
53	Compression testing of a concrete cylinder	Test	\$	250	\$
54	Preservation of a cylinder for future testing	Cylinder Unit	\$	5	\$
55	Concrete core compression testing	Test	\$	5	\$
56	Compression testing on a set of three (3) grout cubes	Testing on Set of 3 Grout Cubes	\$	100	\$
57	Determination of relative density and absorptivity of the coarse aggregate	Analysis	\$	25	\$
58	Chloride ion penetration testing in accordance with ASTM standard C-1202-10	Test	\$	10	\$
59	Determination of water-soluble ion content in concrete or hardened grout	Test	\$	10	\$
60	Compression testing on a grout/epoxy capsule	Test	\$	10	\$
61	Direct tensile bond test on concrete core (epoxy and grout)	Test	\$	10	\$
62	Determination of the petrographic number of the aggregates	Hour	\$	10	\$
63	Resistance of concrete to rapid freeze-thaw cycles	Test	\$	5	\$
64	Resistance to scaling of concrete surfaces due to de-icing salts	Test	\$	5	\$
65	Microscopical determination of air-void system parameters in hardened concrete	Test	\$	5	\$
66	Bituminous concrete core testing (gross relative density and thickness measurement)	Test	\$	20	\$
67	Complete analysis of the (Type 1) bituminous concrete mixture	Analysis	\$	50	\$
68	Analysis of the bitumen grade used in the bituminous concrete	Analysis	\$	15	\$
69	Testing of resistance to the formation of ruts	Test	\$	50	\$
70	LC26-003 Gyrotory shear press testing on the bituminous concrete mixture	Test	\$	10	\$
71	Adhesion testing of the waterproofing membrane system and the bituminous concrete	Test	\$	10	\$
72	Laboratory testing of soil density	Test	\$	50	\$
73	Aggregates - Determination of water content by drying	Analysis	\$	50	\$

5.02 Price Table (cont.)

74	Nuclear density testing device	Day	\$	200	\$
75	Sieve analysis of the upper or lower base material	Analysis	\$	50	\$
76	Sieve analysis of granular borrow material	Analysis	\$	50	\$
77	Drilling team	Eight (8)-Hour Day	\$	5	\$
78	On-site traction testing on anchor pin	Test	\$	125	\$
79	Elongation testing of the structural steel and reinforcing steel	Test	\$	5	\$
80	Core drill	Hour	\$	80	\$
81	Brass mold with plates and clamps for making grout cubes	Month	\$	5	\$
82	Charpy impact testing on steel plate sample	Test	\$	5	\$
83	Chemical analysis of a sample steel plate	Analysis	\$	5	\$
84	Determination of C ₁₀ -C ₅₀ petroleum hydrocarbon content	Analysis	\$	125	\$
85	Determination of polycyclic aromatic hydrocarbon (PAH) content	Analysis	\$	125	\$
86	Determination of metal content (Ag, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn and Zn)	Analysis	\$	125	\$
87	Determination of volatile organic compound (VOC) content - soil	Analysis	\$	20	\$
88	Analyses of samples of waste materials for characteristics of toxic and leachable materials	Analysis	\$	20	\$
89	Analyses of samples of water	Analysis	\$	15	\$
90	Remote travel expenses	km	\$	7500	\$
91	Miscellaneous expenses	Net Cost Markup (Allowance)	-	-	\$ 15 000.00
92	Laboratory services upon request	Allowance (see Specifications)	-	-	\$ 10 000.00

B = Sub-Total Year 2014: \$

YEAR 2015

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Item	Designation	Unit of Measurement	Unit Price*	Estimated Quantity	Total Price**
93	Project Engineer	Hour	\$	180	\$
94	Assistant Project Engineer	Hour	\$	100	\$
95	Senior Engineers	Hour	\$	120	\$
96	Senior Engineers	Hour	\$	440	\$
97	Senior Technicians - Overtime	Hour	\$	120	\$
98	Senior Technicians - Non-destructive testing of steel	Hour	\$	100	\$
99	Compression testing of a concrete cylinder	Test	\$	50	\$
100	Preservation of a cylinder for future testing	Cylinder Unit	\$	2	\$
101	Concrete core compression testing	Test	\$	2	\$
102	Compression testing on a set of three (3) grout cubes	Testing on Set of 3 Grout Cubes	\$	2	\$
103	Determination of relative density and absorptivity of the coarse aggregate	Analysis	\$	5	\$
104	Chloride ion penetration testing in accordance with ASTM standard C-1202-10	Test	\$	2	\$
105	Determination of water-soluble ion content in concrete or hardened grout	Test	\$	2	\$
106	Compression testing on a grout/epoxy capsule	Test	\$	2	\$
107	Direct tensile bond test on a concrete core (epoxy and grout)	Test	\$	2	\$
108	Determination of the petrographic number of the aggregates	Hour	\$	5	\$
109	Resistance of concrete to rapid freeze-thaw cycles	Test	\$	2	\$
110	Resistance to scaling of concrete surfaces due to de-icing salts	Test	\$	2	\$
111	Microscopical determination of air-void system parameters in hardened concrete	Test	\$	1	\$
112	Bituminous concrete core testing (gross relative density and thickness measurement)	Test	\$	5	\$
113	Complete analysis of the (Type 1) bituminous concrete mixture	Analysis	\$	5	\$
114	Analysis of the bitumen grade used in the bituminous concrete	Analysis	\$	5	\$
115	Testing of resistance to the formation of ruts	Test	\$	1	\$

116	LC26-003 Gyratory shear press testing on the bituminous concrete mixture	Test	\$	1	\$
117	Adhesion testing of the waterproofing membrane system and the bituminous concrete	Test	\$	1	\$
118	Laboratory testing of soil density	Test	\$	5	\$
119	Aggregates - Determination of water content by drying	Analysis	\$	5	\$

5.02 Price Table (cont.)

120	Nuclear density testing device	Day	\$	50	\$
121	Sieve analysis of the upper or lower base material	Analysis	\$	5	\$
122	Sieve analysis of granular borrow material	Analysis	\$	5	\$
123	Drilling team	Eight (8)-Hour Day	\$	2	\$
124	On-site traction testing on anchor pin	Test	\$	100	\$
125	Elongation testing of the structural steel and reinforcing steel	Test	\$	1	\$
126	Core drill	Hour	\$	5	\$
127	Brass mold with plates and clamps for making grout cubes	Month	\$	1	\$
128	Charpy impact testing on steel plate sample	Test	\$	1	\$
129	Chemical analysis of a sample steel plate	Analysis	\$	5	\$
130	Determination of C ₁₀ -C ₅₀ petroleum hydrocarbon content	Analysis	\$	5	\$
131	Determination of polycyclic aromatic hydrocarbon (PAH) content	Analysis	\$	5	\$
132	Determination of metal content (Ag, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn and Zn)	Analysis	\$	5	\$
133	Determination of volatile organic compound (VOC) content - soil	Analysis	\$	5	\$
134	Analyses of samples of waste materials for characteristics of toxic and leachable materials	Analysis	\$	5	\$
135	Analyses of samples of water	Analysis	\$	5	\$
136	Remote travel expenses	km	\$	500	\$
137	Miscellaneous expenses	Net Cost Markup (Allowance)	-	-	\$ 2 500.00
138	Laboratory services upon request	Allowance (see Specifications)	-	-	\$ 2 500.00

C = Sub-Total Year 2015:	\$
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D = Sub-Total Year 2012 + Sub-Total Year 2013 (A+B):	\$
E = TPS (5% of D):	\$
F = (TVQ 9.5% of D):	\$
TOTAL G = (D+E+F) (amount not to be exceeded):	\$