INVITATION TO TENDER

Title **RETURN BIDS TO:** Repair of asphalted access roads and modification of a parking lot - Sherbrooke Bid Receiving / Agriculture and Agri-Food Canada Solicitation No. 01B46-16-084 2016-08-24 Agriculture and Agri-Food Canada Eastern Service Centre Client Reference No. Tender Receiving Unit A695 2001 Robert-Bourassa Blvd., Suite 671-TEN File No. Montréal, Quebec H3A 3N2 01B46-16-084 **TENDER TO:** Solicitation Closes: Wednesday, September 7, 2016, at 14:00, EDT. Agriculture and Agri-Food Canada We hereby offer to sell to Her Majesty the Queen in right of F.O.B Canada, in accordance with the terms and conditions set out O Plant Other Destination herein, referred to herein or attached hereto, the construction listed herein and on any attached sheets at the price(s) set out Address Enquiries to: therefor. Samuel Archambault Comments Title: Contracting Officer samuel.archambault@agr.gc.ca Telephone Number Ext. Fax Number 514 315-6139 514 283-1918 Destination Sherbrooke Research and Development Centre 2000 College Street Sherbrooke, Quebec J1M 0C8 Instructions: See Herein **Delivery Required Delivery Offered** October 28, 2016 Vendor / Firm Name and Address Telephone Number Fxt. Fax Number **ISSUING OFFICE** Name and title of person authorized to sign on behalf of Vendor / Firm Agriculture and Agri-Food Canada (type or print) Eastern Service Centre Tender Receiving Unit 2001 Robert-Bourassa Blvd., Suite 671-TEN

Signature



Date

Montréal, Quebec

H3A 3N2

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Appendix "A"

GENERAL INSTRUCTIONS TO BIDDERS

GENERAL INSTRUCTIONS TO BIDDERS

G101	Completion of Bid
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GI01 COMPLETION OF BID

- 1) The bid shall be:
 - (a) submitted on the BID AND ACCEPTANCE FORM provided by AAFC with the bid package or on a clear and legible reproduced copy of such BID AND ACCEPTANCE FORM that must be identical in content and format to the BID AND ACCEPTANCE FORM provided by AAFC;
 - (b) based on the Bid Documents listed in the Special Instructions to Bidders;
 - (c) correctly completed in all respects;
 - (d) signed, with an original signature, by a duly authorized representative of the Bidder; and
 - (e) accompanied by
 - (i) bid security as specified in GI07; and
 - (ii) any other document or documents specified elsewhere in the solicitation where it is stipulated that said documents are to accompany the bid.
- Subject to paragraph 6) of GI10, any alteration to the pre-printed or pre-typed sections of the Bid and Acceptance Form, or any condition or qualification placed upon the bid shall be cause for disqualification. Alterations, corrections, changes or erasures made to statements or figures entered on the Bid and Acceptance Form by the Bidder shall be initialed by the person or persons signing the bid. Alterations, corrections, changes or erasures that are not initialed shall be deemed void and without effect.
- 3) Unless otherwise noted elsewhere in the Bid Documents, facsimile copies of bids are not acceptable.



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GI02 IDENTITY OR LEGAL CAPACITY OF THE BIDDER

- 1) In order to confirm the authority of the person or persons signing the bid or to establish the legal capacity under which the Bidder proposes to enter into Contract, any Bidder who carries on business in other than its own personal name shall, if requested by Canada, provide satisfactory proof of
 - (a) such signing authority; and
 - (b) the legal capacity under which it carries on business;

prior to contract award. Proof of signing authority may be in the form of a certified copy of a resolution naming the signatory(ies) that is (are) authorized to sign this bid on behalf of the corporation or partnership. Proof of legal capacity may be in the form of a copy of the articles of incorporation or the registration of the business name of a sole proprietor or partnership.

GI03 APPLICABLE TAXES

1) "Applicable Taxes" means the Goods and Services Tax (GST), the Harmonized Sales Tax (HST), and any provincial tax, by law, payable by Canada such as, the Quebec Sales Tax (QST) as of April 1, 2013.

GI04 CAPITAL DEVELOPMENT AND REDEVELOPMENT CHARGES

For the purposes of GC1.8 LAWS, PERMITS AND TAXES in the General Conditions of the Contract, only fees or charges directly related to the processing and issuing of building permits shall be included. The Bidder shall not include any monies in the bid amount for special municipal development, redevelopment or other fees or charges which a municipal authority may seek as a prerequisite to the issuance of building permits.

GI05 REGISTRY AND PRE-QUALIFICATION OF FLOATING PLANT

1) Dredges or other floating plant to be used in the performance of the Work must be of Canadian registry. For dredges or other floating plant that are not of Canadian make or manufacture, the Bidder must obtain a certificate of qualification from Industry Canada and this certificate must accompany the bid. Plant so qualified by Industry Canada may be accepted on this project.

GI06 LISTING OF SUBCONTRACTORS AND SUPPLIERS

Notwithstanding any list of Subcontractors that the Bidder may be required to submit as part of the bid, the Bidder shall, within 48 hours of receipt of a notice to do so, submit all information requested in the said notice including the names of Subcontractors and Suppliers for the part or parts of the Work listed. Failure to do so shall result in the disqualification of its bid.

GI07 BID SECURITY REQUIREMENTS

1) The Bidder shall submit bid security with the bid in the form of a bid bond or a security deposit in an amount that is equal to not less than 10 percent of the bid amount. Applicable Taxes shall not be included when calculating the amount of any bid security that may be required. The maximum amount of bid security required with any bid is \$2,000,000.00.

- 2) A bid bond shall be in an approved form http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?
 id=14494§ion=text#appS, properly completed, with original signature(s) and issued by an approved company whose bonds are acceptable to Canada either at the time of solicitation closing or as identified in Treasury Board Appendix L: Acceptable Bonding Companies.
- 3) A security deposit shall be an original, properly completed, signed where required and be either:
 - a bill of exchange, bank draft or money order made payable to the Receiver General for Canada and certified by an approved financial institution or drawn by an approved financial institution on itself; or
 - (b) bonds of, or unconditionally guaranteed as to principal and interest by, the Government of Canada;
- 4) For the purposes of subparagraph 3) (a) of GI07
 - (a) a bill of exchange is an unconditional order in writing signed by the Bidder and addressed to an approved financial institution, requiring the said institution to pay, on demand, at a fixed or determinable future time a sum certain of money to, or to the order of, the Receiver General for Canada;
 - (b) if a bill of exchange, bank draft or money order is certified by or drawn on an institution or corporation other than a chartered bank, it must be accompanied by proof that the said institution or corporation meets at least one of the criteria described in subparagraph 4.c. of Gl07, either by letter or by a stamped certification on the bill of exchange, bank draft or money; and
 - (c) An approved financial institution is:
 - (i) a corporation or institution that is a member of the Canadian Payments Association as defined in the <u>Canadian Payments Act</u>;
 - (ii) a corporation that accepts deposits that are insured, to the maximum permitted by law, by the Canada Deposit Insurance Corporation or the "Autorité des marchés financiers";
 - (iii) a corporation that accepts deposits from the public if repayment of the deposit is guaranteed by Her Majesty the Queen in right of a province;
 - (iv) a corporation, association or federation incorporated or organized as a credit union or co-operative credit society that conforms to the requirements of a credit union which are more particularly described in paragraph 137(6) of the Income Tax Act; or
 - (v) Canada Post Corporation.
- 5) Bonds referred to in subparagraph 3)(b) of GI07 shall be provided on the basis of their market value current at the date of solicitation closing, and shall be:
 - (a) payable to bearer;
 - accompanied by a duly executed instrument of transfer of the bonds to the Receiver General for Canada in the form prescribed by the Domestic Bonds of Canada Regulations; or
 - (c) registered as to principal or as to principal and interest in the name of the Receiver General for Canada pursuant to the Domestic Bonds of Canada Regulations.

- As an alternative to a security deposit an irrevocable standby letter of credit is acceptable to Canada and the amount shall be determined in the same manner as a security deposit referred to above.
- 7) An irrevocable standby letter of credit referred to in paragraph 6) of GI07 shall
 - (a) be an arrangement, however named or described, whereby a financial institution (the "Issuer") acting at the request and on the instructions of a customer (the "Applicant) or on its own behalf.
 - is to make a payment to, or to the order of, the Receiver General for Canada as the beneficiary;
 - (ii) is to accept and pay bills of exchange drawn by the Receiver General for Canada;
 - (iii) authorizes another financial institution to effect such payment or accept and pay such bills of exchange; or
 - (iv) authorizes another financial institution to negotiate against written demand(s) for payment provided that the terms and conditions of the letter of credit are complied with;
 - (b) state the face amount which may be drawn against it;
 - (c) state its expiry date;
 - (d) provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by the Departmental Representative identified in the letter of credit by his/her office;
 - (e) provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face value of the letter of credit;
 - (f) provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007 Revision, ICC Publication No. 600; pursuant to the ICC UCP; a credit is irrevocable even if there is no indication to that effect; and
 - (g) be issued or confirmed, in either official language, by a financial institution which is a member of the Canadian Payments Association and is on the letterhead of the Issuer or Confirmer. The format is left to the discretion of the Issuer or Confirmer.
- 8) Bid security shall lapse or be returned as soon as practical following:
 - the solicitation closing date, for those Bidders submitting non-compliant bids; and
 - (b) the administrative bid review, for those Bidders submitting compliant bids ranked fourth to last on the schedule of bids; and
 - (c) the award of contract, for those Bidders submitting the second and third ranked bids; and
 - (d) the receipt of contract security, for the successful Bidder; or
 - (e) the cancellation of the solicitation, for all Bidders.
- 9) Notwithstanding the provisions of paragraph 8) of GI07 and provided more than three compliant bids have been received, if one or more of the bids ranked third to first is withdrawn or rejected

for whatever reason then Canada reserves the right to hold the security of the next highest ranked compliant bid in order to retain the bid security of at least three valid and compliant bids.

GI08 SUBMISSION OF BID

- The Bid and Acceptance Form, duly completed, and the bid security shall be enclosed and sealed in an envelope provided by the Bidder, and shall be addressed and submitted to the office designated on the INVITATION TO TENDER Form for the receipt of bids. The bid must be received on or before the date and time set for solicitation closing.
- 2) Unless otherwise specified in the Special Instructions to Bidders
 - (a) the bid shall be in Canadian currency;
 - (b) exchange rate fluctuation protection is not offered; and
 - (c) any request for exchange rate fluctuation protection shall not be considered.
- 3) Prior to submitting the bid, the Bidder shall ensure that the following information is clearly printed or typed on the face of the bid envelope:
 - (a) Solicitation Number;
 - (b) Name of Bidder;
 - (c) Return address; and
 - (d) Closing Date and Time.
- 4) Timely and correct delivery of bids is the sole responsibility of the Bidder.

GI09 REVISION OF BID

- A bid submitted in accordance with these instructions may be revised by letter or facsimile provided the revision is received at the office designated for the receipt of bids, on or before the date and time set for the closing of the solicitation. The letter or facsimile shall be on the Bidder's letterhead or bear a signature that identifies the Bidder;
- A revision to a bid that includes unit prices must clearly identify the changes(s) in the unit price(s) and the specific item(s) to which each change applies.
- A letter or facsimile submitted to confirm an earlier revision shall be clearly identified as a confirmation.
- 4) Failure to comply with any of the above provisions shall result in the rejection of the non-compliant revision(s) only. The bid shall be evaluated based on the original bid submitted and all other compliant revision(s).

GI10 REJECTION OF BID

- 1) Canada may accept any bid, whether it is the lowest or not, or may reject any or all bids.
- 2) Without limiting the generality of paragraph 1) of GI10, Canada may reject a bid if any of the following circumstances is present:

- the Bidder, or any employee or subcontractor included as part of the bid, has been convicted under Section 121 ("Frauds on the government" & "Contractor subscribing to election fund"), 124 "Selling or purchasing office"), 380 ("Fraud committed against Her Majesty") or 418 ("Selling defective stores to Her Majesty") of the Criminal Code of Canada, or under paragraph 80(1)(d) ("False entry, certificate or return"), subsection 80(2) ("Fraud against Her Majesty") or Section 154.01 ("Fraud against Her Majesty") of the Financial Administration Act;
- (b) the Bidder's bidding privileges are suspended or are in the process of being suspended;
- (c) the bidding privileges of any employee or subcontractor included as part of the bid are suspended or are in the process of being suspended, which suspension or pending suspension would render that employee or subcontractor ineligible to bid on the Work, or the portion of the Work the employee or subcontractor is to perform;
- the Bidder is bankrupt, or where for whatever reason, its activities are rendered inoperable for an extended period;
- (e) evidence, satisfactory to Canada, of fraud, bribery, fraudulent misrepresentation or failure to comply with any law protecting individuals against any manner of discrimination, has been received with respect to the Bidder, any of its employees or any subcontractor included as part of its bid;
- (f) evidence satisfactory to Canada that based on past conduct or behavior, the Bidder, a sub-contractor or a person who is to perform the Work is unsuitable or has conducted himself/herself improperly:
- (g) with respect to current or prior transactions with Canada
 - (i) Canada has exercised, or intends to exercise, the contractual remedy of taking the work out of the contractor's hands with respect to a contract with the Bidder, any of its employees or any subcontractor included as part of its bid; or
 - (ii) Canada determines that the Bidder's performance on other contracts is sufficiently poor to jeopardize the successful completion of the requirement being bid on.
- 3) In assessing the Bidder's performance on other contracts pursuant to subparagraph 2)(g)(ii)of GI10, Canada may consider, but not be limited to, such matters as:
 - (a) the quality of workmanship in performing the Work;
 - (b) the timeliness of completion of the Work;
 - (c) the overall management of the Work and its effect on the level of effort demanded of the department and its representative; and
 - (d) the completeness and effectiveness of the Contractor's safety program during the performance of the Work.
- 4) Without limiting the generality of paragraphs 1), 2) and 3) of GI10, Canada may reject any bid based on an unfavourable assessment of the:
 - (a) adequacy of the bid price to permit the work to be carried out and, in the case of a bid

- providing prices per unit or a combination of lump sum and prices per unit, whether each such price reasonably reflects the cost of performing the part of the work to which that price applies;
- (b) Bidder's ability to provide the necessary management structure, skilled personnel, experience and equipment to perform competently the work under the Contract; and
- (c) Bidder's performance on other contracts.
- 5) Where Canada intends to reject a bid pursuant to a provision of paragraphs 1), 2), 3) or 4) of GI10, other than subparagraph 2)(g)of IT10, the contracting authority will inform the Bidder and provide the Bidder ten (10) days within which to make representations, before making a final decision on the bid rejection.
- 6) Canada may waive informalities and minor irregularities in bids received if Canada determines that the variation of the bid from the exact requirements set out in the Bid Documents can be corrected or waived without being prejudicial to other Bidders.

GI11 BID COSTS

No payment will be made for costs incurred in the preparation and submission of a bid in response to the bid solicitation. Costs associated with preparing and submitting a bid, as well as any costs incurred by the Bidder associated with the evaluation of the bid, are the sole responsibility of the Bidder.

GI12 COMPLIANCE WITH APPLICABLE LAWS

- By submission of a bid, the Bidder certifies that the Bidder has the legal capacity to enter into a contract and is in possession of all valid licences, permits, registrations, certificates, declarations, filings, or other authorizations necessary to comply with all federal, provincial and municipal laws and regulations applicable to the submission of the bid and entry into any ensuing contract for the performance of the work.
- 2) For the purpose of validating the certification in paragraph 1) of Gl12, a Bidder shall, if requested, provide a copy of every valid licence, permit, registration, certificate, declaration, filing or other authorization listed in the request, and shall provide such documentation within the time limit(s) set out in the said request.
- 3) Failure to comply with the requirements of paragraph 2) of GI12 shall result in disqualification of the bid.

GI13 APPROVAL OF ALTERNATIVE MATERIALS

When materials are specified by trade names or trademarks, or by manufacturers' or suppliers' names, the bid shall be based on use of the named materials. During the solicitation period, alternative materials may be considered provided full technical data is received in writing by the Contracting Officer at least 10 calendar days prior to the solicitation closing date.

GI14 CONFLICT OF INTEREST - UNFAIR ADVANTAGE

1) In order to protect the integrity of the procurement process, bidders are advised that Canada may reject a bid in the following circumstances:

- if the Bidder, any of its subcontractors, any of their respective employees or former employees was involved in any manner in the preparation of the bid solicitation or in any situation of conflict of interest or appearance of conflict of interest;
- (b) if the Bidder, any of its subcontractors, any of their respective employees or former employees had access to information related to the bid solicitation that was not available to other bidders and that would, in Canada's opinion, give or appear to give the Bidder an unfair advantage.
- 2) The experience acquired by a bidder who is providing or has provided the goods and services described in the bid solicitation (or similar goods or services) will not, in itself, be considered by Canada as conferring an unfair advantage or creating a conflict of interest. This bidder remains however subject to the criteria established above.
- Where Canada intends to reject a bid under this section, the Contracting Authority will inform the Bidder and provide the Bidder an opportunity to make representations before making a final decision. Bidders who are in doubt about a particular situation should contact the Contracting Authority before bid closing. By submitting a bid, the Bidder represents that it does not consider itself to be in conflict of interest nor to have an unfair advantage. The Bidder acknowledges that it is within Canada's sole discretion to determine whether a conflict of interest, unfair advantage or an appearance of conflict of interest or unfair advantage exists.

GI15 INTEGRITY PROVISIONS - BID

- 1) Ineligibility and Suspension Policy (the "Policy"), and all related Directives, are incorporated by reference into, and form a binding part of the procurement process. The Supplier must comply with the Policy and Directives, which can be found at *Ineligibility and Suspension Policy*.
- Under the Policy, charges and convictions of certain offences against a Supplier, its affiliates or first tier subcontractors, and other circumstances, will or may result in a determination by Public Works and Government Services Canada (PWGSC) that the Supplier is ineligible to enter, or is suspended from entering into a contract with Canada. The list of ineligible and suspended Suppliers is contained in PWGSC's Integrity Database. The Policy describes how enquiries can be made regarding the ineligibility or suspension of Suppliers.
- In addition to all other information required in the procurement process, the Supplier must provide the following:
 - a. by the time stated in the Policy, all information required by the Policy described under the heading "Information to be Provided when Bidding, Contracting or Entering into a Real Property Agreement"; and
 - b. with its bid / quote / proposal, a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier subcontractors that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy. The list of foreign criminal charges and convictions must be submitted using an Integrity Declaration Form, which can be found at <u>Declaration form for procurement</u>.
- 4) Subject to subsection 5, by submitting a bid / quote / proposal in response a request by AAFC, the Supplier certifies that:
 - a. it has read and understands the *Ineligibility and Suspension Policy*;

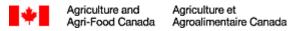
- b. it understands that certain domestic and foreign criminal charges and convictions, and other circumstances, as described in the Policy, will or may result in a determination of ineligibility or suspension under the Policy;
- it is aware that Canada may request additional information, certifications, and validations from the Supplier or a third party for purposes of making a determination of ineligibility or suspension;
- d. it has provided with its bid / quote / proposal a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier subcontractors that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy;
- e. none of the domestic criminal offences, and other circumstances, described in the Policy that will or may result in a determination of ineligibility or suspension, apply to it, its affiliates and its proposed first tier subcontractors; and
- f. it is not aware of a determination of ineligibility or suspension issued by PWGSC that applies to it.
- 5) Where a Supplier is unable to provide any of the certifications required by subsection 4, it must submit with its bid/ quote / proposal a completed Integrity Declaration Form, which can be found at Declaration form for procurement.
- 6) Canada will declare non-responsive any bid / quote / proposal in respect of which the information requested is incomplete or inaccurate, or in respect of which the information contained in a certification or declaration is found by Canada to be false or misleading in any respect. If Canada establishes after award of the Contract that the Supplier provided a false or misleading certification or declaration, Canada may terminate the Contract for default. Pursuant to the Policy, Canada may also determine the Supplier to be ineligible for award of a contract for providing a false or misleading certification or declaration.

Ineligibility and Suspension Policy - http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html

Declaration form for procurement - http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html

GI16 CODE OF CONDUCT FOR PROCUREMENT - BID

1) The Code of Conduct for Procurement provides that Bidders must respond to bid solicitations in an honest, fair and comprehensive manner, accurately reflect their capacity to satisfy the requirements set out in the bid solicitation and resulting contract, submit bids and enter into contracts only if they will fulfill all obligations of the Contract. By submitting a bid, the Bidder is certifying that it is complying with the Code of Conduct for Procurement. Failure to comply with the Code of Conduct for Procurement may render the bid non-responsive.



Appendix "B"

SPECIAL INSTRUCTIONS TO BIDDERS

SPECIAL INSTRUCTIONS TO BIDDERS (SI)

SI01	Bid	Documents	,

SI02 Enquiries during the Solicitation Period

SIO3 Non-Mandatory Site Visit

S104 Revision of Bid

S105 Bid Results

SI06 Insufficient Funds

SI07 Bid Validity Period

SI08 Construction Documents

SI09 Web Sites

SI10 Personnel Security Requirements

SI01 BID DOCUMENTS

- 1) The following are the bid documents:
 - (a) INVITATION TO TENDER Page 1 form AAFC / AAC5323-E;
 - (b) SPECIAL INSTRUCTIONS TO BIDDERS form AAFC / AAC5301-E;
 - (c) GENERAL INSTRUCTIONS TO BIDDERS form AAFC / AAC5313-E;
 - (d) Clauses and Conditions identified in "CONTRACT DOCUMENTS";
 - (e) Drawings and Specifications;
 - (f) BID AND ACCEPTANCE form AAFC / AAC5320-E and any Appendices attached thereto; and,
 - (g) Any amendment issued prior to solicitation closing.

Submission of a bid constitutes acknowledgement that the Bidder has read and agrees to be bound by these documents.

SI02 ENQUIRIES DURING THE SOLICITATION PERIOD

- Enquiries regarding this bid must be submitted in writing to the Contracting Officer named on the INVITATION TO TENDER Page 1 as early as possible within the solicitation period. Except for the approval of alternative materials as described in GI13 of the GENERAL INSTRUCTIONS TO BIDDERS, enquiries should be received no later than five (5) calendar days prior to the date set for solicitation closing to allow sufficient time to provide a response. Enquiries received after that time may not result in an answer being provided.
- 2) To ensure consistency and quality of the information provided to Bidders, the Contracting Officer shall examine the content of the enquiry and shall decide whether or not to issue an amendment.
- 3) All enquiries and other communications related to this bid sent throughout the solicitation period are to be directed ONLY to the Contracting Officer named on the INVITATION TO TENDER -Page 1. Non-compliance with this requirement during the solicitation period can, for that reason alone, result in disqualification of a bid.

SIO3 NON-MANDATORY SITE VISIT

1) There will be a site visit on Thursday, September, 1, 2016 at 01:15 \(\cap \) AM \(\bullet \) PM EDT.



Interested bidders are to meet at:

Sherbrooke Research and Development Centre 2000 College Street Sherbrooke, Quebec J1M 0C8

SI04 REVISION OF BID

 A bid may be revised by letter or facsimile in accordance with GI09 of the GENERAL INSTRUCTIONS TO BIDDERS. The facsimile number for receipt of revisions is 514 283-1918

SI05 BID RESULTS

1) Following bid closing, bid results may be obtained from the bid receiving office by email at samuel archambaul t@agr. gc. ca

SI06 INSUFFICIENT FUNDING

- 1) In the event that the lowest compliant bid exceeds the amount of funding allocated for the Work, Canada in its sole discretion may:
 - (a) cancel the solicitation; or
 - (b) obtain additional funding and award the Contract to the Bidder submitting the lowest compliant bid; and/or
 - (c) negotiate a reduction in the bid price and/or scope of work of not more than 15% with the Bidder submitting the lowest compliant bid. Should an agreement satisfactory to Canada not be reached, Canada shall exercise option (a) or (b).

SI07 BID VALIDITY PERIOD

- Canada reserves the right to seek an extension to the bid validity period prescribed in Clause 4 of the BID AND ACCEPTANCE Form. Upon notification in writing from Canada, Bidders shall have the option to either accept or reject the proposed extension.
- 2) If the extension referred to in paragraph 1) of SI07 is accepted, in writing, by all those who submitted bids, then Canada shall continue immediately with the evaluation of the bids and its approvals processes.
- 3) If the extension referred to in paragraph 1) of SI07 is not accepted in writing by all those who submitted bids then Canada shall, at its sole discretion, either:
 - (a) continue to evaluate the bids of those who have accepted the proposed extension and seek the necessary approvals; or
 - (b) cancel the invitation to bid.
- 4) The provisions expressed herein do not in any manner limit Canada's rights in law or under GI10 of the GENERAL INSTRUCTIONS TO BIDDERS.

SI08 CONSTRUCTION DOCUMENTS

The successful contractor will be provided with one paper copy of the sealed and signed plans, the specifications and the amendments upon acceptance of the offer. Additional copies, up to a maximum of Zero (0), will be provided free of charge upon request by the Contractor. Obtaining more copies shall be the responsibility of the Contractor including costs.

SI09 WEB SITES

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

Treasury Board Appendix L, Acceptable Bonding Companies http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494§ion=text#appL

Canadian economic sanctions

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

SI10 PERSONNEL SECURITY REQUIREMENTS

- The successful Bidder's personnel, as well as any subcontractor and its personnel, who are required to perform any part of the work pursuant to the subsequent contract, must meet the following contract security requirements:
 - Unscreened personnel may be used for the work. Unscreened personnel will not need an escort.

Appendix "C"

BID AND ACCEPTANCE FORM

BID AND ACCEPTANCE FORM

CONSTRUCTION CONTRACT - MAJOR WORKS

BA01 IDENTIFICATION					
Description of the Work The project involves in general: 1) removal of paving and rebuilding of the road structure and pavement of a \pm 3 115 m2 parking lot and installation of a foundation drain of \pm 100m in length and marking.					
2) modifications to a parking leexcavation and backfilling, lay				ones and tre	es,
Solicitation Number		File / Project Nu	mber		
01B46-16-084		A695			
BA02 BUSINESS NAME AND ADDRESS OF	BIDDER				
Name					
Address					
Unit/Suite/Apt. Street number Number suffix	Street name			Street type	Street direction
PO Box or Route Number	Municipality (City, Town, etc.)			Province	Postal code
Phone number	Fax number		Email address		
BA03 THE OFFER					
The Bidder offers to Canada as represented	by the Minister of Agriculture or	od Agri food Cons	ada to perform and complet	the Work for the	abovo namod
project in accordance with the Bid Documer		iu Agri-100u Caria	ida to periorifi and complet	e the Work for the	above named
\$ exclu	iding Applicable Taxes (GST/HS	ST/QST).			
(to be expressed in numbers only)					
BA04 BID VALIDITY PERIOD					
1) The bid shall not be withdrawn for a period of	of 60 days following the date	of solicitation clos	sing.		
BA05 APPENDICES					
The following appendices are included in thi	s Bid and Acceptance Form:				
☐ No appendices					
Appendix 1					
Appendix 2					
BA06 ACCEPTANCE AND CONTRACT					
Upon acceptance of the Bidder's offer by Ca forming the Contract shall be the contract do				g Contractor. The	documents
BA07 CONSTRUCTION TIME					
1) The Contractor shall perform and complete the Work on or before 2016-10-28					
BA08 BID SECURITY					
The Bidder shall enclose bid security with its	s bid in accordance with GI07 BI	D SECURITY RE	EQUIREMENTS.		
2) If a security deposit is furnished as bid security, it shall be forfeited in the event that the bid is accepted by Canada and the Contractor fails to provide Contract Security in accordance with GC9 CONTRACT SECURITY, provided that Canada may, if it is in the public interest, waive the right of Canada to forfeiture any or all of the security deposit.					



BA09 SIGNATURE			
	Name		
Name and title of person authorized			
to sign on behalf of Bidder	Title		
(type or print)			
	Signature	Date	
	Name		
	Title		
	Signature	Date	
BA10 INTEGRITY PROVISIONS - LIS	T OF NAMES		
	n received by the time the evaluation of bids is completed, Canada will in le the names within the time frame specified will render the bid non-respond.		
Bidders who are incorporated, including the Bidder.	those bidding as a joint venture, must provide a complete list of names o	of all individuals who are currently directors of	
Bidders bidding as sole proprietorship, a	s well as those bidding as a joint venture, must provide the name of the o	owner(s).	
Bidders bidding as societies, firms or pa	rtnerships do not need to provide lists of names.		

BID AND ACCEPTANCE FORM

CONSTRUCTION CONTRACT - MAJOR WORKS APPENDIX 2

LIST OF SUBCONTRACTORS

The Bidder will subcontract the parts of the work listed below to the subcontractor named for each part. The Bidder agrees not to make changes in the list of subcontractors without the written consent of the Departmental Representative. The Bidder understands that for each part of the work, if more than one subcontractor is named, or no subcontractor is named, or, the Bidder fails to state that the work will be done by its own forces where applicable, the bid will be subject to disqualification.

LIST OF EQUIPMENT		
N/A		
LIST OF MATERIALS		
N/A		

The cost breakdown attachment is part of the Bid and $\operatorname{Acceptance}$ form . It must be completed and signed .

AGRICULTURE AND
AGRI-FOOD CANADA
Repair of asphalted access roads
and modification of a parking lot
Research and Development
Centre of Sherbrooke

Cost Breakdown

Repair of asphalted access roads and modification of a parking lot

	Parking Lot for Buildings 11, 12, 13 et 69	Parking Lot for Building 1	TOTAL
Roadwork			
Related work			
Subtotal			

^{*} taxes not included

AGRICULTURE AND
AGRI-FOOD CANADA
Repair of asphalted access roads
and modification of a parking lot
Research and Development
Centre of Sherbrooke

Cost BreakdownRepair of asphalted access roads and modification of a parking lot

ART.	DESCRIPTION	UNIT	UNIT PRICE (A)	APPROX. QUANTITY (B)	TOTAL CALCULATED AMOUNT C = A X B
1.0	ROADWORK				
1.1	Removal of existing pavement	sq. m.		3 115	
1.2	Excavation and preparation of the Infrastructure	sq. m.		3 115	
1.3	Foundation drain	lin. m.		100	
1.4	MG-112 300mm	sq. m.		3 085	
1.5	MG-20 150mm	sq. m.		3 085	
1.6	Single layer of pavement, ESG-14 70 mm	sq. m.		3 085	
1.7	Marking	Lump sum		1	
			Subto	tal - ROADWORK	
2.0	RELATED WORK			ı	
2.1	Sodding	sq. m.		75	
2.2	Repair of Interlocking Paving Stone	sq. m.		5	
	•	•	Subtotal -	RELATED WORK	

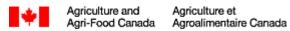
TOTAL - PARKING LOT FOR BUILDINGS 11, 12, 13, and 69	
--	--

AGRICULTURE AND AGRI-FOOD CANADA Repair of asphalted access roads and modification of a parking lot **Research and Development** Centre of Sherbrooke

Cost Breakdown Repair of asphalted access roads and modification of a parking lot

	PARKING LOT FOR BUILDING 1				
ART.	DESCRIPTION	UNIT	UNIT PRICE (A)	APPROX. QUANTITY (B)	TOTAL CALCULATED AMOUNT C = A X B
1.0	ROADWORK				
1.1	Removal of existing pavement	sq. m.		75	
1.2	Removal of existing curbs, grass traffic islands, and tree.	Lump sum		1	
1.3	Excavation and preparation of the Infrastructure	sq. m.		170	
1.5	MG-112 300mm	sq. m.		170	
1.6	MG-20 150mm	sq. m.		170	
1.7	Single layer of pavement, ESG-14 70 mm	sq. m.		235	
1.8	Concrete curb	lin. m.		20	
1.9	Marking	Lump sum		1	
			Subto	tal - ROADWORK	
2.0	RELATED WORK			,	
2.1	Sodding	sq. m.		20	
		•	Subtotal -	RELATED WORK	
				·	
	TOTAL - PARKING LOT FOR BUILDING 1				

TOTAL - PARKING LOT FOR BUILDING 1	



Appendix "D"

MAJOR WORKS - GENERAL CONDITIONS

MAJOR WORKS – GENERAL CONDITIONS

Page 1 of 62

MAJO	R WORKS GENERAL CONDITIONS FORM AAFC 5321:	Revision Date
	OFNED AL PROMODIO	
GC1	GENERAL PROVISIONS	2016-05-01
GC2	ADMINISTRATION OF THE CONTRACT	2016-05-01
GC3	EXECUTION AND CONTROL OF THE WORK	2016-01-01
GC4	PROTECTIVE MEASURES	Original
GC5	TERMS OF PAYMENT	2016-05-01
GC6	DELAYS AND CHANGES IN THE WORK	Original
GC7	DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT	Original
GC8	DISPUTE RESOLUTION	2016-05-01
GC9	CONTRACT SECURITY	2016-05-01
GC10	INSURANCE	Original

GC1 GENERAL PROVISIONS

GC1.1	INTERPRE	TATION
	GC1.1.1	Headings and References
	GC1.1.2	Terminology
	GC1.1.3	Application of Certain Provisions
	GC1.1.4	Substantial Performance
	GC1.1.5	Completion
GC1.2	CONTRAC	T DOCUMENTS
	GC1.2.1	General
	GC1.2.2	Order of Precedence
	GC1.2.3	Security and Protection of Documents and Work
GC1.3	STATUS O	F THE CONTRACTOR
GC1.4	RIGHTS AI	ND REMEDIES
GC1.5	TIME OF T	HE ESSENCE
GC1.6	INDEMNIF	ICATION BY THE CONTRACTOR
GC1.7	INDEMNIF	ICATION BY CANADA
GC1.8	LAWS, PEI	RMITS AND TAXES
GC1.9	WORKERS	S' COMPENSATION
GC1.10	NATIONAL	SECURITY
GC1.11	UNSUITAB	LE WORKERS
GC1.12	PUBLIC CE	EREMONIES AND SIGNS
GC1.13	CONFLICT	OF INTEREST
GC1.14	AGREEME	NTS AND AMENDMENTS
GC1.15	SUCCESS	ION
GC1.16	ASSIGNME	ENT
GC1.17		
GC1.18	CERTIFICA	ATION - CONTINGENCY FEES
GC1.19		IONAL SANCTIONS
GC1.20		Y PROVISIONS – CONTRACT
GC1.21	CODE OF	CONDUCT FOR PROCUREMENT - CONTRACT

GC1.1 (2016-05-01) INTERPRETATION

GC1.1.1 Headings and References

- The headings in the contract documents, other than those in the drawings and specifications, form no part of the Contract but are inserted for convenience of reference only.
- 2) A reference made to a part of the Contract by means of numbers preceded by letters is a reference to the particular part of the Contract that is identified by that combination of letters and numbers and to any other part of the Contract referred to therein.
- 3) A reference to a paragraph or subparagraph followed by an identifying number, letter or combination thereof is, unless specifically stated otherwise, a reference to the paragraph or subparagraph that forms part of the clause within which the reference is made.

GC1.1.2 Terminology

In the Contract, unless the context otherwise requires:

"Administrative Agreement"

is a negotiated agreement with the Minister of AAFC as provided for in the Ineligibility and Suspension Policy.

"Affiliate"

is a person, including, but not limited to, organizations, bodies corporate, societies, companies, firms, partnerships, associations of persons, parent companies or subsidiaries, whether partly or wholly-owned, as well as individuals, directors, officers and key employees if:

- (i) one controls or has the power to control the other, or
- (ii) a third party has the power to control both.

"Applicable Taxes"

means the Goods and Services Tax (GST), the Harmonized Sales Tax (HST), and any provincial tax, by law, payable by Canada such as, the Quebec Sales Tax (QST) as of April 1, 2013;

"Canada", "Crown", "Her Majesty" means Her Majesty the Queen in right of Canada;

"Contract"

means the contract documents referred to as such therein and every other document specified or referred to in any of them as forming part of the Contract, all as amended by agreement of the parties;

"Contract Amount"

means the amount set out in the Contract to be payable to the Contractor for the Work, subject to the terms and conditions of the Contract, exclusive of Applicable Taxes;

"Contract Security"

means any security given by the Contractor to Canada in accordance with the Contract;

"Contractor"

means the person contracting with Canada to provide or furnish all labour, Material and Plant for the execution of the Work under the Contract, and includes the Contractor's superintendent as designated in writing to Canada.

"Certificate of Completion"

means a certificate issued by Canada when the Work reaches Completion;

"Certificate of Measurement"

means a certificate issued by Canada certifying the correctness of the final quantities, prices per unit and values of labour, Plant and Material performed, used and supplied by the Contractor for the construction of the part of the Work to which a Unit Price Arrangement applies;

"Certificate of Substantial Performance"

means a certificate issued by Canada when the Work reaches Substantial Performance;

"Control"

means:

- a) direct control, such as where:
 - a person controls a body corporate if securities of the body corporate to
 which are attached more than 50 percent of the votes that may be cast to
 elect directors of the body corporate are beneficially owned by the person
 and the votes attached to those securities are sufficient, if exercised, to
 elect a majority of the directors of the body corporate;

- (ii) a person controls a corporation that is organized on a cooperative basis if the person and all of the entities controlled by the person have the right to exercise more than 50 percent of the votes that may be cast at an annual meeting or to elect the majority of the directors of the corporation;
- (iii) a person controls an unincorporated entity, other than a limited partnership, if more than 50 percent of the ownership interests, however designated, into which the entity is divided are beneficially owned by that person and the person is able to direct the business and affairs of the entity;
- (iv) the general partner of a limited partnership controls the limited partnership; and
- a person controls an entity if the person has any direct or indirect influence that, if exercised, would result in control in fact of the entity.
- deemed control, such as where:
 a person who controls an entity is deemed to control any entity that is controlled, or deemed to be controlled, by the entity
- c) indirect control, such as where:
 a person is deemed to control, within the meaning of paragraph (a) or (b), an entity where the aggregate of:
 - (i) any securities of the entity that are beneficially owned by that person, and
 - (ii) any securities of the entity that are beneficially owned by any entity controlled by that person

is such that, if that person and all of the entities referred to in paragraph (c)(ii) that beneficially own securities of the entity were one person, that person would control the entity.

"Departmental Representative"

means the person designated in the Contract, or by written notice to the Contractor, to act as the Departmental Representative for the purposes of the Contract, and includes a person, designated and authorized in writing by the Departmental Representative to the Contractor;

"herein", "hereby", "hereof", "hereunder" and similar expressions refer to the Contract as a whole and not to any particular section or part thereof;

"Ineligibility"

means a person not eligible to contract with Canada;

"Lump Sum Arrangement"

means that part of the Contract that prescribes a lump sum as payment for performance of the Work to which it relates;

"Material"

includes all commodities, articles, machinery, equipment, fixtures and things required to be furnished in accordance with the Contract for incorporation into the Work;

"person"

also includes, unless there is an express stipulation in the Contract to the contrary, any partnership, proprietorship, firm, joint venture, consortium or corporation;

"Plant"

includes all tools, implements, machinery, vehicles, structures, equipment, articles and things that are necessary for the performance of the Contract, other than Material and those tools customarily provided by a tradesperson in practicing a trade;

"Subcontractor"

means a person having a direct contract with the Contractor, subject to GC3.6

"Subcontracting", to perform a part or parts of the Work, or to supply Material customized for the Work:

"Superintendent"

means the employee or representative of the Contractor designated by the Contractor to act pursuant to GC2.6, "Superintendent";

"Supplementary Conditions"

means the part of the Contract that amends or supplements the General Conditions;

"Supplier"

means a person having a direct contract with the Contractor to supply Plant or Material not customized for the Work;

"Suspension"

means a determination of temporary ineligibility by the Minister of AAFC;

"Total Estimated Cost", "Revised Estimated Cost", "Increase (Decrease)" on Page 1 of the Contract or Contract Amendment means an amount used for internal administrative purposes only that comprises the Contract Amount, or the revised Contract Amount, or the amount that would increase or decrease the Contract Amount and the Applicable Taxes as evaluated by the Contracting Authority, and does not constitute tax advice on the part of Canada:

"Unit Price Arrangement"

means that part of the Contract that prescribes the product of a price per unit of measurement multiplied by a number of units of measurement for performance of the Work to which it relates;

"Unit Price Table"

means the table of prices per unit set out in the Contract;

"Work"

means, subject only to any express stipulation in the Contract to the contrary, everything that is necessary to be done, furnished or delivered by the Contractor to perform the Contract in accordance with the contract documents; and

"Working Day"

means a day other than a Saturday, Sunday, or a statutory holiday that is observed by the construction industry in the area of the place of the Work.

GC1.1.3 Application of Certain Provisions

- Any provisions of the Contract that are expressly stipulated to be applicable only to a Unit Price Arrangement are not applicable to any part of the Work to which a Lump Sum Arrangement applies.
- Any provisions of the Contract that are expressly stipulated to be applicable only to a Lump Sum Arrangement are not applicable to any part of the Work to which a Unit Price Arrangement applies.

GC1.1.4 Substantial Performance

- 1) The Work shall be considered to have reached Substantial Performance when
 - a) the Work or a substantial part thereof has passed inspection and testing and is, in the opinion of Canada, ready for use by Canada or is being used for the intended purposes; and
 - b) the Work is, in the opinion of Canada, capable of completion or correction at a cost of not more than
 - (i) 3 percent of the first \$500,000;
 - (ii) 2 percent of the next \$500,000; and
 - (iii) 1 percent of the balance

of the Contract Amount at the time this cost is calculated.

- 2) Where the Work or a substantial part thereof is ready for use or is being used for the purposes intended and
 - a. the remainder of the Work or a part thereof cannot be completed by the time specified in the Contract, or as amended in accordance with GC6.5, "Delays and Extension of Time", for reasons beyond the control of the Contractor; or
 - b. Canada and the Contractor agree not to complete a part of the Work within the specified time;

the cost of that part of the Work that was either beyond the control of the Contractor to complete or Canada and the Contractor have agreed not to complete by the time specified, shall be deducted from the value of the Contract referred to in subparagraph 1)(b) of GC1.1.4 and the said cost shall not form part of the cost of the Work remaining to be done in determining Substantial Performance.

GC1.1.5 Completion

The Work shall be deemed to have reached Completion when all labour, Plant and Material required have been performed, used or supplied, and the Contractor has complied with the Contract and all orders and directions made pursuant thereto, all to the satisfaction of Canada.

GC1.2 (2016-05-01) CONTRACT DOCUMENTS

The following discusses contract documents

GC1.2.1 General

 The contract documents are complementary, and what is required by any one shall be as binding as if required by all.

- 2) References in the contract documents to the singular shall be considered to include the plural as the context requires.
- Nothing contained in the contract documents shall create a contractual relationship between Canada and any Subcontractor or Supplier, their subcontractors or suppliers, or their agents or employees.

GC1.2.2 Order of Precedence

- 1) In the event of any discrepancy or conflict in the contents of the following documents, such documents shall take precedence and govern in the following order:
 - a) any amendment or variation of the contract documents that is made in accordance with the General Conditions;
 - b) any amendment issued prior to tender closing;
 - c) Supplementary Conditions;
 - d) General Conditions;
 - e) the duly completed Bid and Acceptance Form when accepted;
 - f) drawings and specifications.

later dates shall govern within each of the above categories of documents.

- 2) In the event of any discrepancy or conflict in the information contained in the drawings and specifications, the following rules shall apply:
 - a) specifications shall govern over drawings;
 - b) dimensions shown in figures on a drawings shall govern where they differ from dimensions scaled from the same drawings; and
 - c) drawings of larger scale govern over those of smaller scale.

GC1.2.3 Security and Protection of Documents and Work

- The Contractor shall guard and protect contract documents, drawings, information, models and copies thereof, whether supplied by Canada or the Contractor, against loss or damage from any cause.
- 2) The Contractor shall keep confidential all information provided to the Contractor by or on behalf of Canada in connection with the Work, and all information developed by the Contractor as part of the Work, and shall not disclose any such information to any person without the written permission of Canada, except that the Contractor may disclose to a subcontractor, authorized in accordance with the Contract, information necessary to the performance of a subcontract. This section does not apply to any information that
 - a) is publicly available from a source other than the Contractor; or

- b) is or becomes known to the Contractor from a source other than Canada, except any source that is known to the Contractor to be under an obligation to Canada not to disclose the **information**.
- 3) When the Contract, the Work, or any information referred to in paragraph 2) is identified as top secret, secret, confidential, or protected by Canada, the Contractor shall, at all times, take all measures reasonably necessary for the safeguarding of the material so identified, including such measures as may be further specified elsewhere in the Contract or provided, in writing, from time to time by Canada.
- 4) Without limiting the generality of paragraphs 2) and 3) of GC1.2.3, when the Contract, the Work, or any information referred to in paragraph 2) is identified as top secret, secret, confidential, or protected by Canada, Canada shall be entitled to inspect the Contractor's premises and the premises of its subcontractors or suppliers and any other person at any tier, for security purposes at any time during the term of the Contract, and the Contractor shall comply with, and ensure that any such subcontractors or suppliers comply with all written instructions issued by Canada dealing with the material so identified, including any requirement that employees of the Contractor and its subcontractors and suppliers and any other person at any tier execute and deliver declarations relating to reliability screenings, security clearances and other procedures.
- 5) The Contractor shall safeguard the Work and the Contract, the specifications, drawings and any other information provided by Canada to the Contractor, and shall be liable to Canada for any loss or damage from any causes.

GC1.3 STATUS OF THE CONTRACTOR

- 1) The Contractor is engaged under the Contract as an independent contractor.
- 2) The Contractor, its subcontractors and suppliers and any other person at any tier and their employees are not engaged by the Contract as employees, servants or agents of Canada.
- 3) For the purposes of the contract the Contractor shall be solely responsible for any and all payments and deductions required to be made by law including those required for Canada or Quebec Pension Plans, Employment Insurance, Worker's Compensation, provincial health or insurance plans, and Income Tax.

GC1.4 (2016-05-01) RIGHTS AND REMEDIES

 Except as expressly provided in the Contract, the duties and obligations imposed by the Contract and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights, and remedies otherwise imposed or available by law.

GC1.5 (2016-05-01) TIME OF THE ESSENCE

1) Time is of the essence of the Contract.

GC1.6 INDEMNIFICATION BY THE CONTRACTOR

1) The Contractor shall pay all royalties and patent fees required for the performance of the Contract and, at the Contractor's expense, shall defend all claims, actions or proceedings

- against Canada charging or claiming that the Work or any part thereof provided or furnished by the Contractor to Canada infringes any patent, industrial design, copyright trademark, trade secret or other proprietary right enforceable in Canada.
- 2) The Contractor shall indemnify and save Canada harmless from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by any third party, brought or prosecuted and in any manner based upon, arising out of, related to, occasioned by, or attributable to the activities of the Contractor, its subcontractors and suppliers and any other person at any tier, in performing the Work.
- 3) For the purposes of paragraph 2) of GC1.6, "activities" means any act improperly carried out, any omission to carry out an act and any delay in carrying out an act.

GC1.7 (2016-05-01) INDEMNIFICATION BY CANADA

- Subject to the <u>Crown Liability and Proceedings Act</u>, the <u>Patent Act</u>, and any other law that affects Canada's rights, powers, privileges or obligations, Canada shall indemnify and save the Contractor harmless from and against all claims, demands, losses, costs, damage, actions, suits or proceedings arising out of the Contractor's activities under the Contract that are directly attributable to
 - a) a lack of or a defect in Canada's title to the Work site if owned by Canada, whether real or alleged; or
 - b) an infringement or an alleged infringement by the Contractor of any patent of invention or any other kind of intellectual property occurring while the Contractor was performing any act for the purposes of the Contract employing a model, plan or design or any other thing related to the Work that was supplied by Canada to the Contractor.

GC1.8 (2016-05-01) LAWS, PERMITS AND TAXES

- The Contractor shall comply with all federal, provincial and municipal laws and regulations applicable to the performance of the Work or any part thereof including, without limitation, all laws concerning health and the protection of the environment, and shall require compliance therewith by all of its subcontractors and suppliers at any tier as if the Work were being performed for an owner other than Canada. The Contractor shall furnish evidence of compliance with such laws and regulations to Canada at such times as Canada may reasonably request.
- 2) Unless stipulated otherwise in the Contract, the Contractor shall obtain and maintain all permits, certificates, licences, registrations and authorizations required for the lawful performance of the Work.
- 3) Prior to the commencement of the Work at the site, the Contractor shall tender to a municipal authority an amount equal to all fees and charges that would be lawfully payable to that municipal authority in respect of building permits as if the Work were being performed for an owner other than Canada.
- 4) Within 10 days of making a tender pursuant to paragraph 3) of GC1.8, the Contractor shall notify Canada of the amount properly tendered and whether or not the municipal authority has accepted that amount.

- 5) If the municipal authority has not accepted the amount tendered, the Contractor shall pay that amount to Canada within 6 days after the time stipulated in paragraph 4) of GC1.8.
- 6) For the purposes of this clause, "municipal authority" means any authority that would have jurisdiction respecting permission to perform the Work if the owner were not Canada.
- Notwithstanding the residency of the Contractor, the Contractor shall pay any applicable tax arising from or related to the performance of the Work under the Contract.
- 8) In accordance with the Statutory Declaration referred to in paragraph 4) of GC5.5, "Substantial Performance of the Work", a Contractor who has neither residence nor place of business in the province or territory in which work under the Contract is being performed shall provide Canada with proof of registration with the provincial sales tax authorities in the said province.
- 9) For the purpose of the payment of any Applicable Taxes or the furnishing of security for the payment of any Applicable Taxes arising from or related to the performance of the Work, and notwithstanding the provision that all Material, Plant and interest of the Contractor in all real property, licences, powers and privileges, become the property of Canada after the time of purchase in accordance with GC3.10, "Material Plant and Real Property Become Property of Canada", the Contractor shall be liable, as a user or consumer, for the payment or for the furnishing of security for the payment of any Applicable Taxes payable, at the time of the use or consumption of that Material, Plant or interest of the Contractor in accordance with the relevant legislation.
- 10) Federal government departments and agencies are required to pay Applicable Taxes.
- 11) Applicable Taxes will be paid by Canada as provided in the request for payment. It is the sole responsibility of the Contractor to charge Applicable Taxes at the correct rate in accordance with applicable legislation. The Contractor agrees to remit to appropriate tax authorities any amounts of Applicable Taxes paid or due.
- 12) The Contractor is not entitled to use Canada's exemptions from any tax, such as provincial sales taxes, unless otherwise specified by law. The Contractor must pay applicable provincial sales tax, ancillary taxes, and any commodity tax, on taxable goods or services used or consumed in the performance of the Contract (in accordance with applicable legislation), including for material incorporated into real property.
- 13) In those cases where Applicable Taxes, customs duties, and excise taxes are included in the Contract Amount, the Contract Amount will be adjusted to reflect any increase, or decrease, of Applicable Taxes, customs duties, and excise taxes that will have occurred between bid submission and contract award. However, there will be no adjustment for any change to increase the Contract Amount if public notice of the change was given before bid submission date in sufficient detail to have permitted the Contractor to calculate the effect of the change.
- 14) Tax Withholding of 15 Percent Canada Revenue Agency
 Pursuant to the *Income Tax Act*, 1985, c. 1 (5th Supp.) and the *Income Tax Regulations*,
 Canada must withhold 15 percent of the amount to be paid to the Contractor in respect of services provided in Canada if the Contractor is not a resident of Canada, unless the Contractor obtains a valid waiver from the Canada Revenue Agency. The amount withheld will be held on account for the Contractor in respect to any tax liability which may be owed to Canada.

GC1.9 WORKERS' COMPENSATION

- Prior to commencement of Work, at the time of Substantial Performance of the Work, and prior to issuance of the Certificate of Completion, the Contractor shall provide evidence of compliance with workers' compensation legislation applicable to the place of the Work, including payments due thereunder.
- 2) At any time during the term of the Contract, when requested by Canada, the Contractor shall provide such evidence of compliance by the Contractor, its subcontractors and any other person at any tier and any other person performing part of the Work who is required to comply with such legislation.

GC1.10 NATIONAL SECURITY

- If Canada determines that the Work is of a class or kind that involves national security, Canada may order the Contractor to
 - (a) provide Canada with any information concerning persons employed or to be employed by the Contractor for purposes of the Contract; and
 - (b) remove any person from the site of the Work if, in the opinion of Canada, that person may be a risk to the national security;
 - and the Contractor shall comply with the order.
- 2) In all contracts with persons who are to be employed in the performance of the Contract, the Contractor shall make provision for the performance of any obligation that may be imposed upon the Contractor under paragraph 1) of GC1.10.

GC1.11 (2016-05-01) UNSUITABLE WORKERS

 Canada shall instruct the Contractor to remove from the site of the Work any person employed by the Contractor for purposes of the Contract who, in the opinion of Canada, is incompetent or is guilty of improper conduct, and the Contractor shall not permit a person who has been removed to return to the site of the Work.

GC1.12 PUBLIC CEREMONIES AND SIGNS

- 1) The Contractor shall not permit any public ceremony in connection with the Work without the prior consent of Canada.
- 2) The Contractor shall not erect nor permit the erection of any sign or advertising on the Work or its site without the prior consent of Canada.

GC1.13 (2016-05-01) CONFLICT OF INTEREST

1) It is a term of the Contract that no individual, for whom the post-employment provisions of the Conflict of Interest and Post-Employment Code for Public Office Holders or the Values and Ethics Code for the Public Service apply, shall derive a direct benefit from the Contract unless that individual is in compliance with the applicable post-employment provisions.

GC1.14 AGREEMENTS AND AMENDMENTS

- 1) The Contract constitutes the entire and sole agreement between the parties with respect to the subject matter of the Contract and supersedes all previous negotiations, communications and other agreements, whether written or oral, relating to it, unless they are incorporated by reference in the Contract. There are no terms, covenants, representations, statements or conditions binding on the parties other than those contained in the Contract.
- 2) The failure of either party at any time to require performance by the other party of any provision hereof shall not affect the right thereafter to enforce such provision. Nor shall the waiver by either party of any breach of any covenant, term or condition hereof be taken to be held to be a waiver of any further breach of the same covenant, term or condition.
- 3) The Contract may be amended only as provided for in the Contract.

GC1.15 (2016-05-01) SUCCESSION

 The Contract shall inure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and, subject to GC1.16, "Assignment", permitted assigns.

GC1.16 (2016-05-01) ASSIGNMENT

1) The Contractor shall not make any assignment of the Contract, either in whole or in part, without the written consent of Canada.

GC1.17 (2016-05-01) NO BRIBE

1) The Contractor represents and covenants that no bribe, gift, benefit, nor other inducement has been nor shall be paid, given, promised or offered directly or indirectly to any official or employee of Canada or to a member of the family of such a person, with a view to influencing the entry into the Contract or the administration of the Contract.

GC1.18 CERTIFICATION - CONTINGENCY FEES

- 1) In this clause
 - (a) "contingency fee" means any payment or other compensation that is contingent upon or is calculated upon the basis of a degree of success in soliciting or obtaining a Government contract or negotiating the whole or any part of its terms;
 - (b) "employee" means a person with whom the Contractor has an employer/employee relationship; and
 - (c) "person" includes an individual or a group of individuals, a corporation, a partnership, an organization and an association and, without restricting the generality of the foregoing, includes any individual who is required to file a return with the registrar pursuant to section 5 of the Lobbying Act R.S.C. 1985 c.44 (4th Supplement) as the same may be amended from time to time.
- 2) The Contractor certifies that it has not directly or indirectly paid nor agreed to pay and covenants that it shall not directly or indirectly pay nor agree to pay a contingency fee for the solicitation, negotiation or obtaining of the Contract to any person other than an employee acting in the normal course of the employee's duties.

- 3) All accounts and records pertaining to payments of fees or other compensation for the solicitation, obtaining or negotiation of the Contract shall be subject to the accounts and audit provisions of the Contract.
- 4) If the Contractor certifies falsely under this section or is in default of the obligations contained therein, Canada may either take the Work out of the Contractor's hands in accordance with the provisions of the Contract or recover from the Contractor by way of reduction to the Contract Amount or otherwise, the full amount of the contingency fee.

GC1.19 INTERNATIONAL SANCTIONS

- Persons and companies in Canada, and Canadians outside of Canada are bound by economic sanctions imposed by Canada. As a result, the Government of Canada cannot accept delivery of goods or services that originate, either directly or indirectly, from the countries or persons subject to <u>economic sanctions</u> (http://www.international.gc.ca/sanctions/index.aspx?lang=eng)
- 2) It is a condition of the Contract that the Contractor not supply to the Government of Canada any goods or services which are subject to economic sanctions.
- 3) By law, the Contractor must comply with changes to the regulations imposed during the life of the Contract. During the performance of the Contract should the imposition of sanctions against a country or person or the addition of a good or service to the list of sanctioned goods or services cause an impossibility of performance for the Contractor, the Contractor may request that the Contract be terminated in accordance with GC7.3 TERMINATION OF CONTRACT.

GC1.20 (2016-05-01) INTEGRITY PROVISIONS - CONTRACT

1) The Ineligibility and Suspension Policy (the "Policy") and all related Directives are incorporated into, and form a binding part of the Contract. The Contractor must comply with the provisions of the Policy and Directives, which can be found on Public Works and Government Services Canada's website at Ineligibility and Suspension Policy. (http://www.tpsqc-pwgsc.qc.ca/ci-if/politique-policy-eng.html).

GC1.21 (2016-05-01) CODE OF CONDUCT FOR PROCUREMENT - CONTRACT

The Contractor agrees to comply with the Code of Conduct (http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html) for Procurement and to be bound by its terms for the period of the Contract.

GC2 ADMINISTRATION OF THE CONTRACT

GC2.1	DEPARTMENTAL REPRESENTATIVE'S AUTHORITY
GC2.2	INTERPRETATION OF CONTRACT
GC2.3	NOTICES
GC2.4	SITE MEETINGS
GC2.5	REVIEW AND INSPECTION OF WORK
GC2.6	SUPERINTENDENT
GC2.7	NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR
GC2.8	ACCOUNTS AND AUDITS

GC2.1 (2016-05-01) DEPARTMENTAL REPRESENTATIVE'S AUTHORITY

"Technical Authority" shall be recognized as the Departmental representative and designated at time of award of contract and shall perform the following:

- a) is responsible for all matters concerning the technical content of the work under the contract;
- b) authorized to issue notices, instructions, and changes within the scope of the Work, relevant to the contract.
- c) accept on behalf of Canada any notice, order or other communication from the contractor relating to the Work
- d) within a reasonable time, review and respond to submissions made by the Contractor in accordance with the requirements of the Contract

The technical authority has no authority to authorize changes to the Contract terms and conditions of the Contract.

"Contracting Authority" shall be recognized as the authority delegated by the Minister of AAFC to enter into contracts, amend the contracts and is responsible for all matters concerning and interpretation of the terms and conditions of the Contract.

The contracting authority is responsible for the management of the Contract and any changes to the Contract terms and conditions must be authorized in writing by the Contracting Authority.

GC2.2 INTERPRETATION OF CONTRACT

- If, at any time before Canada has issued a Certificate of Completion, any question arises between the parties about whether anything has been done as required by the Contract or about what the Contractor is required by the Contract to do, and in particular but without limiting the generality of the foregoing, about
 - (a) the meaning of anything in the drawings and specifications;
 - (b) the meaning to be given to the drawings and specifications in case of any error therein, omission therefrom, or obscurity or discrepancy in their wording or intention;

- (c) whether or not the quality or quantity of any Material or workmanship supplied or proposed to be supplied by the Contractor meets the requirements of the Contract;
- (d) whether or not the labour, Plant or Material performed, used and supplied by the Contractor for performing the Work and carrying out the Contract are adequate to ensure that the Work shall be performed in accordance with the Contract and that the Contract shall be carried out in accordance with its terms;
- (e) what quantity of any of the Work has been completed by the Contractor; or
- (f) the timing and scheduling of the various phases of the performance of the Work as specified in the Contract;

the question shall be decided, subject to the provisions of GC8 DISPUTE RESOLUTION, by Canada.

- 2) The Contractor shall perform the Work in accordance with any decisions of Canada that are made under paragraph 1) of GC2.2 and in accordance with any consequential directions given by Canada.
- 3) If the Contractor fails to comply with any instruction or direction issued by Canada pursuant to the Contract, Canada may employ such methods as Canada deems advisable to do what the Contractor failed to do, and the Contractor shall, on demand, pay Canada an amount that is equal to the aggregate of all costs, expenses and damages incurred or sustained by Canada by reason of the Contractor's failure to comply with such instruction or direction, including the cost of any methods employed by Canada in doing what the Contractor failed to do.

GC2.3 NOTICES

- Subject to paragraph 3) of GC2.3, any notice, order or other communication may be given in any manner, and if required to be in writing, shall be addressed to the party to whom it is intended at the address in the Contract or at the last address of which the sender has received written notice in accordance with this section.
- 2) Any notice, order or other communication given in writing in accordance with paragraph 1) of GC2.3 shall be deemed to have been received by either party
 - (a) if delivered personally, on the day that it was delivered;
 - (b) if forwarded by mail, on the earlier of the day it was received or the sixth day after it was mailed; and
 - (c) if forwarded by facsimile or electronic mail, 24 hours after it was transmitted.
- 3) A notice given under GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS, GC7.2 SUSPENSION OF WORK, and GC7.3 TERMINATION OF CONTRACT shall be given in writing and, if delivered personally, shall be delivered, if the Contractor is a sole proprietor, to the Contractor or, if the Contractor is a partnership or corporation, to an officer thereof.

GC2.4 (2016-05-01) SITE MEETINGS

1) In consultation with Canada, the Contractor shall arrange site meetings at regular intervals, with all involved parties who are to attend, in order to ensure, among other things, the proper co-ordination of the Work.

GC2.5 REVIEW AND INSPECTION OF WORK

- Canada shall review the Work to determine if it is proceeding in conformity with the Contract and to record the necessary data to make an assessment of the value of Work completed. Canada shall measure and record the quantities of labour, Plant and Material performed, used or supplied by the Contractor in performing the Work or any part thereof that is subject to a Unit Price Arrangement and, on request, shall inform the Contractor of those measurements, and permit the Contractor to inspect any records pertaining thereto.
- 2) Canada shall reject Work or Material which in Canada's opinion does not conform to the requirements of the Contract, and shall require inspection or testing of Work, whether or not such Work is fabricated, installed, or completed. If such Work is not in accordance with the requirements of the Contract, the Contractor shall correct the Work and shall pay Canada, on demand, all reasonable costs and expenses that were incurred by Canada in having the examination performed.
- The Contractor shall provide Canada with access to the Work and its site at all times, and at all times shall provide sufficient, safe, and proper facilities for the review and inspection of the Work by persons authorized by Canada and any representatives of those authorities having jurisdiction. If parts of the Work are in preparation at locations other than the site of the Work, Canada shall be given access to such Work whenever it is in progress.
- 4) The Contractor shall furnish Canada with such information respecting the performance of the Contract as Canada may require, and render every possible assistance to enable Canada to verify that the Work is performed in accordance with the Contract, carry out any other duties and exercise any powers in accordance with the Contract.
- 5) If Work is designated for tests, inspections, or approvals in the Contract or by Canada's instructions, or by laws or ordinances of the place of the Work, the Contractor shall give Canada reasonable notice of when such Work shall be ready for review and inspection. The Contractor shall arrange for and shall give Canada reasonable notice of the date and time of inspections, tests or approvals.
- 6) If the Contractor covers, or permits to be covered, Work that has been designated for tests, inspections or approvals before such tests, inspections or approvals are made, completed or given, the Contractor shall, if so directed by Canada, uncover such Work, have the inspections, tests or approvals satisfactorily made, completed or given and make good the covering of the Work at the Contractor's expense.

GC2.6 SUPERINTENDENT

- Prior to commencing the Work, the Contractor shall designate a Superintendent and shall notify Canada of the name, address and telephone number of the Superintendent. The Contractor shall keep the Superintendent at the Work site during working hours until the Work has reached completion.
- 2) The Superintendent shall be in full charge of the operations of the Contractor during the performance of the Work and shall be authorized to accept on behalf of the Contractor any notice, order or other communication given to the Superintendent or the Contractor relating to the Work.

- 3) Upon request of Canada, the Contractor shall remove any Superintendent who, in the opinion of Canada, is incompetent or has been guilty of improper conduct, and shall forthwith designate another Superintendent who is acceptable to Canada.
- 4) The Contractor shall not substitute a Superintendent without the written consent of Canada. If a Superintendent is substituted without such consent, Canada shall be entitled to refuse to issue any documentation or certification relating to progress payments, Substantial Performance or Completion of the Work until the Superintendent has returned to the Work site or another Superintendent who is acceptable to Canada has been substituted.

GC2.7 (2016-05-01) NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR

- For the purposes of this clause, "persons" include the Contractor, its subcontractors and suppliers at any tier and their respective employees, agents, licensees or invitees and any other individual involved in the performance of the Work or granted access to the Work site. A "person" includes any partnership, proprietorship, firm, joint venture, consortium and corporation.
- 2) Without restricting the provisions of paragraph 3) of GC2.6, "Superintendent", the Contractor shall not refuse to employ and shall not discriminate in any manner against any person because
 - of that person's race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, disability, conviction for which a pardon has been granted, or family status;
 - b) of the race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, disability, conviction for which a pardon has been granted, or family status of any person having a relationship or association with that person, or
 - c) a complaint has been made or information has been given in respect of that person relating to an alleged failure by the Contractor to comply with subparagraph (a) or (b).
- 3) Within two working days immediately following receipt of a written complaint pursuant to paragraph 2) of GC2.7, the Contractor shall
 - a) cause to have issued a written direction to the person or persons named by the complainant to cease all actions that form the basis of the complaint;
 - b) forward a copy of the complaint to Canada by registered mail or courier service.
- 4) Within 24 hours immediately following receipt of a direction from Canada to do so, the Contractor shall cause to have removed from the site of the Work and from the performance of Work under the Contract, any person or persons whom Canada believes to be in breach of the provisions of paragraph 2) of GC2.7.
- 5) No later than 30 days after receipt of the direction referred to in paragraph 4) of GC2.7, the Contractor shall cause the necessary action to be commenced to remedy the breach described in the direction.
- 6) If a direction is issued pursuant to paragraph 4) of GC2.7, Canada may withhold from monies that are due and payable to the Contractor or setoff pursuant to GC5.9, "Right of Setoff", whichever is applicable, an amount representing the sum of the costs and payment referred to in paragraph 8) of GC2.7.

- 7) If the Contractor fails to proceed in accordance with paragraph 5) of GC2.7, Canada shall take the necessary action to have the breach remedied, and shall determine all supplementary costs incurred by Canada as a result.
- 8) Canada may make a payment directly to the complainant from monies that are due and payable to the Contractor upon receipt from the complainant of
 - a) a written award issued pursuant to the federal **Commercial Arbitration Act**, R.S. 1985, c. 17 (2nd Supp.);
 - b) a written award issued pursuant to the **Canadian Human Rights Act**, R.S. 1985, c. H-6;
 - c) a written award issued pursuant to provincial or territorial human rights legislation; or
 - d) a judgement issued by a court of competent jurisdiction.
- 9) If Canada is of the opinion that the Contractor has breached any of the provisions of this clause, Canada may take the Work out of the Contractor's hands pursuant to GC7.1, "Taking the Work out of the Contractor's Hands".
- 10) Subject to paragraph 7) of GC3.6, "Subcontracting", the Contractor shall ensure that the provisions of this clause are included in all agreements and contracts entered into as a consequence of the Work.

GC2.8 (2016-05-01) ACCOUNTS AND AUDITS

- The Contractor shall, in addition to the requirements expressed in paragraph 6) of GC3.4, "Execution of the Work", maintain full records of the Contractor's estimated and actual cost of the Work together with all tender calls, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto, and shall make them available on request to audit and inspection by Canada and the Deputy Receiver General for Canada or by persons designated to act on behalf of either or both of them.
- 2) The Contractor shall allow any of the persons referred to in paragraph 1) of GC2.8 to make copies of and take extracts from any of the records and material, and shall furnish such persons or entities with any information those persons or entities may require from time to time in connection with such records and material.
- 3) The Contractor shall maintain and keep the records intact until the expiration of six (6) years after the date that a Certificate of Completion has been issued or until the expiration of such other period of time as Canada may direct.
- 4) The Contractor shall cause all subcontractors at any tier and all other persons directly or indirectly controlled by or affiliated with the Contractor and all persons directly or indirectly having control of the Contractor to comply with the requirements of this clause as if they were the Contractor.

GC3 EXECUTION AND CONTROL OF THE WORK

GC3.1	PROGRESS SCHEDULE
GC3.2	ERRORS AND OMISSIONS
GC3.3	CONSTRUCTION SAFETY
GC3.4	EXECUTION OF THE WORK
GC3.5	MATERIAL
GC3.6	SUBCONTRACTING
GC3.7	CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS
GC3.8	LABOUR
GC3.9	TRUCK HAULAGE RATES (CANCELLED)
GC3.10	MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF CANADA
GC3.11	DEFECTIVE WORK
GC3 12	CLEANUP OF SITE

GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK

GC3.1 (2016-05-01) PROGRESS SCHEDULE

The Contractor shall

- a) prepare and submit to Canada, prior to the submission of the Contractor's first progress claim, a progress schedule in accordance with the requirements set out in the Contract;
- b) monitor the progress of the Work relative to the schedule and update the schedule as stipulated by the contract documents;
- c) advise Canada of any revisions to the schedule required as the result of any extension of time for completion of the Contract that was approved by Canada; and
- d) prepare and submit to Canada, at the time of issuance of a Certificate of Substantial Performance, an update of any schedule clearly showing a detailed timetable that is acceptable to Canada for the completion of any unfinished Work and the correction of all listed defects.

GC3.2 (2016-05-01) ERRORS AND OMISSIONS

The Contractor shall report promptly to Canada any errors, discrepancies, or omissions the Contractor may discover when reviewing the contract documents. In making a review, the Contractor does not assume any responsibility to Canada for the accuracy of the review. The Contractor shall not be liable for damage or costs resulting from such errors, discrepancies, or omissions in the contract documents prepared by or on behalf of Canada that the Contractor did not discover.

GC3.3 CONSTRUCTION SAFETY

 Subject to GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS, the Contractor shall be solely responsible for construction safety at the place of the Work and for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Work. In any emergency, the Contractor shall either stop the Work,

- make changes or order extra work to ensure the safety of life and the protection of the Work and neighbouring property.
- 2) Prior to commencing the Work, the Contractor shall notify the authorities having jurisdiction for construction safety at the site of the Work with respect to the intended commencement of the Work, and shall provide such authority with whatever additional information may be required by that authority.

GC3.4 EXECUTION OF THE WORK

- The Contractor shall perform, use or supply and pay for, all labour, Plant, Material, tools, construction machinery and equipment, water, heat, light, power, transportation and other facilities and services necessary for the performance of the Work in accordance with the Contract.
- 2) The Contractor shall, at all times, perform the Work in a proper, diligent and expeditious manner as is consistent with construction industry standards and in accordance with the progress schedule prepared pursuant to GC3.1 PROGRESS SCHEDULE and shall provide sufficient personnel to fulfil the Contractor's obligations in accordance with that schedule.
- 3) Subject to paragraph 4) of GC3.4, the Contractor shall have complete care, custody and control of the Work and shall direct and supervise the Work so as to ensure compliance with the Contract. The Contractor shall be responsible for construction means, methods, techniques, sequences and procedures and for co-ordinating the various parts of the Work.
- When requested in writing by Canada, the Contractor shall make appropriate alterations in the method, Plant or workforce at any time Canada considers the Contractor's actions to be unsafe or damaging to either the Work, existing facilities, persons at the site of the Work or the environment.
- 5) The Contractor shall have sole responsibility for the design, erection, operation, maintenance and removal of temporary structures and other temporary facilities and for the construction methods used in their erection, operation, maintenance and removal. The Contractor shall engage and pay for registered professional engineering personnel, skilled in the appropriate discipline to perform these functions if required by law or by the Contract, and in all cases when such temporary facilities and their methods of construction are of such a nature that professional engineering skill is required to produce safe and satisfactory results.
- 6) The Contractor shall keep at least one copy of current contract documents, submittals, reports, and records of meetings at the site of the Work, in good order and available to Canada.
- 7) Except for any part of the Work that is necessarily performed away from or off the site of the Work, the Contractor shall confine Plant, storage of Material, and operations of employees to limits indicated by laws, ordinances, permits or the contract documents.

GC3.5 MATERIAL

- Unless otherwise specified in the Contract, all Material incorporated in the Work shall be new.
- Subject to paragraph 3) of GC3.5, if a specified reused, refurbished, or recycled item of Material is not available, the Contractor shall apply to Canada to substitute a similar item for the one specified.

- 3) If Canada agrees that the Contractor's application for substitution of a reused, refurbished or recycled item is warranted, and that the substitute item is of acceptable quality and value to that specified and is suitable for the intended purpose, Canada may approve the substitution, subject to the following:
 - (a) the request for substitution shall be made in writing to Canada and shall be substantiated by information in the form of the manufacturer's literature, samples and other data that may be required by Canada;
 - (b) the Contractor shall make the request for substitution in a manner that shall not negatively affect the progress schedule of the Contract and well in advance of the time the item of Material must be ordered:
 - (c) substitution of Material shall be permitted only with the prior written approval of Canada, and any substituted items that are supplied or installed without such approval shall be removed from the site of the Work at the expense of the Contractor, and specified items installed at no additional cost to Canada; and
 - (d) the Contractor shall be responsible for all additional expenses incurred by Canada, the Contractor, its subcontractors and suppliers at any tier due to the Contractor's use of the substitute.

GC3.6 SUBCONTRACTING

- Subject to the provisions of this clause, the Contractor may subcontract any part of the Work but not the whole of the Work.
- 2) The Contractor shall notify Canada in writing of the Contractor's intention to subcontract.
- A notification referred to in paragraph 2) of GC3.6 shall identify the part of the Work and the Subcontractor with whom the Contractor intends to subcontract.
- 4) Canada may for reasonable cause, object to the intended subcontracting by notifying the Contractor in writing within six (6) days of receipt by Canada of a notification referred to in paragraph 2) of GC3.6.
- If Canada objects to a subcontracting, the Contractor shall not enter into the intended subcontract.
- 6) The Contractor shall not change, nor permit to be changed, a Subcontractor engaged by the Contractor, in accordance with this clause, without the written consent of Canada.
- 7) The Contractor shall ensure that all the terms and conditions of the Contract that are of general application shall be incorporated in every other contract issued as a consequence of the Contract, at whatever tier, except those contracts issued solely to suppliers at any tier for the supply of Plant or Material.
- 8) Neither a subcontracting nor Canada's consent to a subcontracting shall be construed to relieve the Contractor from any obligation under the Contract or to impose any liability upon Canada.

GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS

- Canada reserves the right to send other contractors or workers, with or without Plant and Material, onto the site of the Work.
- 2) When other contractors or workers are sent on to the site of the Work, Canada shall
 - (a) enter into separate contracts, to the extent it is possible, with the other contractors under conditions of contract that are compatible with the conditions of the Contract;
 - (b) ensure that the insurance coverage provided by the other contractors is co-ordinated with the insurance coverage of the Contractor as it affects the Work; and
 - (c) take all reasonable precautions to avoid labour disputes or other disputes arising from the work of the other contractors or workers.
- 3) When other contractors or workers are sent on to the site of the Work, the Contractor shall
 - (a) co-operate with them in the carrying out of their duties and obligations;
 - (b) co-ordinate and schedule the Work with the work of the other contractors and workers;
 - (c) participate with other contractors and workers in reviewing their construction schedules when directed to do so:
 - (d) where part of the Work is affected by or depends upon the work of other contractors or workers for its proper execution, promptly report to Canada in writing and prior to proceeding with that part of the Work, any apparent deficiencies in such work. Failure by the Contractor to so report shall invalidate any claims against Canada by reason of the deficiencies in the work of other contractors or workers except those deficiencies that are not then reasonably discoverable; and
 - (e) when designated as being responsible for construction safety at the place of work in accordance with the applicable provincial or territorial laws, carry out its duties in that role and in accordance with those laws.
- 4) If, when entering into the Contract, the Contractor could not have reasonably foreseen nor anticipated the sending of other contractors or workers on to the site of the Work and provided the Contractor
 - (a) incurs extra expense in complying with the requirements of paragraph 3) of GC3.7; and
 - (b) gives Canada written notice of a claim for that extra expense within thirty (30) days of the date that the other contractors or workers were sent onto the Work or its site;

Canada shall pay the Contractor the cost of the extra labour, Plant and Material that was necessarily incurred, calculated in accordance with GC6.4 DETERMINATION OF PRICE.

GC3.8 LABOUR

To the extent to which they are available, consistent with proper economy and the
expeditious carrying out of the Work, the Contractor shall, in the performance of the Work,
employ a reasonable number of persons who have been on active service with the Armed
Forces of Canada and have been honourably discharged therefrom.

2) The Contractor shall maintain good order and discipline among the Contractor's employees and workers engaged in the Work and shall not employ on the site of the Work anyone not skilled in the tasks assigned.

GC3.9 TRUCK HAULAGE RATES

CANCELLED

GC3.10 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF CANADA

- Subject to paragraph 9) of GC1.8 LAWS PERMITS AND TAXES, all Material and Plant and
 the interest of the Contractor in all real property, licences, powers and privileges purchased,
 used or consumed by the Contractor for the Work shall, immediately after the time of their
 purchase, use or consumption be the property of Canada for the purposes of the Work and
 they shall continue to be the property of Canada
 - (a) in the case of Material, until Canada indicates that the Materials shall not be required for the Work; and
 - (b) in the case of Plant, real property, licences, powers and privileges, until Canada indicates that the interest vested in Canada therein is no longer required for the purposes of the Work.
- 2) Material or Plant, that is the property of Canada by virtue of paragraph 1) of GC3.10, shall not be taken away from the site of the Work nor used nor disposed of except for the purposes of the Work without the written consent of Canada.
- 3) Canada is not liable for loss of nor damage from any cause to the Material or Plant referred to in paragraph 1) of GC3.10, and the Contractor is liable for such loss or damage notwithstanding that the Material or Plant is the property of Canada.

GC3.11 DEFECTIVE WORK

- The Contractor shall promptly remove from the site of the Work and replace or re-execute defective Work whether or not the defective Work has been incorporated in the Work and whether or not the defect is the result of poor workmanship, use of defective Material, or damage through carelessness or other act or omission of the Contractor.
- 2) The Contractor, at the Contractor's expense, shall promptly make good other work destroyed or damaged by such removals or replacements.
- 3) If, in the opinion of Canada, it is not expedient to correct defective Work or Work not performed as provided for in the Contract documents, Canada may deduct from the amount otherwise due to the Contractor the difference in value between the Work as performed and that called for by the contract documents.
- 4) The failure of Canada to reject any defective Work or Material shall not constitute acceptance of the defective Work or Material.

GC3.12 CLEANUP OF SITE

- 1) The Contractor shall maintain the Work and its site in a tidy condition and free from an accumulation of waste material and debris.
- 2) Before the issue of a Certificate of Substantial Performance, the Contractor shall remove waste material and debris, and all Plant and Material not required for the performance of the remaining Work and, unless otherwise stipulated in the Contract Documents, shall cause the Work and its site to be clean and suitable for occupancy by Canada.
- 3) Before the issue of a Certificate of Completion, the Contractor shall remove all surplus Plant and Materials and any waste products and debris from the site of the Work.
- 4) The Contractor's obligations described in paragraphs 1) to 3) of GC3.12 do not extend to waste products and other debris caused by Canada's servants, or by other contractors and workers referred to in GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS.

GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK

- Without restricting any warranty or guarantee implied or imposed by law or contained in the Contract, the Contractor shall, at the Contractor's expense
 - (a) rectify and make good any defect or fault that appears in the Work or comes to the attention of Canada with respect to those parts of the Work accepted in connection with the Certificate of Substantial Performance within 12 months from the date of Substantial Performance; and
 - (b) rectify and make good any defect or fault that appears in or comes to the attention of Canada in connection with those parts of the Work described in the Certificate of Substantial Performance within 12 months from the date of the Certificate of Completion.
 - (c) transfer and assign, to Canada, any subcontractor, manufacturer or supplier extended warranties or guarantees implied or imposed by law or contained in the Contract covering periods beyond the 12 months stipulated above. Extended warranties or guarantees referred to herein shall not extend the 12-month period whereby the Contractor, except as may be provided elsewhere in the Contract, must rectify and make good any defect or fault that appears in the Work or comes to the attention of Canada.
 - (d) provide, to Canada prior to the issuance of the Certificate of Completion, a list of all extended warranties and guarantees referred to in paragraph (c) above.
- 2) Canada may direct the Contractor to rectify and make good any defect or fault referred to in paragraph 1) of GC3.13 or covered by any other expressed or implied warranty or guarantee and the Contractor shall rectify and make good such defect within the time stipulated in the direction.
- 3) A direction referred to in paragraph 2) GC3.13 shall be in writing and shall be given to the Contractor in accordance with GC2.3 NOTICES.

GC4 PROTECTIVE MEASURES

- GC4.1 PROTECTION OF WORK AND PROPERTY
- GC4.2 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE AND OTHER HAZARDS
- GC4.3 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY CANADA
- GC4.4 CONTAMINATED SITE CONDITIONS

GC4.1 PROTECTION OF WORK AND PROPERTY

- The Contractor shall protect the Work and its site against loss or damage from any cause and shall similarly protect all Material, Plant and real property under the Contractor's care, custody and control whether or not such Material, Plant and real property are supplied by Canada to the Contractor.
- 2) The Contractor shall provide all facilities necessary for the purpose of maintaining security, and shall assist any person authorized by Canada to inspect or to take security measures in respect of the Work and its site.
- 3) Canada may direct the Contractor to do such things and to perform such work as Canada considers reasonable and necessary to ensure compliance with or to remedy a breach of paragraphs 1) or 2) of GC4.1, and the Contractor, shall comply with such direction.

GC4.2 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE AND OTHER HAZARDS

- 1) The Contractor shall do whatever is necessary to ensure that
 - (a) no person, property, right, easement nor privilege is injured, damaged or infringed upon by reasons of the Contractor's activities in performing the Work;
 - (b) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted nor endangered by the performance or existence of the Work, Material or Plant:
 - (c) fire hazards in or about the site of the Work are eliminated and any fire is promptly extinguished;
 - (d) the health and safety of all persons employed in the performance of the Work is not endangered by the methods nor means of their performance;
 - (e) adequate medical services are available to all persons employed on the Work or its site at all times during the performance of the Work;
 - (f) adequate sanitation measures are taken in respect of the Work and its site; and
 - (g) all stakes, buoys and marks placed on the Work or its site by Canada are protected and are not removed, defaced, altered nor destroyed.
- 2) Canada may direct the Contractor to do such things and to perform such work as Canada considers reasonable and necessary to ensure compliance with or to remedy a breach of paragraph 1) of GC4.2, and the Contractor shall comply with the direction of Canada.

GC4.3 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY CANADA

- Subject to paragraph 2) of GC4.3, the Contractor is liable to Canada for any loss of or damage to Material, Plant or real property that is supplied or placed in the care, custody and control of the Contractor by Canada for use in connection with the Contract, whether or not that loss or damage is attributable to causes beyond the Contractor's control.
- 2) The Contractor is not liable to Canada for any loss or damage to Material, Plant or real property referred to in paragraph 1) of GC4.3 if that loss or damage results from and is directly attributable to reasonable wear and tear.
- 3) The Contractor shall not use any Material, Plant or real property supplied by Canada except for the purpose of performing the Contract.
- When the Contractor fails to make good any loss or damage for which the Contractor is liable under paragraph 1) within a reasonable time, Canada may cause the loss or damage to be made good at the Contractor's expense, and the Contractor shall thereupon be liable to Canada for the cost thereof and shall, on demand, pay to Canada an amount equal to that cost.
- 5) The Contractor shall keep records of all Material, Plant and real property supplied by Canada as Canada requires and shall satisfy Canada, when requested, that such Material, Plant and real property are at the place and in the condition in which they ought to be.

GC4.4 CONTAMINATED SITE CONDITIONS

- 1) For the purposes of GC4.4, a contaminated site condition exists when a solid, liquid, gaseous, thermal or radioactive irritant or contaminant, or other hazardous or toxic substance or material, including moulds and other forms of fungi, is present at the site of the Work to an extent that constitutes a hazard, or potential hazard, to the environment, property, or the health or safety of any person.
- 2) If the Contractor encounters a contaminated site condition of which the Contractor is not aware or about which the Contractor has not been advised, or if the Contractor has reasonable grounds to believe that such a site condition exists at the site of the Work, the Contractor shall
 - (a) take all reasonable steps, including stopping the Work, to ensure that no person suffers injury, sickness or death, and that neither property nor the environment is injured or destroyed as a result of the contaminated site condition;
 - (b) immediately notify Canada of the circumstances in writing; and
 - (c) take all reasonable steps to minimize additional costs that may accrue as a result of any work stoppage.
- 3) Upon receipt of a notification from the Contractor, Canada shall promptly determine whether a contaminated site condition exists, and shall notify the Contractor in writing of any action to be taken, or work to be performed, by the Contractor as a result of Canada's determination.
- 4) If the Contractor's services are required by Canada, the Contractor shall follow the direction of Canada with regard to any excavation, treatment, removal and disposal of any polluting substance or material.

- 5) Canada, at Canada's sole discretion, may enlist the services of experts and specialty contractors to assist in determining the existence of, and the extent and treatment of contaminated site conditions, and the Contractor shall allow them access and co-operate with them in the carrying out of their duties and obligations.
- Except as may be otherwise provided for in the Contract, the provisions of GC6.4 DETERMINATION OF PRICE shall apply to any additional work made necessary because of a contaminated site condition.

GC5.12 INTEREST ON SETTLED CLAIMS GC5.13 RETURN OF SECURITY DEPOSIT

GC5 TERMS OF PAYMENT

INTERPRETATION

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GC5.10	ASSESSMENTS AND DAMAGES FOR LATE COMPLETION
GC5.11	DELAY IN MAKING PAYMENT

GC5.1 INTERPRETATION

In these Terms of Payment

- 1) The "payment period" means a period of 30 consecutive days or such other longer period as may be agreed between the Contractor and Canada.
- An amount is "due and payable" when it is due and payable by Canada to the Contractor according to GC5.4 PROGRESS PAYMENT, GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK or GC5.6 FINAL COMPLETION.
- 3) An amount is "overdue" when it remains unpaid on the first day following the day upon which it is due and payable.
- 4) The "date of payment" means the date of the negotiable instrument of an amount due and payable by the Receiver General for Canada.
- 5) The "Bank Rate" means the rate of interest established by the Bank of Canada as the minimum rate at which it makes short term advances to members of the Canadian Payments Association.
- 6) The "Average Bank Rate" means the simple arithmetic mean of the Bank Rate in effect at 4:00 p.m. Eastern Time each day during the calendar month which immediately precedes the calendar month in which payment is made.

GC5.2 AMOUNT PAYABLE

- Subject to any other provisions of the Contract, Canada shall pay the Contractor, at the times and in the manner hereinafter set out, the amount by which the amounts payable by Canada to the Contractor in accordance with the Contract exceed the amounts payable by the Contractor to Canada, and the Contractor shall accept that amount as payment in full satisfaction for everything furnished and done by the Contractor in respect of the Work to which the payment relates.
- When making any payment to the Contractor, the failure of Canada to deduct an amount payable to Canada by the Contractor shall not constitute a waiver of the right to do so, or an admission of lack of entitlement to do so in any subsequent payment to the Contractor.

- 3) Should any payment be made by Canada in excess of what is owed to the Contractor for the actual work performed, the Contractor will reimburse Canada the excess immediately, with or without demand, and any amounts outstanding shall bear simple interest at the Average Bank rate plus 3 percent per annum from the date of overpayment until the day prior to the date of repayment by the Contractor.
- 4) No payment other than a payment that is expressly stipulated in the Contract shall be made by Canada to the Contractor for any extra expense or any loss or damage incurred or sustained by the Contractor.

GC5.3 (2016-05-01) INCREASED OR DECREASED COSTS

- 1. The Contract Amount shall not be increased nor decreased by reason of any increase or decrease in the cost of the Work that is brought about by an increase or decrease in the cost of labour, Plant, Material or any wage adjustment.
- 2. Notwithstanding paragraph 1) of GC5.3, if any change, including a new imposition or repeal, of any tax, customs or other duty, charge, or any similar imposition that is imposed under sales, customs or excise tax legislation of the Government of Canada or any Provincial or Territorial legislation, affects the cost of the Work to the Contractor, and occurs
 - a) after the date of submission by the Contractor of its bid; or
 - b) after the date of submission of the last revision, if the Contractor's bid was revised;
 - the Contract Amount shall be adjusted in the manner provided in paragraph 3) of GC5.3.
- 3. If a change referred to in paragraph 2) of GC5.3 occurs, the Contract Amount shall be increased or decreased by an amount established by an examination by Canada of the relevant records of the Contractor referred to in GC2.8, "Accounts and Audits", to be the increase or decrease in the cost incurred by the Contractor that is directly attributable to that change.
- 4. For the purpose of paragraph 2) of GC5.3, if a tax is changed after the tender closing, but public notice of the change has been given by the Minister of Finance or the corresponding Provincial or Territorial authority before that closing, the change shall be deemed to have occurred before the solicitation closing.
- 5. Notwithstanding paragraphs 2) to 4) of GC5.3, no adjustment to the Contract Amount in respect of the Work or a part thereof shall be made for a change in any imposition referred to in this section that occurs after the date required by the Contract for completion of the Work or that part of the Work.

GC5.4 (2016-05-01) PROGRESS PAYMENT

- 1) On the expiration of a payment period, the Contractor shall deliver to Canada
 - a) a written progress claim in a form acceptable to Canada that fully describes any part of the Work that has been completed, and any Material that was delivered to the Work site but not incorporated into the Work, during that payment period, and

- b) a completed and signed statutory declaration containing a declaration that, up to the date of the progress claim, the Contractor has complied with all lawful obligations and that, in respect of the Work, all lawful obligations of the Contractor to its Subcontractors and Suppliers, referred to collectively in the declaration as " subcontractors and suppliers", have been fully discharged.
- Within 10 days of receipt of a progress claim and statutory declaration from the Contractor, Canada shall inspect, or cause to have inspected, the part of the Work and the Material described in the progress claim, and shall issue a progress report to the Contractor, that indicates the value of the part of the Work and the Material described in the progress claim that, in the opinion of Canada
 - a) is in accordance with the Contract; and
 - b) was not included in any other progress report relating to the Contract.
- 3) Subject to GC5.2, "Amount Payable", and paragraph 5) of GC5.4, Canada shall pay the Contractor an amount that is equal to
 - a) 95 percent of the value that is indicated in Canada's progress report if a labour and material payment bond has been furnished by the Contractor; or
 - b) 90 percent of the value that is indicated in Canada's progress report if a labour and material payment bond has not been furnished by the Contractor.
- 4) Canada shall pay the amount referred to in paragraph 3) of GC5.4 not later than
 - a) 30 days after receipt by Canada of both a progress claim and a statutory declaration referred to in paragraph 1) of GC5.4; or
 - b) 15 days after receipt by Canada of the Contractor's progress schedule or updated progress schedule, in accordance with GC3.1, "Progress Schedule".

whichever is later.

5) In the case of the Contractor's first progress claim, it is a condition precedent to Canada's obligation under paragraph 3) of GC5.4 that the Contractor has provided all necessary documentation required by the Contract for the first progress claim.

GC5.5 (2016-05-01) SUBSTANTIAL PERFORMANCE OF THE WORK

- 1. If, at any time before the issuance of a Certificate of Completion, Canada determines that the Work has reached Substantial Performance as described in subparagraph 1) (b) of GC1.1.4, "Substantial Performance", Canada shall issue a Certificate of Substantial Performance to the Contractor. The Certificate of Substantial Performance shall state or describe
 - a) the date of Substantial Performance;
 - b) the parts of the Work not completed to the satisfaction of Canada; and
 - c) all things that must be done by the Contractor before a Certificate of Completion is issued and before the 12-month warranty period referred to in GC3.13, "Warranty and Rectification of Defects in Work", commences for the said parts and all the said things.

- 2. The issuance of a Certificate of Substantial Performance does not relieve the Contractor from the Contractor's obligations under GC3.11, "Defective Work".
- Subject to GC5.2, "Amount Payable", and paragraph 4) of GC5.5, Canada shall pay the Contractor the amount referred to in paragraph 1) of GC5.2, "Amount Payable", less the aggregate of
 - a) the sum of all payments that were made pursuant to GC5.4, "Progress Payment";
 - b) an amount that is equal to Canada's estimate of the cost to Canada of rectifying defects described in the Certificate of Substantial Performance; and
 - an amount that is equal to Canada's estimate of the cost to Canada of completing the parts of the Work described in the Certificate of Substantial Performance other than defects listed therein.
- 4. Canada shall pay the amount referred to in paragraph 3) of GC5.5 not later than
 - a) 30 days after the date of issue of a Certificate of Substantial Performance, or
 - b) 15 days after the Contractor has delivered to Canada
 - I. a statutory declaration containing a declaration by the Contractor that up to the date of the Certificate of Substantial Performance, the Contractor has complied with all lawful obligations, discharged all its lawful obligations to its Subcontractors and Suppliers in respect of the work under the Contract, and discharged its lawful obligations referred to in GC1.8, "Laws, Permits and Taxes";
 - II. evidence of compliance with workers' compensation legislation in accordance with GC1.9, "Workers' Compensation"; and
 - III. an update of the progress schedule in accordance with the requirements of GC3.1, "Progress Schedule"; whichever is later.

GC5.6 FINAL COMPLETION

- When Canada is of the opinion that the Contractor has complied with the Contract and all orders and directions made pursuant thereto, and that the Work has been completed as described in GC1.1.5 COMPLETION, Canada shall issue a Certificate of Completion to the Contractor and, if the Work or a portion of the Work is subject to a Unit Price Arrangement, Canada shall issue a Certificate of Measurement that shall, subject to GC8, be binding upon and conclusive between Canada and the Contractor as to the quantities referred to therein.
- Subject to GC5.2 AMOUNT PAYABLE and paragraph 3) of GC5.6, Canada shall pay the Contractor the amount referred to in GC5.2 AMOUNT PAYABLE, less the aggregate of the sum of all payments that were made pursuant to GC5.4 PROGRESS PAYMENT and GC5.5 SUBSTANTIAL PERFORMANCE OF WORK.
- 3) Canada shall pay the amount referred to in paragraph 2) of GC5.6 not later than
 - (a) 60 days after the date of issue of a Certificate of Completion; or
 - (b) 15 days after the Contractor has delivered to Canada

- a statutory declaration which contains a declaration by the Contractor that all of the Contractor's lawful obligations and any lawful claims against the Contractor that arose out of the performance of the Contract have been discharged and satisfied; and
- (ii) evidence of compliance with workers' compensation legislation in accordance with GC1.9 WORKERS' COMPENSATION;

whichever is later.

GC5.7 (2016-05-01) PAYMENT NOT BINDING ON CANADA

 Neither acceptance of a progress claim or progress report, nor any payment made by Canada under the Contract, nor partial or entire use or occupancy of the Work by Canada shall constitute an acceptance by Canada of any portion of the Work or Material that is not in accordance with the requirements of the Contract.

GC5.8 CLAIMS AND OBLIGATIONS

- 1) The Contractor shall discharge all the Contractor's lawful obligations and shall satisfy all lawful claims against the Contractor arising out of the performance of the Work at least as often as the Contract requires Canada to pay the Contractor.
- 2) Whenever requested to do so by Canada, the Contractor shall make a statutory declaration declaring to the existence and condition of any obligations and claims against the Contractor arising out of the performance of the Work.
- 3) In order to discharge lawful obligations of and satisfy lawful claims against the Contractor or its Subcontractors arising out of the performance of the Contract, Canada may pay an amount that is due and payable to the Contractor directly to the claimant. Such payment is, to the extent of the payment, a discharge of Canada's liability to the Contractor under the Contract and may be deducted from any amount payable to the Contractor under the Contract.
- 4) For the purposes of paragraph 3) of GC5.8, and subject to paragraph 6) of GC5.8, a claim or obligation shall be considered lawful when it is so determined by
 - (a) a court of legal jurisdiction;
 - (b) an arbitrator duly appointed to arbitrate the claim; or
 - (c) the written consent of the Contractor authorizing payment of the claim or obligation.
- 5) If a claim or obligation would have been subject to the provisions of Provincial or Territorial lien legislation or, in the Province of Quebec, the law relating to legal hypothecs had the Contractor been performing the Work for an entity other than Canada
 - (a) such amount as may be paid by Canada pursuant to paragraphs 3) and 4) of GC5.8 shall not exceed the amount that the Contractor would have been obliged to pay had the provisions of such legislation or law been applicable to the Work;
 - (b) a claimant need not comply with the provisions of such legislation, setting out the steps by way of notice, registration or otherwise as might have been necessary to preserve or perfect any claim for lien or privilege which the claimant might have had; and

- (c) for the purposes of determining the entitlement of a claimant, the notice required by paragraph 8) of GC5.8 shall be deemed to replace the registration or provision of notice after the performance of work as required by any applicable legislation and no claim shall be deemed to have expired, become void or unenforceable by reason of the claimant not commencing any action within the time prescribed by such legislation.
- 6) The Contractor shall, at the request of any claimant, submit to binding arbitration those questions that need to be answered to establish the entitlement of the claimant to payment. The arbitration shall have as parties to it any Subcontractor or Supplier to whom the claimant supplied Material, performed work or rented equipment should such Subcontractor or Supplier wish to be adjoined, and Canada shall not be a party to such arbitration. Subject to any agreement between the Contractor and the claimant, the arbitration shall be conducted in accordance with the governing Provincial or Territorial legislation applicable to the site of the Work.
- 7) Paragraph 3) of GC5.8 shall apply only to claims and obligations
 - (a) the notification of which has set forth the amount claimed to be owing and the person who by contract is primarily liable and has been received by Canada in writing before final payment is made to the Contractor pursuant to GC5.6 FINAL COMPLETION, and within 120 days of the date on which the claimant
 - (i) should have been paid in full under the claimant's contract with the Contractor, its Subcontractor or Supplier if the claim is for money that was lawfully required to be held back from the claimant; or
 - (ii) performed the last of the services, work or labour, or furnished the last of the Material pursuant to the claimant's contract with the Contractor or its Subcontractor or Supplier where the claim is for money not lawfully required to be held back from the claimant; and
 - (b) the proceedings to determine the right to payment of which, pursuant to paragraph 5) of GC5.8, shall have commenced within one year from the date that the notification required by subparagraph 7)(a) of GC5.8 was received by Canada.
- 8) Upon receipt of a notice of claim, Canada may withhold, from any amount that is due and payable to the Contractor pursuant to the Contract, the full amount of the claim or any portion thereof.
- 9) Canada shall notify the Contractor in writing in a timely manner of receipt of any claim and of the intention of Canada to withhold funds. At any time thereafter and until payment is made to the claimant, the Contractor may be entitled to post, with Canada, security in a form acceptable to Canada in an amount equal to the value of the claim, and upon receipt of such security Canada shall release to the Contractor any funds that would be otherwise payable to the Contractor, that were withheld pursuant to the provisions of this clause in respect of the claim of any claimant for whom the security stands.

GC5.9 RIGHT OF SETOFF

 Without limiting any right of setoff or deduction given or implied by law or elsewhere in the Contract, Canada may set off any amount payable to Canada by the Contractor under the Contract, or under any current contract, against any amount payable to the Contractor under the Contract.

- 2) For the purposes of paragraph 1) of GC5.9, "current contract" means a contract between Canada and the Contractor
 - (a) under which the Contractor has an undischarged obligation to perform or supply work, labour or material; or
 - (b) in respect of which Canada has, since the date of the Contract, exercised any right to take the work that is the subject of that contract out of the Contractor's hands.

GC5.10 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION

- 1) For the purposes of this clause
 - the Work shall be deemed to be completed on the date of the Certificate of Completion;
 and
 - (b) the "period of delay" means the number of days commencing on the day fixed for completion of the Work and ending on the day immediately preceding the day on which the Work is completed but does not include any day within a period of extension granted pursuant to GC6.5 DELAYS AND EXTENSION OF TIME and any other day on which, in the opinion of Canada, completion of the Work was delayed for reasons beyond the control of the Contractor.
- If the Contractor does not complete the Work by the day fixed for its completion but completes it thereafter, the Contractor shall pay Canada an amount equal to the aggregate of
 - (a) all salaries, wages and travelling expenses incurred by Canada in respect of persons overseeing the performance of the Work during the period of delay;
 - (b) the cost incurred by Canada as a result of the inability to use the completed Work for the period of delay; and
 - (c) all other expenses and damages incurred or sustained by Canada during the period of delay as a result of the Work not being completed by the day fixed for its completion.
- 3) Canada may waive the right of Canada to the whole or any part of the amount payable by the Contractor pursuant to paragraph 2) of GC5.10 if, in the opinion of Canada, it is in the public interest to do so.

GC5.11 DELAY IN MAKING PAYMENT

- Notwithstanding GC1.5 TIME OF THE ESSENCE, any delay by Canada in making any
 payment when it is due pursuant to GC5 TERMS OF PAYMENT, shall not be a breach of
 the Contract by Canada.
- 2) Subject to paragraph 3) of GC5.11, Canada shall pay to the Contractor simple interest at the Average Bank Rate plus 3 percent per annum on any amount that is overdue pursuant to paragraph 3) of GC5.1 INTERPRETATION, and the interest shall apply from and include the day such amount became overdue until the day prior to the date of payment.
- 3) Interest shall be paid without demand by the Contractor except that

- (a) in respect of amounts that are less than 15 days overdue, no interest shall be paid in respect of payment made within such 15 days unless the Contractor so demands after such amounts have become due and payable; and
- (b) interest shall not be payable or paid on overdue advance payments, if any.

GC5.12 INTEREST ON SETTLED CLAIMS

- 1) For the purposes of this clause, a claim means a disputed amount subject to negotiation between Canada and the Contractor under the Contract.
- 2) A claim is deemed to have been settled when an agreement in writing is signed by Canada and the Contractor setting out the amount of the claim to be paid by Canada and the items of work for which the said amount is to be paid.
- 3) A settled claim is deemed to be outstanding from the day immediately following the date the said claim would have been due and payable under the Contract had it not been disputed.
- 4) Canada shall pay to the Contractor simple interest on the amount of a settled claim at the Average Bank Rate plus 3 percent per annum from the date the settled claim was deemed to be outstanding until the day prior to the date of payment.

GC5.13 RETURN OF SECURITY DEPOSIT

- After a Certificate of Substantial Performance has been issued, and if the Contractor is not in breach of nor in default under the Contract, Canada shall return to the Contractor all or any part of a Security Deposit that, in the opinion of Canada, is not required for the purposes of the Contract.
- 2) After a Certificate of Completion has been issued, Canada shall return to the Contractor the remainder of any security deposit unless the Contract stipulates otherwise.
- 3) If the security deposit was paid into the Consolidated Revenue Fund of Canada, Canada shall pay interest thereon to the Contractor at a rate established pursuant to section 21(2) of the *Financial Administration Act (FAA)*.

GC6 DELAYS AND CHANGES IN THE WORK

GC6.1	CHANGES IN THE WORK
GC6.2	CHANGES IN SUBSURFACE CONDITIONS
GC6.3	HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR
	SCIENTIFIC INTEREST
GC6.4	DETERMINATION OF PRICE
	GC6.4.1 Price Determination Prior to Undertaking Changes
	GC6.4.2 Price Determination Following Completion of Changes
	GC6.4.3 Price Determination - Variations in Tendered Quantities
GC6.5	DELAYS AND EXTENSION OF TIME

GC6.1 CHANGES IN THE WORK

- At any time before issuance of a Certificate of Completion, Canada may issue orders for additions, deletions or other changes to the Work, or changes in the location or position of the whole or any part of the Work, if the addition, deletion, change or other revision is deemed by Canada to be consistent with the general intent of the Contract.
- An order referred to in paragraph 1) of GC6.1 shall be in writing and given to the Contractor in accordance with GC2.3 NOTICES.
- 3) Upon receipt of an order, the Contractor shall promptly perform the work in accordance with the order as if the order had appeared in and been part of the original Contract.
- 4) If anything done or omitted by the Contractor pursuant to an order increases or decreases the cost of the Work to the Contractor, payment for the work shall be made in accordance with GC6.4 DETERMINATION OF PRICE.

GC6.2 CHANGES IN SUBSURFACE CONDITIONS

- If, during the performance of the Work, the Contractor encounters subsurface conditions that
 are substantially different from the subsurface conditions described in the tender documents
 supplied to the Contractor, or a reasonable assumption of fact based thereon, the Contractor
 shall give notice to Canada immediately upon becoming aware of the situation.
- 2) If the Contractor is of the opinion that the Contractor may incur or sustain any extra expense or any loss or damage that is directly attributable to the changed subsurface conditions, the Contractor shall within 10 days of the date the changed subsurface conditions were encountered, give Canada written notice of intention to claim for that extra expense, loss or damage.
- 3) If the Contractor has given a notice referred to in paragraph 2) of GC6.2, the Contractor shall give Canada a written claim for extra expense, loss or damage no later than 30 days after the date that a Certificate of Substantial Performance is issued.
- 4) A written claim referred to in paragraph 3) of GC6.2 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable Canada to determine whether or not the claim is justified, and the Contractor shall supply such further and other information for that purpose as Canada requires.
- 5) If Canada determines that a claim referred to in paragraph 3) of GC6.2 is justified, Canada shall make an extra payment to the Contractor in an amount that is calculated in accordance with GC6.4 DETERMINATION OF PRICE.

- 6) If, in the opinion of Canada, the Contractor effects a saving of expenditure that is directly attributable to a substantial difference between the information relating to subsurface conditions at the site of the Work that is contained in the tender documents, or a reasonable assumption of fact based thereon, and the actual subsurface conditions encountered by the Contractor, the Contract Amount shall be reduced by the amount of the saving of expenditure determined in accordance with GC6.4 DETERMINATION OF PRICE.
- 7) If the Contractor fails to give a notice referred to in paragraph 2) of GC6.2 and a claim referred to in paragraph 3) of GC6.2 within the times stipulated, an extra payment shall not be made to the Contractor in respect of the occurrence.
- 8) Canada does not warrant the content expressed in any subsurface report available for the perusal of the Contractor that does not form part of the tender and contract documents.

GC6.3 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC INTEREST

- 1) For the purposes of this clause
 - (a) "human remains" means the whole or any part of a deceased human being, irrespective of the time of death;
 - (b) "archaeological remains" are items, artefacts or things made, modified or used by human beings in antiquity and may include, but not be limited to, stone, wood or iron structures or monuments, dump deposits, bone artefacts, weapons, tools, coins, and pottery; and
 - (c) "items of historical or scientific interest" are naturally occurring or manufactured objects or things of any age that are not archaeological remains but may be of interest to society because of their historical or scientific significance, value, rarity, natural beauty, or other quality.
- 2) If, during the course of the Work, the Contractor encounters any object, item or thing which is described in paragraph 1) of GC6.3 or which resembles any object, item or thing described in paragraph 1) of GC6.3, the Contractor shall
 - (a) take all reasonable steps, including stopping work in the affected area, to protect and preserve the object, item or thing;
 - (b) immediately notify Canada of the circumstances in writing; and
 - (c) take all reasonable steps to minimize additional costs that may accrue as a result of any work stoppage.
- 3) Upon receipt of a notification in accordance with subparagraph 2)(b) of GC6.3, Canada shall promptly determine whether the object, item or thing is one described in, or contemplated by paragraph 1) of GC6.3, and shall notify the Contractor in writing of any action to be performed, or work to be carried out, by the Contractor as a result of Canada's determination.
- 4) Canada may, at any time, enlist the services of experts to assist in the investigation, examination, taking of measurements or other such recordings, placing of permanent protection around or removing of the object, item or thing encountered by the Contractor, and the Contractor shall, to the satisfaction of Canada, allow them access and co-operate with them in the carrying out of their duties and obligations.

- 5) Human remains, archaeological remains and items of historical or scientific interest encountered at the site of the Work shall be deemed to be the property of Canada.
- 6) Except as may be otherwise provided for in the Contract, the provisions of GC6.4 DETERMINATION OF PRICE and GC6.5 DELAYS AND EXTENSION OF TIME shall apply.

GC6.4 DETERMINATION OF PRICE

GC6.4.1 Price Determination Prior to Undertaking Changes

- 1) If a Lump Sum Arrangement applies to the Contract or a part thereof, the price of any change shall be the aggregate estimated cost of labour, Plant and Material that is required for the change as agreed upon in writing by the Contractor and Canada plus a negotiated allowance for supervision, co-ordination, administration, overhead, margin and the risk of undertaking the work within the stipulated amount.
- 2) If a Unit Price Arrangement applies to the Contract or a part thereof, the Contractor and Canada may, by agreement in writing, add items, units of measurement, estimated quantities and prices per unit to the Unit Price Table.
- 3) A price per unit referred to in paragraph 2) of GC6.4.1 shall be determined on the basis of the aggregate estimated cost of labour, Plant and Material that is required for the additional item as agreed upon by the Contractor and Canada, plus a negotiated allowance.
- 4) To facilitate approval of the price of the change or the additional price per unit as applicable, the Contractor shall submit a cost estimate breakdown identifying, as a minimum, the estimated cost of labour, Plant, Material, each subcontract amount, and the amount of the negotiated allowance.
- 5) If no agreement is reached as contemplated in paragraph 1) of GC6.4.1, the price shall be determined in accordance with GC6.4.2.
- 6) If no agreement is reached, as contemplated in paragraphs 2) and 3) of GC6.4.1, Canada shall determine the class and the unit of measurement of the item of labour, Plant or Material and the price per unit shall be determined in accordance with GC6.4.2.

GC6.4.2 Price Determination Following Completion of Changes

- 1) If it is not possible to predetermine, or if there is failure to agree upon the price of a change in the Work, the price of the change shall be equal to the aggregate of
 - (a) all reasonable and proper amounts actually expended or legally payable by the Contractor in respect of the labour, Plant and Material that fall within one of the classes of expenditure described in paragraph 2) of GC6.4.2, that are directly attributable to the performance of the Contract;
 - (b) an allowance for profit and all other expenditures or costs, including overhead, general administration costs, financing and interest charges, in an amount that is equal to 10 percent of the sum of the expenses referred to in subparagraph 1)(a) of GC6.4.2; and
 - (c) interest on the amounts determined under subparagraphs 1)(a) and 1)(b) of GC6.4.2 calculated in accordance with GC5.12 INTEREST ON SETTLED CLAIMS;

- 2) The cost of labour, Plant and Material referred to in subparagraph 1)(a) of GC6.4.2 shall be limited to the following categories of expenditure:
 - (a) payments to Subcontractors and Suppliers;
 - (b) wages, salaries, bonuses and, if applicable, travel and lodging expenses of employees of the Contractor located at the site of the Work and that portion of wages, salaries, bonuses and, if applicable, travel and lodging expenses of personnel of the Contractor generally employed at the head office or at a general office of the Contractor provided they are actually and properly engaged on the Work under the Contract;
 - (c) assessments payable under any statutory authority relating to workers' compensation, employment insurance, pension plan or holidays with pay, provincial health or insurance plans, environmental reviews, and Applicable Taxes collection costs:
 - (d) rent that is paid for Plant, or an amount equivalent to the said rent if the Plant is owned by the Contractor, that is necessary for and used in the performance of the Work, if the rent or the equivalent amount is reasonable and use of that Plant has been approved by Canada;
 - (e) payments for maintaining and operating Plant necessary for and used in the performance of the Work, and payments for effecting repairs thereto that, in the opinion of Canada, are necessary for the proper performance of the Contract, other than payments for any repairs to the Plant arising out of defects existing before its allocation to the Work;
 - (f) payments for Material that is necessary for and incorporated in the Work, or that is necessary for and consumed in the performance of the Contract;
 - (g) payments for preparation, delivery, handling, erection, installation, inspection, protection and removal of the Plant and Material necessary for and used in the performance of the Contract; and
 - (h) any other payments made by the Contractor with the approval Canada that are necessary for the performance of the Contract in accordance with the Contract Documents.

GC6.4.3 Price Determination - Variations in Tendered Quantities

- 1) Except as provided in paragraphs 2), 3), 4) and 5) of GC6.4.3, if it appears that the final quantity of labour, Plant and Material under a price per unit item shall exceed or be less than the estimated tendered quantity, the Contractor shall perform the Work or supply the Plant and Material required to complete the item and payment shall be made for the actual Work performed or Plant and Material supplied at the price per unit set out in the Contract.
- 2) If the final quantity of the price per unit item exceeds the estimated tendered quantity by more than 15 percent, either party to the Contract may make a written request to the other party to negotiate an amended price per unit for that portion of the item which exceeds 115 percent of the estimated tendered quantity, and to facilitate approval of any amended price per unit, the Contractor shall, on request, provide Canada with
 - detailed records of the actual cost to the Contractor of performing or supplying the tendered quantity for the price per unit item up to the time the negotiation was requested; and

- (b) the estimated unit cost of labour, Plant and Material required for the portion of the item that is in excess of 115 percent of the tendered quantity.
- 3) If agreement is not reached as contemplated in paragraph 2) of GC6.4.3, the price per unit shall be determined in accordance with GC6.4.2.
- 4) If it appears that the final quantity of labour, Plant and Material under a price per unit item shall be less than 85 percent of the estimated tendered quantity, either party to the Contract may make a written request to the other party to negotiate a change to the price per unit for the item if
 - (a) there is a demonstrable difference between the unit cost to the Contractor of performing or supplying the estimated tendered quantity and the unit cost to the Contractor for performing or supplying the final quantity; and
 - (b) the difference in unit cost is due solely to the decrease in quantity and not to any other cause.
- 5) For the purposes of the negotiation referred to in paragraph 4) of GC6.4.3
 - (a) the onus of establishing, justifying and quantifying a proposed change lies with the party making the request for negotiation; and
 - (b) in no event shall the total price for an item that has been amended as a result of a reduction in quantity pursuant to paragraph 4) of GC6.4.3 exceed the amount that would have been payable to the Contractor had 85 percent of the tendered quantity actually been performed or supplied.

GC6.5 DELAYS AND EXTENSION OF TIME

- 1) Upon application of the Contractor made before the date first fixed for completion of the Work or before any other date previously fixed under this clause, Canada may extend the time for completion of the Work by fixing a new date if Canada determines that causes beyond the control of the Contractor have delayed its completion.
- 2) The Contractor's application shall be accompanied by the written consent of the bonding company whose bond forms part of the Contract Security.
- 3) Subject to paragraph 4) of GC6.5, no payment, other than a payment that is expressly stipulated in the Contract, shall be made by Canada to the Contractor for any extra expense, loss or damage incurred or sustained by the Contractor due to delay, whether or not the delay is caused by circumstances beyond the control of the Contractor.
- 4) If the Contractor incurs or sustains any extra expense or any loss or damage that is directly attributable to any neglect or delay that occurs after the date of the Contract on the part of Canada in providing any information or in doing any act that the Contract either expressly requires Canada to do or that would ordinarily be done by an owner in accordance with the practice of the trade, the Contractor shall give Canada written notice of intention to claim for that extra expense or loss or damage within ten working days of the date the neglect or delay first occurred.
- 5) When the Contractor has given a notice referred to in paragraph 4) of GC6.5, the Contractor shall give Canada a written claim for the extra expense, loss or damage no later than 30 days after the date that a Certificate of Completion is issued and not afterwards.

- 6) A written claim referred to in paragraph 5) of GC6.5 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable Canada to determine whether or not the claim is justified and the Contractor shall supply such further and other information for that purpose as Canada may require.
- 7) If Canada determines that a claim referred to in paragraph 5) of GC6.5 is justified, Canada shall make an extra payment to the Contractor in an amount that is calculated in accordance with GC6.4 DETERMINATION OF PRICE.
- 8) If the Contractor fails to give a notice referred to in paragraph 4) and a claim referred to in paragraph 5) of GC6.5 within the times stipulated, an extra payment shall not be made to the Contractor in respect of the occurrence.

GC7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT

- GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS
- GC7.2 SUSPENSION OF WORK
- GC7.3 TERMINATION OF CONTRACT
- GC7.4 SECURITY DEPOSIT FORFEITURE OR RETURN

GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS

- By giving notice in writing to the Contractor in accordance with GC2.3 NOTICES, Canada, without any other authorization, may take all or any part of the Work out of the Contractor's hands, and may employ such means as Canada sees fit to have the Work completed if the Contractor:
 - (a) fails to remedy any delay in the commencement or default in the diligent performance of the Work to the satisfaction of Canada within six days of Canada giving notice to the Contractor in writing in accordance with GC2.3 NOTICES;
 - (b) defaults in the completion of any part of the Work within the time fixed for its completion by the Contract;
 - (c) becomes insolvent, or has committed an act of bankruptcy, and has neither made a proposal to its creditors nor filed a notice of intention to make such a proposal, pursuant to the *Bankruptcy and Insolvency Act*;
 - (d) abandons the work;
 - (e) makes an assignment of the Contract without the consent required by GC1.16 ASSIGNMENT; or
 - (f) otherwise fails to observe or perform any of the provisions of the Contract.
- 2) If the whole or any part of the Work is taken out of the Contractor's hands, the Contractor's right to any further payment that is due or accruing due under the Contract is, subject only to paragraph 3) of GC7.1, extinguished, and the Contractor is liable to pay Canada, upon demand, an amount that is equal to the amount of all loss and damage incurred or sustained by Canada in respect of the Contractor's failure to complete the Work.
- 3) If the whole or any part of the Work that is taken out of the Contractor's hands is completed by Canada, Canada may pay the Contractor the amount, if any, of the holdback or a progress claim as determined by Canada that had accrued and was due prior to the date on which the Work was taken out of the Contractor's hands and that is not required for the purposes of having the Work performed or of compensating Canada for any other loss or damage incurred or sustained by reason of the Contractor's default.
- 4) The taking of the Work or any part thereof out of the Contractor's hands does not relieve the Contractor from any obligation under the Contract or imposed by law except the obligation to complete the performance of that part of the Work that was taken out of the Contractor's hands.
- 5) If the Work or any part thereof is taken out of the Contractor's hands, all Plant and Material and the interest of the Contractor, or its suppliers or subcontractors at any tier, in all real property, licences, powers and privileges acquired, used or provided by the Contractor, or its suppliers or subcontractors at any tier, under the Contract shall continue to be the property of Canada without compensation.

- 6) When Canada certifies that any Plant, Material, or any interest of the Contractor is no longer required for the purposes of the Work, or that it is not in the interests of Canada to retain that Plant, Material, or interest, it shall revert to the Contractor.
- 7) If the Contractor has become insolvent or has committed an act of bankruptcy, and has either made a proposal to its creditors or filed a notice of intention to make such a proposal, pursuant to the <u>Bankruptcy and Insolvency Act</u>, the Contractor shall immediately forward a copy of the proposal or the notice of intention to Canada.

GC7.2 SUSPENSION OF WORK

- When, in Canada's opinion, it is in the public interest to do so, Canada may require the Contractor to suspend performance of the Work either for a specified or an unspecified period, by giving a notice of suspension in writing to the Contractor in accordance with GC2.3 NOTICES.
- When a notice of suspension is received by the Contractor, the Contractor shall suspend all operations in respect of the Work except those that Canada determines are necessary for the care and preservation of the Work, Plant and Material.
- 3) During a period of suspension, the Contractor shall not remove any part of the Work, Plant or Material from its site without the consent of Canada.
- 4) If a period of suspension is 60 days or less, the Contractor shall resume the performance of the Work on the expiration of that period, and the Contractor is entitled to be paid the extra costs necessarily incurred by the Contractor as a result of the suspension, determined in accordance with GC6.4 DETERMINATION OF PRICE.
- 5) If a period of suspension is more than 60 days, Canada and the Contractor may agree that the performance of the Work shall be continued by the Contractor, and the Contractor shall resume performance of the Work subject to any terms and conditions agreed upon by Canada and the Contractor. If Canada and the Contractor do not agree that performance of the Work shall be continued by the Contractor, or upon the terms and conditions under which the Contractor shall continue the Work, the notice of suspension shall be deemed to be a notice of termination pursuant to GC7.3 TERMINATION OF CONTRACT.

GC7.3 TERMINATION OF CONTRACT

- Canada may terminate the Contract at any time by giving a notice of termination in writing to the Contractor in accordance with GC2.3 NOTICES.
- 2) If the Contractor receives a notice of termination, the Contractor shall forthwith cease all operations in performance of the Contract, subject to any conditions stipulated in the notice.
- 3) Subject to paragraph 4) of GC7.3, if the Contract is terminated, Canada shall pay the Contractor an amount determined to be due to the Contractor pursuant to GC6.4 DETERMINATION OF PRICE less the aggregate of all amounts that were paid to the Contractor by Canada and all amounts that are due to Canada from the Contractor pursuant to the Contract.
- 4) In no event shall the total amount payable by Canada to the Contractor exceed the amount, calculated in accordance with GC5 TERMS OF PAYMENT, that would have been payable to the Contractor had the Contractor completed the Work.

5) Payment to the Contractor, if any, shall be made as soon as practicable under the circumstances.

GC7.4 SECURITY DEPOSIT - FORFEITURE OR RETURN

- If the Work is taken out of the Contractor's hands, or the Contractor is in breach of, or in default under, the Contract, Canada may convert a security deposit to Canada's own use.
- 2) If Canada converts a security deposit, the amount realized shall be deemed to be an amount due from Canada to the Contractor under the Contract.
- 3) Any balance of the amount realized that remains after payment of all losses, damage and claims of Canada and others shall be paid by Canada to the Contractor if, in the opinion of Canada, it is not required for the purposes of the Contract.

GC8 DISPUTE RESOLUTION

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GC8.1 INTERPRETATION

- "dispute" means any disagreement regarding any issue identified by the Contractor in the notice submitted to Canada in accordance with paragraph 2 of GC8.3 NOTICE OF DISPUTE, and includes any claim by the Contractor arising from such disagreement and any counterclaim by Canada, but does not include any claim by either party for punitive or exemplary damages, injury to persons, death, or any claim based on an allegation of libel or slander.
- 2) The alternative dispute resolution procedures set out in GC8, do not apply to any claim by Canada against the Contractor except any counterclaim in a dispute as defined in paragraph 1 of GC8.1, including, but not limited to, any claim of setoff regarding any amount due to Canada under GC5.10 ASSESSMENT AND DAMAGES FOR LATE COMPLETION.

GC8.2 CONSULTATION AND CO-OPERATION

- 1) The parties agree to maintain open and honest communication throughout the performance of the Contract.
- 2) The parties agree to consult and co-operate with each other in the furtherance of the Work and the resolution of problems or differences that may arise.

GC8.3 NOTICE OF DISPUTE

1) Any difference between the parties to the Contract of any nature arising out of or in connection with the Contract which could result in a claim by the Contractor against Canada, and which is not settled by consultation and co-operation as envisaged in GC8.2

CONSULTATION AND CO-OPERATION, shall be resolved in the first instance by Canada, whose written decision or direction shall be final and binding subject only to the provisions of GC8. Such written decision or direction includes, but is not limited to, any written decision or direction by Canada under any provision of the General Conditions.

- The Contractor shall be deemed to have accepted the decision or direction of Canada referred to in paragraph 1) of GC8.3 and to have expressly waived and released Canada from any claim in respect of the particular matter dealt with in that decision or direction unless, within 15 working days after receipt of the decision or direction, the Contractor submits to Canada a written notice of dispute requesting formal negotiation under GC8.4 NEGOTIATION. Such notice shall refer specifically to GC8.4 NEGOTIATION, and shall specify the issues in contention and the relevant provisions of the Contract.
- 3) The giving of a written notice in accordance with paragraph 2) of GC8.3 shall not relieve the Contractor from complying with the decision or direction that is the subject of the dispute. Such compliance, however, shall not be construed as an admission by the Contractor of the correctness of such decision or direction.
- 4) If a dispute is not resolved promptly, Canada shall give such instructions as, in Canada's opinion, are necessary for the proper performance of the Work and to prevent delays pending a resolution of the matter. Unless Canada terminates the Contract, orders the Contractor to suspend the Work, or takes the Work out of the hands of the Contractor, the Contractor shall continue to perform the Work in accordance with the provisions and requirements of the Contract and the instructions of Canada. Such performance shall not prejudice any claim that the Contractor may have.
- 5) Nothing in GC8 relieves the Contractor from its obligation to provide any other notice required by the Contract within the time specified in the Contract, including but not limited to, any notice required under GC6.2 CHANGES IN SUBSURFACE CONDITIONS.

GC8.4 NEGOTIATION

- Within 10 working days after receipt by Canada of a notice referred to in paragraph 2) of GC8.3 NOTICE OF DISPUTE, or within such other period of time as may be mutually agreed to, the parties shall commence formal negotiations in order to resolve the dispute. Negotiations shall occur initially between representatives of the Contractor and Canada who play a direct supervisory role in the performance, administration or management of the Contract.
- 2) If the representatives referred to in paragraph 1) of GC8.4 are unable to resolve some or all of the issues which are the subject of the negotiations within 10 working days, the parties shall refer the remaining issues which are in dispute to a second level of negotiation between a principal or principals of the Contractor and a senior level manager or senior level managers representing Canada.
- 3) If negotiations fail to resolve the dispute within 30 working days from the date of delivery of the notice referred to in paragraph 2) of GC8.3 NOTICE OF DISPUTE, or within such longer period as may have been agreed to by the parties, the Contractor may, by giving written notice to Canada, in accordance with GC2.3 NOTICES, within 10 working days from the end of such period, request that mediation be undertaken to assist the parties to reach agreement on the outstanding issues.
- 3) If the Contractor does not request mediation within the period permitted by paragraph 3) of GC8.4, the Contractor shall be deemed to have accepted the decision or direction of Canada under paragraph 1) of GC8.3 NOTICE OF DIPUTE and to have expressly waived and

released Canada from any claim in respect of the particular matter dealt with in that decision or direction.

GC8.5 MEDIATION

- If the Contractor has requested mediation in accordance with paragraph 3) of GC8.4 NEGOTIATION, mediation shall be conducted in accordance with GC8.8 RULES FOR MEDIATION OF DISPUTES.
- 2) If a Project Mediator has not previously been appointed for the purposes of the Contract, a Project Mediator shall be appointed in accordance with GC8.8 RULES FOR MEDIATION OF DISPUTES forthwith after delivery of a notice in accordance with paragraph 3) of GC8.4 NEGOTIATION, requesting mediation.
- 3) If the dispute has not been resolved within
 - (a) Ten (10) working days following the appointment of a Project Mediator in accordance with paragraph 2) of GC8.5, if a Project Mediator was not previously appointed;
 - (b) Ten (10) working days following receipt by Canada of a written notice in accordance with paragraph 3) of GC8.4 NEGOTIATION, if a Project Mediator was previously appointed; or
 - (c) such other longer period as may have been agreed to by the parties;

the Project Mediator shall terminate the mediation by giving written notice to the parties stating the effective date of termination.

GC8.6 BINDING ARBITRATION

- If mediation of the dispute is terminated pursuant to the provisions of GC8.5, "Mediation", and
 - a) the termination of mediation occurs prior to the applicable date set out in paragraph 4) of GC8.6; and
 - b) the disputed issues involve issues of fact or issues of arbitral questions of law or issues of mixed fact and arbitral questions of law;
 - either party, by giving notice in writing to the other party in accordance with GC2.3, "Notices", may require that the dispute be resolved by binding arbitration pursuant to GC8.6.
- A notice referred to in paragraph 1) of GC8.6 shall be given within 10 working days of the date of termination of mediation under GC8.5 Mediation and shall be in accordance with GC2.3, "Notices".
- 3) If no notice is given within the period set out in paragraph 2) of GC8.6, or if the conditions set out in subparagraphs 1)(a) and 1)(b) of GC8.6 are not met, the arbitration provisions set out in GC8.6 do not apply to the dispute.
- Unless otherwise agreed, the arbitration of the dispute shall be held in abeyance until the earlier of
 - a) the date of issuance of a Certificate of Substantial Performance under GC5.5, "Substantial Performance of the Work";

- b) the date the Work is taken out of the Contractor's hands; and
- c) the date of termination of the Contract;

and consolidated with all other such disputes into a single arbitration.

- 5) Arbitral proceedings under this GC8.6 shall be governed by and conducted in accordance with the **Commercial Arbitration Act**, R.S. 1985, c. 17 (2nd Supp.) and the provisions of GC8.11, "Rules for Arbitration of Disputes".
- 6) For the purposes of calculating time under the Rules for Arbitration referred to in paragraph 5) of GC8.6, arbitration proceedings shall commence on the applicable date set out in paragraph 4) of GC8.6.
- 7) Notwithstanding anything else contained in GC8.6, the arbitration provisions in GC8.6 do not apply if the aggregate amount of all claims by the Contractor required to be arbitrated on the applicable date set out in paragraph 4) of GC8.6 is less than \$25,000.

GC8.7 DISPUTES NOT SUBJECT TO ARBITRATION

- Where the arbitration provisions in GC8.6, "Binding Arbitration", do not apply to a dispute as a result of paragraphs 3) or 7) of GC8.6, "Binding Arbitration", either party may take such court action or proceedings as it considers appropriate, including, without limiting the foregoing, all suits that would otherwise have been immediately available to it but for the provisions of these Dispute Resolution Conditions. Subject to the provisions of paragraph 2) of GC8.7, the Contractor shall initiate any such action or proceeding no later than three calendar months after the date that a Certificate of Completion is issued under GC5.6, "Final Completion", and not afterwards, except where it is otherwise provided by law.
- 2) Any action or proceeding resulting from a direction under GC3.13, "Warranty and Rectification of Defects in Work", shall be initiated by the Contractor no later than three calendar months after the expiry of the warranty or guarantee period and not afterwards, except where it is otherwise provided by law.

GC8.8 (2016-05-01) CONFIDENTIALITY

All information exchanged during alternative dispute resolution procedures, by whatever means, shall be without prejudice and shall be treated as confidential by the parties and their representatives, unless otherwise required by law. However, evidence that is independently admissible or discoverable shall not be rendered inadmissible or non-discoverable by virtue of its use during an alternative dispute resolution process.

GC8.9 (2016-05-01) SETTLEMENT

Any agreement to settle all or any part of a dispute, by whatever means, shall be in writing and be signed by the parties or their authorized representatives.

GC8.10 (2016-05-01) RULES FOR MEDIATION OF DISPUTES

GC8.10.1 Interpretation

In these Rules

 "Coordinator" means the person designated by Canada to act as the Dispute Resolution Coordinator.

GC8.10.2 Application

1) By mutual agreement, the parties may change or make additions to the Rules.

GC8.10.3 Communication

 Written communications pursuant to these Rules shall be given in accordance with GC2.3 NOTICES.

GC8.10.4 Appointment of Project Mediator

- The parties to the Contract may, by mutual consent, at any time after entry into the Contract, appoint a mediator (the "Project Mediator") to conduct mediation proceedings in accordance with these Rules for Mediation of Disputes, in regard to any dispute that may arise with regard to the interpretation, application or administration of the Contract. In this case, they shall jointly enter into a contract with the appointed Project Mediator, which contract shall be in a form drafted by the Coordinator and agreed to by the parties.
- 2) If the parties do not appoint a Project Mediator pursuant to paragraph 1) of GC8.8.4, the parties shall appoint a Project Mediator within 17 working days following receipt of a written notice from the Contractor, in accordance with GC2.3 NOTICES, requesting that mediated negotiations be undertaken in accordance with these Rules to assist the parties to reach agreement on any outstanding issues that may be in dispute. Any contract entered into with the appointed Project Mediator shall meet the requirements as set out for the contract described in paragraph 1) of GC8.8.4.
- 3) When mediation is requested by the Contractor pursuant to paragraph 3) of GC8.4 NEGOTIATION, if the parties have previously entered into a contract with a Project Mediator, the parties shall within 2 days send to both the Project Mediator and the Coordinator
 - (a) a copy of the notice requesting negotiation under paragraph 2) of GC8.3 NOTICE OF DISPUTE:
 - (b) a copy of Canada's written position in relation to the notice, the issues in contention and the relevant provisions of the contract; and
 - (c) a copy of the Contractor's written request for mediation required under paragraph 3) of GC8.4 NEGOTIATION.
- 4) If the parties have not agreed on a Project Mediator, the parties shall forthwith provide the Coordinator with the written materials referred to in subparagraphs 3)(a), 3)(b) and 3)(c) of GC8.8.4 together with a request that the Coordinator assist in the appointment of a mutually acceptable Project Mediator in accordance with these Rules.
- 5) Within 5 working days following receipt of the request and materials referred to in paragraph 4) of GC8.8.4, the Coordinator shall provide the parties with a list of qualified private sector mediators obtained from an independent and impartial entity, together with instructions to

- each party to individually and confidentially select and rank their preferred and fully acceptable choices of mediator in descending order. Each mediator listed shall be impartial and independent of the parties, and shall be an experienced and skilled commercial mediator, preferably with knowledge of the subject matter of the dispute.
- 6) Within 10 working days of receipt of the list referred to in paragraph 5) of GC8.8.4 each party shall comply with the instructions accompanying the list(s) and shall deliver the completed listing to the Coordinator.
- 7) Within 2 working days following receipt of the completed listings, the Coordinator shall select the highest common ranked mediator to act as Project Mediator for the purposes of the contract.
- 8) In the event of a tie, the Coordinator shall consult both parties to re-evaluate their rankings in order to assist the Coordinator in selecting a Project Mediator acceptable to both parties. If the parties cannot agree upon a Project Mediator, the Coordinator shall forthwith provide the parties with a second list of mediators and the procedure shall be repeated.
- 9) If the parties have not previously entered into a contract with a mutually acceptable Project Mediator, the Coordinator shall use reasonable efforts to negotiate a contract with a mutually acceptable Project Mediator on behalf of the parties, which contract shall incorporate or otherwise comply with the provisions of these Rules. If negotiations are unsuccessful, or if for other reason the individual is unwilling or unable to enter into a contract to act as Project Mediator, the Coordinator shall repeat the process with the second-highest common ranked mediator.
- 10) The parties agree that, upon successful completion of the negotiations referred to in paragraph 9) of GC8.8.4, they shall jointly enter into a contract with the selected Project Mediator, which contract shall be in a form drafted by the Coordinator and agreed to by the parties.
- 11) Upon execution of the contract with the Project Mediator referred to in paragraph 10) of GC8.8.4 the Coordinator shall provide the Project Mediator with copies of the documents referred to in paragraph 3) of GC8.8.4.

GC8.10.5 Confidentiality

- Subject to paragraph 2) of GC8.8.5, and unless otherwise agreed in writing by the parties, the Project Mediator, the parties and their counsel or representatives shall keep confidential all matters and documents disclosed during mediation proceedings except where the disclosure is necessary for any implementation of any agreement reached or is required by law.
- Evidence that is independently admissible or discoverable in any arbitral or judicial proceeding shall not be rendered inadmissible or non-discoverable by virtue of its use in mediation proceedings.
- 3) Neither party shall make transcripts, minutes or other records of a mediation conference.
- 4) The personal notes and written opinions of the Project Mediator made in relation to mediation are in the Project Mediator's sole possession and control, are confidential, and may not be used in any subsequent proceeding between the parties or where they are opposed in interest without the express written permission of the parties.

5) All information exchanged during mediation procedures, by whatever means, shall be without prejudice and shall be treated as confidential by the parties and their representatives, unless otherwise required by law.

GC8.10.6 Time and Place of Mediation

1) The Project Mediator, in consultation with the parties shall set the date, time and place of any mediation conference as soon as possible, bearing in mind that, subject to agreement to the contrary between the parties, only 10 working days are available within which to attempt to settle the dispute.

GC8.10.7 Representation

- Representatives of the parties may be accompanied at the mediation conference by legal counsel or any other person.
- 2) If the Project Mediator is a lawyer, the Project Mediator shall not provide legal advice to a party during the course of the mediation conference, but may recommend that a party obtain independent legal advice before finalizing a settlement agreement.

GC8.10.8 Procedure

- 1) The parties agree to an exchange of all facts, information and documents upon which they intend to rely in any oral or written presentation during the mediation. This exchange shall be completed no later than 2 working days prior to the date set for a mediation conference.
- 2) The Project Mediator shall be free to meet with the parties individually during a mediation conference if the Project Mediator is of the opinion that this may improve the chances of a mediated settlement, and either party may request such an individual meeting at any time.
- 3) The parties may agree to extend the 10 working days available for settlement of the dispute through mediation, and the Project Mediator shall record that agreement in writing.

GC8.10.9 Settlement Agreement

- The parties shall record in writing any settlement agreement reached, with sufficient detail to ensure a clear understanding of
 - (a) the issues resolved;
 - (b) any obligations assumed by each party including criteria to determine if and when these obligations have been met; and
 - (c) the consequences of failure to comply with the agreement reached.
- 2) The parties agree to carry out the terms of a settlement agreement as soon as possible and, in any event, within any time periods specified in the agreement.

GC8.10.10 Termination of Mediation

- Either party may withdraw from mediation at any time without reason and, in that event, the Project Mediator shall give each party a written notice terminating the mediation and establishing the effective date of termination.
- 2) If, in the opinion of the Project Mediator, either party fails to mediate in good faith or fails to comply with the terms of these Rules, or if the Project Mediator, at any time during mediation, is of the opinion that further negotiations will fail to resolve the issues outstanding, the Project Mediator may terminate the negotiations by providing the parties with a written notice of termination, stating therein the Project Mediator's reasons for the termination, and the effective date of termination.
- 3) If a dispute has not been resolved within 10 working days or such other longer period as may have been agreed to by the parties, the Project Mediator shall terminate the mediation by giving written notice to the parties stating the effective date of termination.

GC8.10.11 Costs

The parties agree that they will each be responsible for the costs of their own representatives and advisors and associated travel and living expenses. Fees and expenses of the Project Mediator and all administrative costs of mediation, such as the cost of the meeting room(s), if any, shall be borne equally by the parties.

GC8.10.12 Subsequent Proceedings

- The parties shall not rely on or introduce as evidence in any arbitral or judicial proceeding, whether or not such proceeding relates to the subject matter of mediation,
 - (a) any documents of other parties that are not otherwise producible in those proceedings;
 - (b) any views expressed or suggestions made by any party in respect of a possible settlement of issues;
 - (c) any admission made by any party in the course of mediation unless otherwise stipulated by the admitting party; and
 - (d) the fact that any party has indicated a willingness to make or accept a proposal or recommendation for settlement.
- The Project Mediator shall neither represent nor testify on behalf of either of the parties in any subsequent investigation, action or proceeding relating to the issues in mediation proceedings.
- 3) The Project Mediator shall not be subpoenaed to give evidence relating to
 - (a) the Project Mediator's role in mediation; or
 - (b) the matters or issues in mediation;

in any subsequent investigation, action or proceeding and the parties agree to vigorously oppose any effort to have the Mediator so subpoenaed.

GC9 CONTRACT SECURITY

GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY

GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY

- The Contractor shall, at the Contractor's expense and within 14 days after the date that the Contractor receives notice that the Contractor's bid was accepted by Canada, obtain and deliver Contract Security to Canada in one of the forms prescribed in GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY.
- 2) If the whole or a part of the Contract Security provided is in the form of a security deposit, it shall be held and disposed of in accordance with GC5.13 RETURN OF SECURITY DEPOSIT and GC7.4 SECURITY DEPOSIT - FORFEITURE OR RETURN.
- 3) If a part of the Contract Security provided is in the form of a labour and material payment bond, the Contractor shall post a copy of that bond at the site of the Work.
- 4) It is a condition precedent to the release of the first progress payment that the Contractor has provided the Contract Security as specified herein.

GC9.2 (2016-05-01) TYPES AND AMOUNTS OF CONTRACT SECURITY

- 1) The Contractor shall deliver to Canada either (a) or (b).
 - a) A performance bond and a labour and material payment bond each in an amount that is equal to not less than 50 percent of the Contract Amount (excluding applicable tax(es)).
 - b) A security deposit or an irrevocable standby letter of credit in an amount that is equal to not less than 20 percent of the Contract Amount (excluding applicable tax(es)).
- 2) A performance bond and a labour and material payment bond referred to in paragraph 1) of GC9.2 shall be in a form and be issued by a bonding or surety company that is approved by Canada.
 - (a) The approved form for the performance bond is displayed at the following Website: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494§ion=text#appS
 - (b) The approved form for the labour and material payment bond is displayed at the following website: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494§ion=text#appS; and
 - (c) The list of approved bonding or surety companies is displayed at the following Website: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494§ion=text#appL
- 3) A security deposit referred to in subparagraph 1)(b) of GC9.2 shall be in the form of
 - a bill of exchange, bank draft or money order made payable to the Receiver General for Canada and certified by an approved financial institution or drawn by an approved financial institution on itself; or

- b. bonds of, or unconditionally guaranteed as to principal and interest by, the Government of Canada.
- 4) For the purposes of subparagraph 3)(a) of GC9.2
 - a bill of exchange is an unconditional order in writing signed by the Contractor and addressed to an approved financial institution, requiring the said institution to pay, on demand, at a fixed or determinable future time a sum certain of money to, or to the order of, the Receiver General for Canada;
 - b) if a bill of exchange, bank draft or money order is certified by or drawn on an institution or corporation other than a chartered bank, it must be accompanied by proof that the said institution or corporation meets at least one of the criteria described in subparagraph 4)(c) of GC9.2, either by letter or by a stamped certification on the bill of exchange, bank draft or money; and
 - c) An approved financial institution is
 - I.a corporation or institution that is a member of the Canadian Payments Association as defined in the <u>Canadian Payments Act</u>;
 - II.a corporation that accepts deposits that are insured, to the maximum permitted by law, by the Canada Deposit Insurance Corporation or the "Autorité des marchés financiers";
 - III.a corporation that accepts deposits from the public if repayment of the deposit is guaranteed by Her Majesty the Queen in right of a province;
 - IV.a corporation, association or federation incorporated or organized as a credit union or co-operative credit society that conforms to the requirements of a credit union which are more particularly described in paragraph 137(6) of the Income Tax Act; or
 - V.Canada Post Corporation.
- 5) Bonds referred to in subparagraph 3)(b) of GC9.2 shall be provided on the basis of their market value current at the date of the Contract, and shall be
 - a) made payable to bearer; or
 - accompanied by a duly executed instrument of transfer of the bonds to the Receiver General for Canada in the form prescribed by the Domestic Bonds of Canada Regulations; or
 - c) registered as to principal, or as to principal and interest, in the name of the Receiver General for Canada pursuant to the Domestic Bonds of Canada Regulations.
- 6) An irrevocable standby letter of credit referred to in subparagraph 1)(b) of GC9.2 shall
 - a) be an arrangement, however named or described, whereby a financial institution (the "Issuer") acting at the request and on the instructions of a customer (the "Applicant") or on its own behalf,
 - Lis to make a payment to, or to the order of, Canada as the beneficiary;
 - II.is to accept and pay bills of exchange drawn by Canada;

- III.authorizes another financial institution to effect such payment or accept and pay such bills of exchange; or
- IV.authorizes another financial institution to negotiate against written demand(s) for payment provided that the terms and conditions of the letter of credit are complied with:
- b) state the face amount that may be drawn against it;
- c) state its expiry date;
- d) provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by Canada;
- e) provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face value of the letter of credit;
- f) provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007
 Revision, ICC Publication No. 600. Pursuant to the ICC UCP, a credit is irrevocable even if there is no indication to that effect; and
- g) be issued or confirmed, in either official language in a format left to the discretion of the issuer or confirmer, by an approved financial institution on its letterhead.

GC10 INSURANCE

GC10.1 INSURANCE CONTRACTS
GC10.2 INSURANCE PROCEEDS

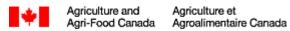
GC10.1 INSURANCE CONTRACTS

- The contractor shall, at the contractor's expense, obtain and maintain insurance contracts in respect of the work and shall provide evidence thereof to Canada in accordance with the requirements of the INSURANCE TERMS.
- 2) The insurance contracts referred to in paragraph 1) of GC10.1 shall
 - (a) be in a form, of the nature, in the amounts, for the periods and containing the terms and conditions specified in INSURANCE TERMS; and
 - (b) provide for the payment of claims under such insurance contracts in accordance with GC10.2 INSURANCE PROCEEDS.

GC10.2 INSURANCE PROCEEDS

- In the case of a claim payable under a Builders Risk/Installation (All Risks) insurance contract
 maintained by the contractor pursuant to GC10.1 INSURANCE CONTRACTS, the proceeds
 of the claim shall be paid directly to Canada, and
 - (a) the monies so paid shall be held by Canada for the purposes of the contract, or
 - (b) if Canada elects, shall be retained by Canada, in which event they vest in Canada absolutely.
- 2) In the case of a claim payable under a General Liability insurance contract maintained by the contractor pursuant to GC10.1 INSURANCE CONTRACTS, the proceeds of the claim shall be paid by the insurer directly to the claimant.
- 3) If an election is made pursuant to paragraph 1) of GC10.2, Canada may cause an audit to be made of the accounts of the contractor and of Canada in respect of the part of the work that was lost, damaged or destroyed for the purpose of establishing the difference, if any, between
 - (a) the aggregate of the amount of the loss or damage suffered or sustained by Canada, including any costs incurred in respect of the clearing and cleaning of the work and its site and any other amount that is payable by the contractor to Canada under the contract, minus any monies retained pursuant to subparagraph 1)(b) of GC10.2; and
 - (b) the aggregate of the amounts payable by Canada to the contractor pursuant to the contract up to the date of the loss or damage.
- 4) A difference that is established pursuant to paragraph 3) of GC10.2 shall be paid forthwith by the party who is determined by the audit to be the debtor to the party who is determined by the audit to be the creditor.

- 5) When payment of a deficiency has been made pursuant to paragraph 4) of GC10.2, all rights and obligations of Canada and the contractor under the contract shall, with respect only to the part of the work that was the subject of the audit referred to in paragraph 3) of GC10.2, be deemed to have been expended and discharged.
- 6) If an election is not made pursuant to subparagraph 1)(b) of GC10.2, the contractor shall, subject to paragraph 7) of GC10.2, clear and clean the work and its site and restore and replace the part of the work that was lost, damaged or destroyed at the contractor's expense as if that part of the work had not yet been performed.
- 7) When the contractor clears and cleans the work and its site and restores and replaces the work referred to in paragraph 6) of GC10.2, Canada shall pay the contractor out of the monies referred to in paragraph 1) of GC10.2 so far as they will thereunto extend.
- 8) Subject to paragraph 7) of GC10.2, payment by Canada pursuant to paragraph 7) of GC10.2 shall be made in accordance with the contract but the amount of each payment shall be 100 percent of the amount claimed notwithstanding subparagraphs 3)(a) and 3)(b) of GC5.4 PROGRESS PAYMENT.



Appendix "E"

TECHNICAL SPECIFICATIONS & PLANS



AGRICULTURE AND AGRI-FOOD CANADA

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

Technical specifications For quotation

FILE: 161-09616-00 DATE: August 2016

PREPARED BY: NAME/FUNCTION			APPROVED BY : NAME/DISCIPLINE	SCEAU/SIGNATURE	
Joanie Desjardins, P. Eng.		Sim	on Houle, P. Eng.		
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		•	SIVIL INFRASTRUCTURES		
ISSUE REGISTRY					
DATE	ISSUED FO			IPTION	
CM —Comments 2016-07-19	СМ	CB —	<i>Call for Bids</i> PU —P Technical specifications	durchase CO — Construction	
2016-08-04	CIVI		Technical specifications		
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AGRICULTURE AND Section 00 01 10 **TABLE OF CONTENTS** AGRI-FOOD CANADA Page 1 Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke 00 00 00 Title Page 1 Seals and Signatures 00 01 07 1 00 01 10 **Table of Contents** 2 **DIVISION 01 - GENERAL REQUIREMENTS** 3 01 11 10 Summary of Work 01 29 00 **Payment Procedures** 4 2 01 32 16.07 Construction Progress Schedule - Bar (GANTT) chart 2 01 31 19 **Project Meetings** 3 01 33 00 Submittal Procedures 3 Health and Safety Requirements 01 35 29.06 **Environmental Procedures** 3 01 35 43 3 01 45 00 **Quality Control** 01 52 00 **Construction Facilities** 2 01 61 00 **Common Product Requirements** 4 2 **Examination and Preparation** 01 71 00 Cleaning 2 01 74 11 Waste Management and Disposal 3 01 74 21 **Closeout Procedures** 01 77 00 2 **DIVISION 02 - EXISTING CONDITIONS** 02 41 13 Selective Site Demolition 4 02 41 13.14 2 Asphalt Paving Removal **DIVISION 03 - CONCRETE** 03 10 00 Concrete Forming and Accessories 2 Cast-in-Place Concrete 03 30 00 5 **DIVISION 31 - EARTHWORK** 31 05 10 2 Corrected Maximum Dry Density for Fill **Aggregate Materials** 31 05 16 4 7 31 23 33.01 **Excavating and Backfilling DIVISION 32 - EXTERIOR IMPROVEMENTS** 32 11 16.01 Granular Sub-base 4 32 12 16.02 Asphalt Paving for Building Sites 6 Concrete Walks, Curbs, and Gutters 32 16 15 4 32 17 23 **Pavement Markings** 3 Topsoil Placement and Grading 32 91 19 13 4 Sodding 5 32 92 23



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Section 00 01 10 Page 2

LIST OF DRAWINGS

Civil

161-09616-00-C01	Location
161-09616-00-C02	Parking Lot for Building #1
161-09616-00-C03	Parking Lot for Buildings #11, 12, 13 and 69
161-09616-00-C04	Details



Part 1 General

1.1 RELATED REQUIREMENTS

.1 The entirety of the specifications included in the present document.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract comprises the rehabilitation of a 3,000 sq.m. parking lot, as well as the modification of a 170 sq.m. parking lot, including but not limited to:
 - .1 Removal of curbs, a grass traffic island, and pavement near Building 1;
 - .2 Foundation rehabilitation;
 - .3 Curb construction;
 - .4 Installment of a layer of pavement;
 - .5 Surface rehabilitation;
 - .6 Surface drainage.

1.3 WORK SEQUENCE

- .1 Construct Work in stages to provide for continuous usage by the site employees. At least one access route to each building must be provided at all times.
- .2 Maintain fire access/control.

1.4 DEADLINE

.1 The Work must be completed in its entirety during a maximum timeframe of ten (10) consecutive work days.

1.5 WORK LOCATION

.1 The Work site is located at 2000 College St. in Sherbrooke, at the Research and Development Centre of Agriculture and Agri-Food Canada. The parking lot to be redone is located between Buildings 11, 12, 13, and 69. The parking lot to be modified is located near Building 1.

1.6 CONTRACTOR USE OF PREMISES

- .1 Limit use of premises for Work, and for storage, for access, to allow:
 - .1 Partial owner occupancy.
- .2 Co-ordinate use of premises under direction of the Consultant.
- .3 Before the start of site work, the Contractor must obtain the approval of the Consultant for the planned route for the transportation of materials and tools. This applies to supply



- materials brought to the site, as well as to surplus materials and waste materials removed from the site.
- .4 Obtain and pay for use of additional storage or work areas needed for operations under this Contract.
- .5 Remove or alter existing work to prevent injury or damage to portions of existing work which remain.
- .6 Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as directed by the Consultant.
- .7 The Contractor must repair and maintain for the duration of Work all existing gravel or asphalt roads altered during Work, to the satisfaction of the City. All materials and labour costs must be covered by the Contractor.
- .8 At completion of operations condition of existing work: equal to or better than that which existed before new work started.
- .9 The Contractor is entirely responsible for all damage caused to the infrastructures used by the Contractor for Work.

1.7 OWNER OCCUPANCY

- .1 Owner will occupy premises during entire construction period for execution of normal operations.
- .2 Co-operate with Owner in scheduling operations to minimize conflict and to facilitate Owner usage.

1.8 ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING

- .1 Execute work with least possible interference or disturbance to building operations, occupants, public and normal use of premises. Arrange with the Consultant to facilitate execution of work.
- .2 Use only the existing streets and access roads for moving workers and material.

1.9 EXISTING SERVICES

- .1 Notify the Consultant and utility companies of intended interruption of services and obtain required permission.
- .2 Where Work involves breaking into or connecting to existing services, give the Consultant 48 hours notice for necessary interruption of mechanical or electrical service throughout course of work. Minimize duration of interruptions. Carry out work at times as directed by governing authorities with minimum disturbance to pedestrian, vehicular traffic, and tenant operations.
- .3 Provide alternative routes for personnel, pedestrian, and vehicular traffic.
- .4 Establish location and extent of service lines in area of work before starting Work. Notify the Consultant of findings.



- .5 Submit schedule to and obtain approval from the Consultant for any shut-down or closure of active service or facility. Adhere to approved schedule and provide notice to affected parties.
- .6 Provide temporary services when directed by the Consultant to maintain critical building and tenant systems.
- .7 Where unknown services are encountered, immediately advise the Consultant and confirm findings in writing.
- .8 Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction.
- .9 Record locations of maintained, re-routed and abandoned service lines.

1.10 DOCUMENTS REQUIRED

- .1 Maintain at job site, one copy each document as follows:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Reviewed Shop Drawings.
 - .5 List of Outstanding Shop Drawings.
 - .6 Change Orders.
 - .7 Other Modifications to Contract.
 - .8 Field Test Reports.
 - .9 Copy of Approved Work Schedule.
 - .10 Health and Safety Plan and Other Safety Related Documents.
 - .11 Other documents as specified.

Part 2 Products

2.1 NOT USED

.1 Not used.

Part 3 Execution

3.1 NOT USED

.1 Not used.



Part 1 General

1.1 REFERENCES

.1 Owner/Contractor Agreement.

1.2 ORDER OF PRIORITIES

.1 In case of contradiction or divergence of payment methods (measurements) between the present section and the other sections of the Specifications, the present section has priority (section 01 29 00).

1.3 MEASUREMENT

- .1 Measurement method:
 - .1 The provision of materials, labour, including supervision, tools, equipment, protection, transport, unloading, tolls and administration costs, profits, financing, etc. required for completing the Work are included in each item of the Pay Items Table.
 - Only the materials approved by the ministerial Representative and incorporated into the Work will be considered for measurement.

1.4 UNIT PRICE TABLE ITEMS

- .1 ROADWORK
 - .1 Removal of existing pavement
 - .1 For removal of existing pavement, the method will be chosen by the Contractor. If pulverization method is chosen, the pulverized materials cannot be used in the subbase (MG-112). Only new materials are accepted for use in the subbase (MG-112).
 - .2 Be informed that no soil samples have been taken on site, therefore the nature of the soil under the pavement is unknown.
 - .3 The Contractor must include in the price by square meter, but not limited to :
 - .1 The sawing of pavement at the junction with the existing pavement (the limits of Work must be approved by the Consultant).
 - .2 The removal of pavement, using a method chosen by the Contractor.
 - .3 The loading, transport, and reserve pile placement of pulverized materials (optional, depending on the chosen method).
 - .4 The loading and transport of surplus materials not used on site.



- .5 The removal and disposal of non-pulverized pavement chunks
- .2 Removal of existing curbs, grass traffic islands, and tree.
 - .1 Contractor must include in the lump sum price, but not limited to:
 - .1 Sawing in places approved by the Consultant.
 - .2 Removal of cement concrete curbs.
 - .3 Removal of a tree.
 - .4 Removal of 2 sections of grass traffic islands, as indicated on the plans.
 - .5 Loading, transport, and disposal off-site in a location in accordance with the laws and directives of the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques.
- .3 Excavation and preparation of the Infrastructure
 - .1 Contractor must include in price per square metre, but not limited to:
 - .1 Excavation of existing foundation materials to the infrastructure line
 - .2 Grading and compaction of the infrastructure line.
- .4 Foundation drain
 - .1 Contractor must include in price per linear metre, but not limited to:
 - .1 Supply and installation of rigid drains 320 kPa, enveloped in a membrane at the base of the layer of MG-112.
 - .2 The drain exits towards the embankment west of Building 12, at the low point of the parking lot. The exact location of the exits to be determined on site.
- .5 Sub-base, aggregate materials MG-112, 300 mm thick /, base, crushed stone MG-20, 150 mm thick.
 - .1 Contractor must include in price per square metre, but not limited to:
 - .1 Supply and transport of aggregate materials listed in the Unit Price Table.
 - .2 Grading of aggregate materials, according to the typical cross-section, in layers of maximum 300 mm.
 - .3 Compaction according to specifications.
- .6 Single layer of pavement, ESG-14 70 mm
 - .1 Contractor must include in price per square metre, but not limited to:
 - .1 Supply and transport of bituminous mixes.
 - .2 Grading according to typical cross-section.



- .3 Compaction.
- .2 All costs related to surface decontamination before paving and between pavement layers are at the cost of the Contractor and must be distributed between the different items of the Unit Price Table. Contractor must evaluate the decontamination costs according to chosen work method.
- .3 Paving must be completed within the specified Work deadline.

.7 Concrete curb

- .1 Contractor must include in price per linear metre, but not limited to:
 - .1 Work Placement.
 - .2 Supply, grading, and compaction of crushed stone MG-20 for curb foundations.
 - .3 Supply and installation of formwork where required.
 - .4 Supply and transport of concrete.
 - .5 Installation and grading according to typical cross-section.
 - .6 Joint construction.
 - .7 Backfill and compaction behind the curb.
 - .8 Curing and protection of concrete.

.2 RELATED WORK

- .1 Sodding
 - .1 Contractor must carry out sodding in areas designated on plans. The limits of sodding work will be determined on-site with the Consultant.
 - .2 Contractor must include in price per square metre, but not limited to:
 - .1 Earthwork (Cut/Fill).
 - .2 Supply and grading of topsoil 100mm thick.
 - .3 Supply and placement of Turf Grass Nursery Sod, at least 450 mm wide.
 - .4 Protection and upkeep of sodded surfaces until final reception of Work, according to specifications of article 18 of CCDG (2016).
 - .5 Uniform application of fertilizer 1-3-1 before placement of sod.
 - .6 All work must be according ot section 18 of CCDG (2016) of the Ministère des Transports, de la Mobilité durable et de l'Électrification des transports (MTMDET).

.2 Repair of Interlocking Paving Stone

- .1 Removal and stockpiling of Interlocking Paving Stone.
- .2 Supply and grading of stone MG-20 150 mm thick minimum.
- .3 Supply and grading of rock dust 25 mm thick.



- .4 Replace Interlocking paving stone according to existing arrangement.
- .5 Replace paving stones missing or broken during construction with similar ones, approved by the Owner.
- .6 Placement of rock dust between paving stones to fill holes.
- .7 Final cleaning of site.

.3 Marking

- .1 Contractor must include in lump sum price, but not limited to :
 - .1 Premarking and marking parking lines with alkyde, according to plans.
- .2 Marking must be according to articles 17.1 and 17.2 of CCDG 2016 as well as standards in Ouvrages routiers, volume 5 titled « Signalisation routière du Québec » published by the MTMDET.

1.5 FINAL PAYMENT

- .1 Submit application for final payment when Work is completed.
- .2 Consultant will, no later than 10 days after receipt of application for final payment, review Work to verify validity of application. Consultant will give notification that application is valid or give reasons why it is not valid, no later than 7 days after reviewing Work.
- .3 Consultant will issue final certificate for payment when application for final payment is found valid.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.



CONSTRUCTION PROGRESS SCHEDULE – BAR (GANTT) CHART

Section 01 32 16.07 Page 1

1.1 RELATED REQUIREMENTS

.1 Section 01 31 19 – Project meetings

1.2 **DEFINITIONS**

- .1 Activity: element of Work performed during course of Project. Activity normally has expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 Bar Chart (GANTT Chart): graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system.
- .3 Baseline: original approved plan (for project, work package, or activity), plus or minus approved scope changes.
- .4 Construction Work Week: Monday to Friday, inclusive, will provide five day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission.
- .5 Duration: number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
- .6 Milestone: significant event in project, usually completion of major deliverable.
- .7 Project Schedule: planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.

1.3 REQUIREMENTS

- .1 Ensure Master Plan and Detail Schedules are practical and remain within specified Contract duration.
- .2 Plan to complete Work in accordance with prescribed milestones and time frame.
- .3 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.

1.4 ACTION AND INFORMATIONAL SUBMITTALS

.1 Submit to the Consultant within 5 working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress.



1.5 PROJECT SCHEDULE

- .1 Develop detailed Project Schedule derived from Master Plan.
- .2 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
 - .1 Award.
 - .2 Shop Drawings, Samples.
 - .3 Permits.
 - .4 Mobilization.
 - .5 Demolition.
 - .6 Excavation.
 - .7 Foundations.
 - .8 Curbs.
 - .9 Pavement.
 - .10 Surface rehabilitation.
 - .11
 - .12 Testing and Commissioning.

1.6 PROJECT SCHEDULE REPORTING

.1 Update Project Schedule on weekly basis reflecting activity changes and completions, as well as activities in progress. The updated Project Schedule must be sent by e-mail to all the parties involved.

1.7 PROJECT MEETINGS

- .1 Discuss Project Schedule at the site work kick-off meeting.
- .2 Weather related delays with their remedial measures will be discussed and negotiated.

Part 2 Products

2.1 NOT USED

.1 Not used.

Part 3 Execution

3.1 NOT USED

.1 Not used.



Part 1 General

Centre of Sherbrooke

1.1 RELATED REQUIREMENTS

.1 Section 01 32 16.07 - Construction Progress Schedule - Bar (GANTT) chart

1.2 PRICE AND PAYMENT METHOD

.1 The costs incurred for the project meetings must be included in the price submitted for each item of the submitted Price Table Items.

1.3 ADMINISTRATIVE

- .1 The Preconstruction Meeting will take place before the start of site work. The second meeting will be the inspection for tentative Acceptance of Work.
- .2 The Consultant will prepare agenda for meetings.
- .3 The Consultant will distribute written notice of each meeting four days in advance of meeting date to the Contractor and the Project Owner.
- .4 Provide physical space and make arrangements for meetings.
- .5 The Consultant will preside at meetings.
- .6 The Consultant will record the meeting minutes and include significant proceedings and decisions, as well asidentify actions by parties.
- .7 The Consultant will reproduce and distribute copies of minutes within [three] days after meetings and transmit to meeting participants and affected parties not in attendance.
- .8 Representative of Contractor, Subcontractor and suppliers attending meetings will be qualified and authorized to act on behalf of party each represents.

1.4 PRECONSTRUCTION MEETING

- .1 Within 15 days after award of Contract, the Consultant will request a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities.
- .2 The Consultant, Contractor, major Subcontractors, and Project Owner will be in attendance.
- .3 Establish time and location of meeting and notify parties concerned minimum [5] days before meeting.
- .4 Incorporate mutually agreed variations to Contract Documents into Agreement, prior to signing.
- .5 Agenda to include:
 - .1 Appointment of official representative of participants in the Work.



Centre of Sherbrooke

- .2 Schedule of Work: in accordance with Section 01 32 16.07 Construction Progress Schedules Bar (GANTT) Chart.
- .3 Schedule of submission of shop drawings, samples, colour chips. Submit submittals in accordance with Section 01 33 00 Submittal Procedures.
- .4 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Section 01 52 00 Construction Facilities.
- .5 Delivery schedule of specified equipment.
- .6 Site security.
- .7 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
- .8 Record drawings in accordance with Section [01 33 00 Submittal Procedures].
- .9 Take-over procedures, acceptance, warranties in accordance with Section [01 78 00 Closeout Submittals].
- .10 Monthly progress claims, administrative procedures, photographs, hold backs.
- .11 Appointment of inspection and testing agencies or firms.
- .12 Insurances, transcript of policies.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.



SUBMITTAL PROCEDURES

Section 01 33 00 Page 1

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

1.1 ADMINISTRATIVE

- .1 Submit to the Consultant submittals listed for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with Work affected by submittal until review is complete.
- .3 Present shop drawings, product data, samples and mock-ups in SI Metric units.
- .4 Where items or information is not produced in SI Metric units converted values are acceptable.
- .5 Review submittals prior to submission to the Consultant. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and considered rejected.
- Notify the Consultant, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Verify field measurements and affected adjacent Work are co-ordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by the Consultant's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by the Consultant review.
- .10 Keep one reviewed copy of each submission on site.
- The costs related to the specifications included in the current section must be distributed between the different items in the Pay Items Table.

1.2 SHOP DRAWINGS AND PRODUCT DATA

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- .2 Indicate materials, methods of construction, explanatory notes and other information necessary for completion of Work.
- .3 Allow 5 days the Consultant's review of each submission.
- .4 Adjustments made on shop drawings by the Consultant are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to the Consultant prior to proceeding with Work.
- .5 Make changes in shop drawings as the Consultant may require, consistent with Contract Documents. When resubmitting, notify the Consultant in writing of revisions other than those requested.



- .6 Accompany submissions with transmittal letter, in [duplicate], containing:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's name and address.
 - .4 Identification and quantity of each shop drawing, product data and sample.
 - .5 Other pertinent data.
- .7 Submissions include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier.
 - .3 Manufacturer.
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .5 Details of appropriate portions of Work as applicable:
 - .1 Fabrication.
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
- .8 After the Consultant's review, distribute copies.
- .9 Submit 1 electronic copies of product data sheets or brochures for requirements requested in specification Sections and as requested by [Departmental Representative] [DCC Representative] [Consultant] where shop drawings will not be prepared due to standardized manufacture of product.
- .10 Submit 1 electronic copies of test reports for requirements requested in specification Sections and as requested by the Consultant.
 - .1 Report signed by authorized official of testing laboratory that material, product or system identical to material, product or system to be provided has been tested in accord with specified requirements.
 - .2 Testing must have been within [3] years of date of contract award for project.
- .11 Submit 1 electronic copies of certificates for requirements requested in specification Sections and as requested by the Consultant.
 - .1 Statements printed on manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements.
 - .2 Certificates must be dated after award of project contract complete with project name.



Centre of Sherbrooke

SUBMITTAL PROCEDURES

Section 01 33 00 Page 3

- Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.
- .13 Delete information not applicable to project.
- .14 Supplement standard information to provide details applicable to project.
- .15 If upon review by the Consultant, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before Work may proceed.

1.3 SAMPLES

.1 The laboratory mandated for quality control is responsible for sampling.

1.4 CERTIFICATES AND TRANSCRIPTS

- .1 Immediately after award of Contract, submit Workers' Compensation Board status.
- .2 Submit transcription of insurance immediately after award of Contract.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.



Part 1 General

1.1 REFERENCES

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Province of Quebec
 - .1 An Act Respecting Occupational Health and Safety, R.S.Q., c.S-2.1 (current edition) Updated [2005].

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 Submittal Procedures.
- .2 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
 - .1 Results of site specific safety hazard assessment.
 - .2 Results of safety and health risk or hazard analysis for site tasks and operation found in work plan.
- .3 Submit 2 copies of Contractor's authorized representative's work site health and safety inspection reports to the Consultant weekly.
- .4 Submit copies of reports or directions issued by Federal, Provincial health and safety inspectors.
- .5 Submit copies of incident and accident reports.
- .6 Consultant will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 7 days after receipt of plan. Revise plan as appropriate and resubmit plan to the Consultant within 5 days after receipt of comments from Consultant.
- .7 Consultant's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .8 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to the Consultant.
- .9 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

1.3 FILING OF NOTICE

.1 File Notice of Project with Provincial authorities prior to beginning of Work.



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HEALTH AND SAFETY REQUIREMENTS

Section 01 35 29.06 Page 2

- .2 Contractor shall be responsible and assume the Principal Contractor role for each work zone location and not the entire complex. Contractor shall provide a written acknowledgement of this responsibility with 3 weeks of contract award. Contractor to submit written acknowledgement to CSST along with Ouverture de Chantier Notice.
- .3 Work zone locations include:
 - .1 Refer to Section 01 11 00 Summary of Work

1.4 SAFETY ASSESSMENT

.1 Perform site specific safety hazard assessment related to project.

1.5 MEETINGS

.1 Schedule and administer Health and Safety meeting with Consultant prior to commencement of Work. This meeting can be integrated into the Preconstruction Meeting.

1.6 REGULATORY REQUIREMENTS

.1 Do Work in accordance with the requirements of the competent authorities that have jurisdiction in the territory of the Work.

1.7 GENERAL REQUIREMENTS

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.
- .2 Consultant may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.8 RESPONSIBILITY

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Contractor shall be the Principal Contractor as described in the Quebec Act Respecting Health and Safety code for the Construction for only their scope and areas of work as defined and described this project specification.
- .3 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.
- .4 The Contractor must supply, for the duration of Work, adequate work zone signage for visitors.



1.9 COMPLIANCE REQUIREMENTS

- .1 Comply with R.S.Q., c. S-2.1, an Act respecting Health and Safety, and c. S-2.1, r.4 Safety Code for the Construction Industry.
- .2 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations.

1.10 UNFORSEEN HAZARDS

.1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Provincehaving jurisdiction and advise Consultant verbally and in writing.

1.11 POSTING OF DOCUMENTS

.1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province having jurisdiction, and in consultation with the Consultant.

1.12 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Consultant.
- .2 Provide Consultant with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Consultant may stop Work if non-compliance of health and safety regulations is not corrected.

1.13 BLASTING

.1 Blasting or other use of explosives is not permitted.

1.14 WORK STOPPAGE

.1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED



Part 1 General

1.1 RELATED REQUIREMENTS

.1 Section 31 24 13 – Excavation, backfill, and compaction in road construction

1.2 REFERENCES

- .1 Definitions:
 - .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humans; or degrade environment aesthetically, culturally and/or historically.
 - .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction.
- .2 Reference Standards:
 - .1 Canadian Environmental Protection Act, 1999 (S.C. 1999)
 - .2 Environment Quality Act (L.R.Q., c. Q-2)
 - .3 Regulation respecting the application of the Environment Quality Act (Q-2, r.3).

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- activities or delivery of materials to site, submit Environmental Protection Plan for review [and approval] by Consultant.
- .2 Environmental Protection Plan must include comprehensive overview of known or potential environmental issues to be addressed during construction.
- .3 Address topics at level of detail commensurate with environmental issue and required construction task[s].
- .4 Include in Environmental Protection Plan:
 - .1 Name[s] of person[s] responsible for ensuring adherence to Environmental Protection Plan.
 - .2 Name[s] and qualifications of person[s] responsible for manifesting hazardous waste to be removed from site.
 - .3 Name[s] and qualifications of person[s] responsible for training site personnel.
 - .4 Descriptions of environmental protection personnel training program.
 - .5 Erosion and sediment control plan identifying type and location of erosion and sediment controls to be provided including monitoring and reporting requirements to assure that control measures are in compliance with erosion and sediment control plan, Federal, Provincial, and Municipal laws and regulations.



- .6 Work area plan showing proposed activity in each portion of area and identifying areas of limited use or non-use.
 - .1 Plan to include measures for marking limits of use areas and methods for protection of features to be preserved within authorized work areas.
- .7 Spill Control Plan to include procedures, instructions, and reports to be used in event of unforeseen spill of regulated substance.
- .8 Non-Hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris.
- .9 Air pollution control plan detailing provisions to assure that dust, debris, materials, and trash, are contained on project site.
- .10 Contaminant Prevention Plan identifying potentially hazardous substances to be used on job site; intended actions to prevent introduction of such materials into air, water, or ground; and detailing provisions for compliance with Federal, Provincial, and Municipal laws and regulations for storage and handling of these materials.

1.4 FIRES

.1 Fires and burning of rubbish on site is not permitted.

1.5 DRAINAGE

- .1 Provide temporary drainage and pumping required to keep excavations and site free from water.
- .2 Ensure pumped water into waterways, sewer or drainage systems is free of suspended materials.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.6 POLLUTION CONTROL

- .1 Maintain temporary erosion and pollution control features installed under this Contract.
- .2 Control emissions from equipment and plant in accordance with local authorities' emission requirements.
- .3 Prevent sandblasting and other extraneous materials from contaminating air and waterways beyond application area.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.
- .5 The Contractor must insure that the machinery, the tools, and the equipment used for site Work are safe, clean, and in good repair. The ministerial Representative retains the right to refuse site access or to expulse any machinery, tools, or equipment that do not respect these requirements. Equipment that is visibly in poor repair and show signs of leakage or risk of leakage will be expulsed from the site, at the expense of the Contractor or the owner of the equipment, without charge to the Client.



.6 The Contractor must have in hand, present at the site, an emergency intervention kit as well as personnel trained to use it, in order to respond to events that require an environmental intervention.

1.7 NOTIFICATION

- .1 Consultant will notify Contractor in writing of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
- .2 Contractor: after receipt of such notice, inform Consultant of proposed corrective action and take such action for approval by Consultant.
 - .1 Take action only after receipt of written approval by Consultant.
- .3 Consultant will issue stop order of work until satisfactory corrective action has been taken
- .4 No time extensions granted or equitable adjustments allowed to Contractor for such suspensions.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Bury rubbish and waste materials on site where directed after receipt of written approval from Consultant.
- .3 Ensure public waterways, storm and sanitary sewers remain free of waste and volatile materials disposal.
- .4 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.
 - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.2 SITE RESTORATION

.1 The Contractor must restore to their initial state all surfaces exposed or damaged by machinery (drainage slopes, embankments, etc.)



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 31 00 00.01 Earthworks
- .2 31 05 16 Aggregate materials
- .3 31 24 13 Excavating, backfill, and compaction in road construction
- .4 32 12 16.01 Granular sub-base
- .5 32 12 16.02 Asphalt paving for building sites
- .6 32 16 15 Concrete walks, curbs, and gutters
- .7 All other applicable sections

1.2 REFERENCES

.1 Canadian Construction Documents Committee (CCDC)

.1

1.3 INSPECTION

- .1 Allow Consultant access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Consultant instructions, or law of Place of Work.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 Consultant will order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction.

1.4 INDEPENDENT INSPECTION AGENCIES

- .1 Independent Inspection/Testing Agencies will be engaged by Agriculture and Agri-food Canada (AAC) for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by AAC.
- .2 Provide equipment required for executing inspection and testing by appointed agencies.
- .3 Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.



Centre of Sherbrooke

QUALITY CONTROL

Section 01 45 00 Page 2

.4 If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by Consultant at no cost. Pay costs for retesting and reinspection.

1.5 ACCESS TO WORK

- .1 Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
- .2 Co-operate to provide reasonable facilities for such access.

1.6 PROCEDURES

- .1 Notify Consultant in advance of requirement for tests, in order that attendance arrangements can be made.
- .2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in orderly sequence to not cause delays in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

1.7 REJECTED WORK

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Consultant as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in opinion of Consultant it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner will deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which will be determined by .

1.8 REPORTS

- .1 Submit 4 copies of inspection and test reports to Consultant.
- .2 Provide copies to subcontractor of work being inspected or tested.

1.9 TESTS AND MIX DESIGNS

- .1 Furnish test results and mix designs as requested.
- .2 Cost of tests and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work will be appraised Consultant and may be authorized as recoverable.



QUALITY CONTROL

Section 01 45 00 Page 3

1.10 MILL TESTS

.1 Submit mill test certificates as requested.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.



Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Prepare site plan indicating proposed location and dimensions of area to be fenced and used by Contractor, number of trailers to be used, avenues of ingress/egress to fenced area and details of fence installation.
- .2 Provide construction facilities in order to execute work expeditiously.
- .3 Remove from site all such work after use.

1.2 SITE STORAGE/LOADING

- .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with weight or force that will endanger Work.
- .3 All site storage outside of the work zones indicated on the plans must be preapproved by the ministerial Representative. For this purpose, the Contractor must submit a written request presenting the needs and the location of affected zones with a sketch.
- .4 Once the Work completed, the storage areas must be removed and the affected surfaces restored to their original state, to the satisfaction of the ministerial Representative.

1.3 CONSTRUCTION PARKING

- .1 Parking will be permitted on site provided it does not disrupt performance of Work.
- .2 Provide and maintain adequate access to project site.
- .3 Clean roadways where used by Contractor's equipment.

1.4 EQUIPMENT, TOOL AND MATERIALS STORAGE

- .1 Provide and maintain, in clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
- .2 Locate materials not required to be stored in weatherproof sheds on site in manner to cause least interference with work activities.

1.5 SANITARY FACILITIES

- .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
- .2 Post notices and take precautions as required by local health authorities. Keep area and premises in sanitary condition.



Research and Development

Centre of Sherbrooke

1.6 PROTECTION AND MAINTENANCE OF TRAFFIC

- .1 Provide access and temporary relocated roads as necessary to maintain traffic.
- .2 Maintain and protect traffic on affected roads during construction period except as otherwise specifically directed by Consultant.
- .3 Provide measures for protection and diversion of traffic, including provision of watchpersons and flag-persons, erection of barricades, placing of lights around and in front of equipment and work, and erection and maintenance of adequate warning, danger, and direction signs
- .4 Protect travelling public from damage to person and property.
- .5 Contractor's traffic on roads selected for hauling material to and from site to interfere as little as possible with public traffic on the site.
- .6 Verify adequacy of existing roads and allowable load limit on these roads. Contractor: responsible for repair of damage to roads caused by construction operations.
- .7 Dust control: adequate to ensure safe operation at all times.
- .8 Provide snow removal during period of Work.

1.7 CLEAN-UP

- .1 Remove construction debris, waste materials, packaging material from work site daily.
- .2 Clean dirt or mud tracked onto paved or surfaced roadways.
- .3 Store materials resulting from demolition activities that are salvageable.
- .4 Stack stored new or salvaged material not in construction facilities.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- .2 Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- **.3** Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 03 10 00 Concrete forming and accessories
- .2 Section 03 30 00 Cast-in-place Concrete
- .3 Section 31 00 00.01 Earthwork
- .4 Section 31 05 16 Aggregate Materials
- .5 Section 31 24 13 Excavation, backfill and compaction in roadwork
- .6 Section 32 11 16.01 Aggregate Base Layer
- .7 Section 32 12 16.02 Asphalt Paving for Building Sites
- .8 Section 32 16 15 Concrete Walks, Curbs, and Gutters
- .9 All other applicable sections.

1.2 REFERENCES

- .1 If there is question as to whether products or systems are in conformance with applicable standards, Consultant reserves right to have such products or systems tested to prove or disprove conformance.
- .2 Cost for such testing will be borne by Consultant in event of conformance with Contract Documents or by Contractor in event of non-conformance.

1.3 OUALITY

- .1 Products, materials, equipment and articles incorporated in Work shall be new, not damaged or defective, and of best quality for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .2 Procurement policy is to acquire, in cost effective manner, items containing highest percentage of recycled and recovered materials practicable consistent with maintaining satisfactory levels of competition. Make reasonable efforts to use recycled and recovered materials and in otherwise utilizing recycled and recovered materials in execution of work.
- .3 Defective products, whenever identified prior to completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .4 Should disputes arise as to quality or fitness of products, decision rests strictly with Consultant based upon requirements of Contract Documents.
- .5 Unless otherwise indicated in specifications, maintain uniformity of manufacture for any particular or like item throughout building.



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COMMON PRODUCT REQUIREMENTS

Section 01 61 00 Page 2

.6 Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

1.4 AVAILABILITY

- .1 Immediately upon signing Contract, review product delivery requirements and anticipate foreseeable supply delays for items. If delays in supply of products are foreseeable, notify Consultant of such, in order that substitutions or other remedial action may be authorized in ample time to prevent delay in performance of Work.
- .2 In event of failure to notify Consultant at commencement of Work and should it subsequently appear that Work may be delayed for such reason, Consultant reserves right to substitute more readily available products of similar character, at no increase in Contract Price or Contract Time.

1.5 STORAGE, HANDLING AND PROTECTION

- .1 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in Work.
- .3 Store products subject to damage from weather in weatherproof enclosures.
- .4 Keep sand, when used for grout or mortar materials, clean and dry. Store sand on wooden platforms and cover with waterproof tarpaulins during inclement weather.
- .5 Store and mix paints in heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
- .6 Remove and replace damaged products at own expense and to satisfaction of Consultant.

1.6 TRANSPORTATION

.1 Pay costs of transportation of products required in performance of Work.

1.7 MANUFACTURER'S INSTRUCTIONS

- .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify Consultant in writing, of conflicts between specifications and manufacturer's instructions, so that [Departmental Representative] [DCC Representative] [Consultant] will establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes Consultant to require removal and re-installation at no increase in Contract Price or Contract Time.



Section 01 61 00 Page 3

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

1.8 QUALITY OF WORK

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify Consultant if required Work is such as to make it impractical to produce required results.
- .2 Do not employ anyone unskilled in their required duties. Consultant reserves right to require dismissal from site, workers deemed incompetent or careless.
- .3 Decisions as to standard or fitness of Quality of Work in cases of dispute rest solely with Consultant, whose decision is final.

1.9 CO-ORDINATION

- .1 Ensure co-operation of workers in laying out Work. Maintain efficient and continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

1.10 CONCEALMENT

.1 Before installation inform Consultant if there is interference. Install as directed by Consultant.

1.11 REMEDIAL WORK

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Co-ordinate adjacent affected Work as required.
- .2 Perform remedial work by specialists familiar with materials affected. Perform in a manner to neither damage nor put at risk any portion of Work.

1.12 PROTECTION OF WORK IN PROGRESS

.1 Prevent overloading of parts of Work.

1.13 EXISTING UTILITIES

- .1 When breaking into or connecting to existing services or utilities, execute Work at times directed by local governing authorities, with minimum of disturbance to Work, and/or building occupants and pedestrian and vehicular traffic.
- .2 Protect, relocate or maintain existing active services. When services are encountered, cap off in manner approved by authority having jurisdiction. Stake and record location of capped service.

Part 2 Products

2.1 NOT USED

.1 Not Used.



AGRICULTURE AND AGRI-FOOD CANADA REQUIREMENTS Section 01 61 00 REQUIREMENTS Page 4 Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

Part 3 Execution

3.1 NOT USED

.1 Not Used.



.3

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

Part 1		General	
1.1		RELATED REQUIREMENTS	
	.1	03 30 00 – Cast-in-place Concrete	
	.2	31 00 00.01 – Earthworks	
	.3	31 05 16 – Aggregate materials	
	.4	31 24 13 - Excavation, backfill, and compaction in road construction	
	.5	32 11 16.01 – Granular Sub-base	
	.6	32 12 16.02 – Asphalt paving for building sites	
	.7	32 16 15 - Concrete walks, curbs, and gutters	
	.8	All other applicable sections	
1.2		REFERENCES	
	.1	Owner's identification of existing survey control points and property limits.	
1.3		QUALIFICATIONS OF SURVEYOR	
	.1	Qualified registered land surveyor, licensed to practice in Place of Work, acceptable to Consultant.	
1.4		SURVEY REFERENCE POINTS	
	.1	Existing base horizontal and vertical control points are designated on drawings.	
	.2	Locate, confirm and protect control points prior to starting site work. Preserve permanent reference points during construction.	
	.3	Make no changes or relocations without prior written notice to Consultant.	
	.4	Report to [Consultant when reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.	
	.5	Require surveyor to replace control points in accordance with original survey control.	
1.5		SURVEY REQUIREMENTS	
	.1	Establish a sufficient number of permanent bench marks on site, referenced to established bench marks by survey control points. Record locations, with horizontal and vertical data in Project Record Documents.	
	.2	Establish lines and levels, locate and lay out, by instrumentation.	

Stake for grading, fill placement, and rehabilitation.



1.6 EXISTING SERVICES

.1 Before commencing work, establish location and extent of service lines in area of Work and notify Consultant of findings.

1.7 RECORDS

- .1 Maintain a complete, accurate log of control and survey work as it progresses.
- On completion of foundations and major site improvements, prepare a certified survey showing dimensions, locations, angles and elevations of Work.

1.8 ACTION AND INFORMATIONAL SUBMITTALS

- .1 On request of Consultant, submit documentation to verify accuracy of field engineering work.
- .2 Submit certificate signed by surveyor certifying and noting those elevations and locations of completed Work that conform with Contract Documents.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 35 43 Environmental protection
- .2 Section 01 74 21 Waste management and disposal

1.2 PROJECT CLEANLINESS

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, including that caused by Owner or other Contractors.
- .2 Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Consultant. Do not burn waste materials on site.
- .3 Clear snow and ice from access to building in designated areas only.
- .4 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .5 Provide on-site containers for collection of waste materials and debris.
- .6 Provide and use marked separate bins for recycling. Refer to Section 01 74 21 Construction/Demolition Waste Management and Disposal.
- .7 Dispose of waste materials and debris off site.
- .8 Store volatile waste in covered metal containers, and remove from premises at end of each working day.

1.3 FINAL CLEANING

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Remove waste products and debris other than that caused by Owner or other Contractors.
- .5 Remove waste materials from site at regularly scheduled times or dispose of as directed by Consultant. Do not burn waste materials on site, unless approved by Consultant.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .8 Remove snow and ice from access to building.



Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 02 41 13 Selective site demolition
- .2 Section 02 41 13.14 Asphalt paving removal

1.2 Definitions:

- .1 Class III: non-hazardous waste construction renovation and demolition waste.
- .2 Construction, Renovation and/or Demolition (CRD) Waste: Class III solid, non-hazardous waste materials generated during construction, demolition, and/or renovation activities
- .3 Inert Fill: inert waste exclusively asphalt and concrete.
- .4 Waste Source Separation Program (WSSP): implementation and co-ordination of ongoing activities to ensure designated waste materials will be sorted into predefined categories and sent for recycling and reuse, maximizing diversion and potential to reduce disposal costs.
- .5 Recyclable: ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .6 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .7 Recycling: process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for purpose of using in altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- .8 Reuse: repeated use of product in same form but not necessarily for same purpose. Reuse includes:
 - .1 Salvaging reusable materials from re-modelling projects, before demolition stage, for resale, reuse on current project or for storage for use on future projects.
 - .2 Returning reusable items including pallets or unused products to vendors.
- .9 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.
- .10 Separate Condition: refers to waste sorted into individual types.
- .11 Source Separation: act of keeping different types of waste materials separate beginning from the point they became waste.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

.1 Submit in accordance with Section 01 33 00 - Submittal Procedures.

1.4 USE OF SITE AND FACILITIES

.1 Execute Work with minimal interference and disturbance to normal use of premises.



WASTE MANAGEMENT AND DISPOSAL

Section 01 74 21 Page 2

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

.2 Maintain security measures established by facility provide temporary security measures approved by Consultant.

1.5 STORAGE, HANDLING AND PROTECTION

- .1 Store, materials to be reused, recycled and salvaged in locations as directed by Consultant.
- .2 Unless specified otherwise, materials for removal become Contractor's property.

1.6 DISPOSAL OF WASTES

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste or oil] into waterways, storm, or sanitary sewers.
- .3 Remove materials on-site as Work progresses.

1.7 SCHEDULING

.1 Co-ordinate Work with other activities at site to ensure timely and orderly progress of Work.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 APPLICATION

.1 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.

3.2 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.

3.3 DIVERSION OF MATERIALS

- .1 From following list, separate materials from general waste stream and stockpile in separate piles or containers, as reviewed by Consultant, and consistent with applicable fire regulations.
 - .1 Mark containers or stockpile areas.



Centre of Sherbrooke

WASTE MANAGEMENT AND DISPOSAL

Section 01 74 21 Page 3

.2 Provide instruction on disposal practices.

3.4 CANADIAN GOVERNMENTAL DEPARTMENTS CHIEF RESPONSIBILITY FOR THE ENVIRONMENT

.1 Schedule G - Government Chief Responsibility for the Environment:

Province	Address	General Inquires	Fax
Québec	Ministère de	418-643-3127 800-561-	418-646-5974
	l'Environnement et de la	1616	
	Faune, Siège social 150,		
	boul, René-Lévesque		
	Est Québec QC G1R		
	4Y1		
	Conseil de la	418-643-3818	
	conservation et de		
	l'environnement 800,		
	place d'Youville, 19e		
	étage Québec QC G1R		
	3P4		



Part 1 General

1.1 RELATED REQUIREMENTS

.1 Section 01 74 11 – Cleaning.

1.2 ADMINISTRATIVE REQUIREMENTS

- .1 Acceptance of Work Procedures:
 - .1 Contractor's Inspection: Contractor: conduct inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
 - .1 Notify Consultant in writing of satisfactory completion of Contractor's inspection and submit verification that corrections have been made.
 - .2 Request Consultant's inspection.
 - .2 Consultant's Inspection:
 - .1 Consultant and Contractor to inspect Work and identify defects and deficiencies.
 - .2 Contractor to correct Work as directed.
 - .3 Completion Tasks: submit written certificates in French that tasks have been performed as follows:
 - .1 Work: completed and inspected for compliance with Contract Documents.
 - .2 Defects: corrected and deficiencies completed.
 - .3 Materials: tested, and fully operational.
 - .4 Work: complete and ready for final inspection.
 - .4 Final Inspection:
 - .1 When completion tasks are done, request final inspection of Work by the Project Owner, Consultant, and Contractor.
 - .2 When Work incomplete according to Consultant, complete outstanding items and request re-inspection.

1.3 FINAL CLEANING

- .1 Clean in accordance with Section 01 74 11 Cleaning.
 - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.

Part 2 Products

2.1 NOT USED

.1 Not Used.



Section 01 77 00 Page 2

Part 3 Execution

3.1 NOT USED

.1 Not Used.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 01 74 21 Waste management and disposal.
- .3 Section 01 45 00 Quality control.
- .4 Section 01 35 43 Environmental protection.
- .5 Section 01 35 29.06 Health and safety requirements
- .6 Section 02 81 01 –Hazardous materials
- .7 Section 31 23 33.01 Excavating and backfilling

1.2 MEASUREMENT AND PAYMENT

- .1 Measurement Procedures.
 - .1 Measure removal of asphaltic concrete pavement in square metres
 - .2 Measure removal of curbs, grass traffic islands, and trees in an all-inclusive price.

1.3 REFERENCES

- .1 Definitions:
 - .1 Demolition: rapid destruction of building following removal of hazardous materials.
 - .2 Hazardous Materials: dangerous substances, dangerous goods, hazardous commodities and hazardous products, may include but not limited to: asbestos PCB's, CFC's, HCFC's poisons, corrosive agents, flammable substances, ammunition, explosives, radioactive substances, or other material that can endanger human health or well being or environment if handled improperly.
- .2 Reference Standards:
 - .1 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
 - .2 Transport Canada (TC)
 - .1 Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Scheduling: meet project time lines without compromising specified minimum rates of material diversion.
 - .1 Notify Consultant in writing] when unforeseen delays occur.



1.5 ACTION AND INFORMATIONAL SUBMITTALS

.1 Submit in accordance with Section 01 33 00 - Submittal Procedures.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Store and manage hazardous materials in accordance with Section [01 35 43 Environmental Procedures.].
- .2 Storage and Protection.
 - .1 Protect in accordance with Section [31 23 33.01 Excavating, Trenching and Backfilling].
 - .2 Protect existing items designated to remain and items designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of Consultant and at no cost toOwner.
 - .3 Remove and store materials to be salvaged, in manner to prevent damage.
 - .4 Store and protect in accordance with requirements for maximum preservation of material
 - .5 Handle salvaged materials as new materials.

1.7 SITE CONDITIONS

- .1 Site Environmental Requirements.
 - .1 Perform work in accordance with Section 01 35 43 Environmental Procedures.
 - .2 Ensure that selective demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
 - .3 Do not dispose of waste of volatile materials including but not limited to, mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers.
 - .1 Ensure proper disposal procedures are maintained throughout the project.
 - .4 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers or onto adjacent properties.
 - .5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.
 - .6 Protect trees, plants and foliage on site and adjacent properties where indicated.

Part 2 Products

2.1 EQUIPMENT

.1 Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.



Part 3 Execution

3.1 PREPARATION

- .1 Inspect site with Consultant and verify extent and location of items designated for removal and items to remain.
- .2 Locate and protect utilities. Preserve active utilities traversing site in operating condition.
- .3 Notify and obtain approval of utility companies before starting demolition.

3.2 REMOVAL OF HAZARDOUS WASTES

.1 Remove contaminated or dangerous materials defined by authorities having jurisdiction, relating to environmental protection, from site and dispose of in safe manner to minimize danger at site or during disposal.

3.3 REMOVAL OPERATIONS

- .1 Remove items as indicated.
- .2 Do not disturb items designated to remain in place.
- .3 Removal of pavements, curbs and gutters:
 - .1 Square up adjacent surfaces to remain in place by saw cutting or other method approved by Consultant.
 - .2 Protect underlying and adjacent granular materials.
- .4 Remove [designated trees during demolition.
 - .1 Obtain written approval of Consultant prior to removal of trees not designated.
- .5 Disposed of alternately trees designated for removal.
- .6 Disposal of Material:
 - .1 Dispose of materials not designated for salvage or reuse on site at authorized facilities approved by Consultant.
- .7 Backfill:
 - .1 Backfill in areas as indicated and in accordance with Section 31 23 33.01 Excavating, Trenching and Backfilling.

3.4 REMOVAL FROM SITE

- .1 Transport material designated for alternate disposal using approved haulers.
- .2 Dispose of materials not designated for alternate disposal in accordance with applicable regulations.
 - .1 Disposal Facilities: approved.



SELECTIVE SITE DEMOLITION

Section 02 41 13 Page 4

3.5 RESTORATION

Centre of Sherbrooke

- .1 Restore areas and existing works outside areas of demolition to conditions that existed prior to beginning of Work.
- .2 Use soil treatments and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.

3.6 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
 - .2 Remove debris, trim surfaces and leave work site clean, upon completion of Work
 - .3 Use cleaning solutions and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.

3.7 PROTECTION

.1 Repair damage to adjacent materials or property caused by selective site demolition.



Part 1	General
1 al t 1	General

1.1 RELATED REQUIREMENTS

- .1 Section 01 74 11 Cleaning.
- .2 Section 01 74 21 Waste management and disposal.
- .3 Section 32 12 16 Asphalt paving.
- .4 Section 32 11 16.01 Aggregate sub-base.

1.2 MEASUREMENT AND PAYMENT

- .1 Removal of existing asphalt pavement will be measured in square metres of surface actually removed regardless of depth removed.
- .2 Payment under this item will include operations involved in removing, hauling, stockpiling, and disposal off-site of designated pavement and cleaning of remaining pavement surface.

Part 2 Products

Part 3 Execution

3.1 PREPARATION

- .1 Prior to beginning removal operation, inspect and verify with Consultant areas, depths and lines of asphalt pavement to be removed.
- .2 Protection: protect existing pavement not designated for removal, light units and structures from damage. In event of damage, immediately replace or make repairs to approval of Consultant at no additional cost.

3.2 REMOVAL

- .1 Remove existing asphalt pavement in its entire thickness.
- .2 Use equipment and methods of removal and hauling which do not damage or disturb underlying pavement.
- .3 Prevent contamination of removed asphalt pavement by topsoil, underlying gravel or other materials.
- .4 Suppress dust generated by removal process.

3.3 CLEANING

.1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.



ASPHALT PAVING REMOVAL

Section 02 41 13.14 Page 2

- .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.
- .3 Sweep remaining asphalt pavement surfaces clean of debris resulting from removal operations using rotary power brooms and hand brooming as required.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures
- .2 Section 32 16 15 Concrete walks, curbs, and gutters.

1.2 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CAN/CSA A23.1CSA O121
 - .2 CSA/CSA-O86
 - .3 CSA O437 S
 - .4 CSA O153
 - .5 CSA S269.1
 - .6 CAN/CSA-S269.3
 - .7 CSA-A23.1/A23.2

Part 2 Products

2.1 MATERIALS

- .1 Formwork materials:
 - .1 For concrete without special architectural features, use wood and wood product formwork materials.
- .2 Form ties:
 - .1 For concrete not designated 'Architectural', use removable or snap-off metal ties, fixed or adjustable length, free of devices leaving holes larger than 25 mm diameter in concrete surface.
- .3 Form release agent: non-toxic, biodegradable.
- .4 Form stripping agent: colourless mineral oil, non-toxic, biodegradable, free of kerosene, with viscosity between 70 and 110s Saybolt Universal at 40 degrees C, flashpoint minimum 150 degrees C, open cup.
- .5 Falsework materials: to CSA-S269.1.
- .6 Sealant: to Section 07 92 00 Joint Sealants.



Part 3 Execution

3.1 FABRICATION AND ERECTION

- .1 Verify lines, levels and centres before proceeding with formwork and ensure dimensions agree with drawings.
- .2 Obtain Consultant's approval for use of earth forms framing openings not indicated on drawings.
- .3 Hand trim sides and bottoms and remove loose earth from earth forms before placing concrete.
- .4 Fabricate and erect formwork in accordance with CAN/CSA-S269.3 to produce finished concrete conforming to shape, dimensions, locations and levels indicated within tolerances required by CSA-A23.1/A23.2.
- .5 Align form joints and make watertight.
 - .1 Keep form joints to minimum.
- .6 Use 50 mm chamfer strips on external corners and/or50 mm fillets at interior corners, joints, unless specified otherwise.
- .7 Form chases, slots, openings, drips, recesses, expansion and control joints as indicated.
- .8 Clean formwork in accordance with CSA-A23.1/A23.2, before placing concrete.

3.2 REMOVAL AND RESHORING

- .1 Leave formwork in place for following minimum periods of time after placing concrete.
 - .1 1 day for cast-in-place concrete curbs.
- .2 Re-use formwork subject to requirements of CSA-A23.1/A23.2.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 03 10 00 Concrete forming and accessories.
- .2 Section 31 22 14 Levelling.
- .3 Section 31 23 33 Excavation and backfill.
- .4 Section 32 16 15 Concrete walks, curbs, and gutters.

1.2 REFERENCES

- .1 Abbreviations and Acronyms:
 - .1 Portland Cement: hydraulic cement, blended hydraulic cement (XXb b denotes blended) and Portland-limestone cement.
 - .1 Type GU, GUb and GUL General use cement.
 - .2 Type MS and MSb Moderate sulphate-resistant cement.
 - .3 Type MH, MHb and MHL Moderate heat of hydration cement.
 - .4 Type HE, HEb and HEL High early-strength cement.
 - .5 Type LH, LHb and LHL Low heat of hydration cement.
 - .6 Type HS and HSb High sulphate-resistant cement.
 - .2 Fly ash:
 - .1 Type F with CaO content less than 15%.
 - .2 Type CI with CaO content ranging from 15 to 20%.
 - .3 Type CH with CaO greater than 20%.
 - .3 GGBFS Ground, granulated blast-furnace slag.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 Submittal Procedures.
- .2 Provide testing results for review by Consultant and do not proceed without written approval when deviations from mix design or parameters are found.
- .3 Concrete hauling time: provide for review by Consultant deviations exceeding maximum allowable time of 120 minutes for concrete to be delivered to site of Work and discharged after batching.

1.4 QUALITY ASSURANCE

- .1 Quality Assurance: in accordance with Section 01 45 00 Quality Control.
- .2 Provide Consultant, minimum 1 week prior to starting concrete work, with valid and recognized certificate from plant delivering concrete.



1.5 DELIVERY, STORAGE AND HANDLING

- .1 Delivery and Acceptance Requirements:
 - .1 Concrete hauling time: deliver to site of Work and discharged within 120 minutes maximum after batching.
 - .1 Do not modify maximum time limit without receipt of prior written agreement from Consultant and concrete producer as described in CSA A23.1/A23.2.
 - 2 Deviations to be submitted for review Consultant.
 - .2 Concrete delivery: ensure continuous concrete delivery from plant meets CSA A23.1/A23.2.

Part 2 Products

2.1 MATERIALS

- .1 Cement Type GUb.
- .2 Water: to CSA A23.1.
- .3 Aggregates:
 - .1 Aggregates used in the cement concrete must be according to NQ2560-114 and MTQ 3101.
 - .1 Large aggregates intrinsic characteristics: category 3
 - .2 Large aggregates fabrication characteristics: category c
 - .3 Fine aggregates intrinsic characteristics: category 3
- .4 Admixtures:
 - .1 Must not contain calcium chloride, neither added nor formed by chemical reaction between the components. The use of any admixture is subject to approval by the laboratory.
 - .2 Air entraining admixture: to ASTM C260.
 - .1 The air voids in the cement mixture must have the correct measurements and spacing. The spacing of air bubbles must be equal or less than 230 μm .
 - .3 Chemical admixture: Consultant to approve accelerating or set retarding admixtures during cold and hot weather placing.
 - .1 Must not contain calcium chloride, neither added nor formed by chemical reaction between the components. The use of any admixture is subject to approval by the laboratory.
 - .4 Waterproofing agent :
 - .1 The waterproofing agent must be to MTQ3601.
 - .5 Curing materials:



CAST-IN-PLACE CONCRETE

Section 03 30 00 Page 3

- .1 Curing materials must be to MTQ3501.
- .6 Mineral and puzzolanic admixtures to ASTM-C-494.

2.2 MIXES

Centre of Sherbrooke

- .1 Performance Method for specifying concrete: to meet Consultant performance criteria to CSA A23.1/A23.2.
 - .1 Ensure concrete supplier meets performance criteria as established below and provide verification of compliance as in Quality Control Plan.
 - .2 Provide concrete mix to meet following plastic state requirements:
 - 1 Workability: free of surface blemishes and segregation.
 - .3 Provide concrete mix to meet following hard state requirements:
 - .1 Compressive strength at 28 age: 35 Ma minimum.
 - .2 Aggregate size: to MTQ3101.
 - .4 Provide quality management plan to ensure verification of concrete quality to specified performance.
 - .5 Concrete supplier's certification: both batch plant and materials meet CSA A23.1 requirements.

Part 3 Execution

3.1 PREPARATION

- .1 Obtain Consultant's written approval before placing concrete.
 - .1 Provide 24 hours minimum notice prior to placing of concrete.
- .2 During concreting operations:
 - .1 Development of cold joints not allowed.
 - .2 Ensure concrete delivery and handling facilitates placing with minimum of rehandling, and without damage to existing structure or Work.
- .3 Pumping of concrete will not be permitted.
- .4 Prior to placing of concrete obtain Consultant's approval of proposed method for protection of concrete during placing and curing [in adverse weather].
- .5 Protect previous Work from staining.
- .6 Clean and remove stains prior to application for concrete finishes.
- .7 Maintain accurate records of poured concrete items to indicate date, location of pour, quality, air temperature and test samples taken.
- .8 In locations where new concrete is dowelled to existing work, drill holes in existing concrete.



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CAST-IN-PLACE CONCRETE

Section 03 30 00 Page 4

- .1 Place steel dowels of deformed steel reinforcing bars and pack solidly with epoxy grout to anchor and hold dowels in positions as indicated.
- .9 Do not place load upon new concrete until authorized by Consultant.

3.2 INSTALLATION/APPLICATION

- .1 Do cast-in-place concrete work to CSA A23.1/A23.2.
- .2 Sleeves and inserts:
 - .1 Where approved by Consultant, set sleeves, ties, pipe hangers and other inserts and openings as indicated or specified elsewhere.
 - .2 Do not eliminate or displace reinforcement to accommodate hardware. If inserts cannot be located as specified, obtain written approval of modifications from Consultant before placing of concrete.
 - .3 Set special inserts for strength testing as indicated and as required by non-destructive method of testing concrete.
- .3 Anchor bolts:
- .4 Finishing and curing:
 - .1 Finish concrete to CSA A23.1/A23.2.

.1

- .2 Use procedures as reviewed by Consultant or those noted in CSA A23.1/A23.2 to remove excess bleed water. Ensure surface is not damaged.
- .3 Protect surfaces from weather conditions and from nearby work.
- .4 Keep the exposed surfaces of fresh concrete humid for at least 7 consecutive days.
- .5 The use of curing agents is permitted in areas where it is impossible to maintain adequate humidity. Use a product that does not affect the appearance of the concrete.
- .6 Protect the exposed surfaces from the sun, dry wind, cold, heat, and from flowing water.
- .7 A float must be used for the finishing, unless otherwise specified.
- .8 Small concrete works must have reached a minimal resistance of 15 MPa before nearby work can be undertaken. For structural concrete, 80% of the specified compressive resistance at 28 days must be obtained.
- .9 Wait for at least 70% of the specified resistance to be reached before removing the molds.

.10

3.3 FIELD QUALITY CONTROL

.1 Site tests: conduct tests as follows in accordance with Section 01 45 00 - Quality Control and submit report as described in PART 1 - ACTION AND INFORMATIONAL SUBMITTALS.



- .1 Concrete pours.
- .2 Slump.
- .3 Air content.
- .4 Compressive strength at 7 and 28 days.
- .5 Air and concrete temperature.
- .2 Inspection and testing of concrete and concrete materials will be carried out by testing laboratory designated by the project Owner for review to CSA A23.1/A23.2.
 - 1 Ensure testing laboratory is certified to [CSA A283].
- .3 Ensure test results are distributed for discussion at pre-pouring concrete meeting between Consultant.
- .4 Project Owner will pay for costs of tests as specified in Section 01 29 83 Payment Procedures for Testing Laboratory Services.
- .5 The mandated testing laboratory will take additional test cylinders during cold weather concreting. Cure cylinders on job site under same conditions as concrete which they represent.

3.4 CLEANING

- .1 Clean in accordance with Section 01 74 11 Cleaning.
 - .1 Provide appropriate area on job site where concrete trucks and be safely washed.
 - .2 Do not dispose of unused admixtures and additive materials into sewer systems, into lakes, streams, onto ground or in other location where it will pose health or environmental hazard.
 - .3 Prevent admixtures and additive materials from entering drinking water supplies or streams.
 - .4 Using appropriate safety precautions, collect liquid or solidify liquid with inert, non-combustible material and remove for disposal.
 - .5 Dispose of waste in accordance with applicable local, Provincial/Territorial and National regulations.



Part 1 General

1.1 RELATED REQUIREMENTS

.1 Section 31 05 16 Aggregate materials.

1.2 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM C127-[04], Standard Test Method for Density, Relative Density (Specific Gravity) and Absorption of Coarse Aggregate.
 - .2 ASTM D698-[00ae1], Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
 - .3 ASTM D1557-[02e1], Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)).
 - .4 ASTM D4253-[00], Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.

1.3 **DEFINITIONS**

- .1 Corrected maximum dry density is defined as:
 - .1 $D = (F1 \times D1) + (0.9 \times D2 \times F2)$
 - .2 Where: D =corrected maximum dry density kg/m^3 .
 - .1 F1 = fraction (decimal) of total field sample passing 4.75 mm sieve
 - .2 F2 = fraction (decimal) of total field sample retained on 4.75 mm sieve (equal to 1.00 F1)
 - .3 D1 = maximum dry density, kg/m³of material passing mm sieve determined in accordance with Method of .
 - .4 D2 = bulk density, kg/m³, of material retained on mm sieve, equal to 1000G where G is bulk specific gravity (dry basis) of material when tested to ASTM C127.
 - .3 For free draining aggregates, determine D1 (maximum dry density) to ASTM D4253 dry method or wet method when directed by Consultant.

Part 2 Products

2.1 NOT USED

.1 Not Used.



AGRICULTURE AND AGRI-FOOD CANADA Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke CORRECTED MAXIMUM DRY DENSITY FOR FILL

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Part 3 Execution

3.1 NOT USED

.1 Not Used.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 31 00 00 Earthworks
- .3 Section 32 11 23 Aggregate foundation layer
- .4 Section 32 12 16 Asphalt pavement

1.2 REFERENCES

- .1 Cahier des Charges et Devis Généraux des infrastructures routières (CCDG) Construction et réparation. (Most recent edition).
- .2 Normes du Ministère des Transports, de la Mobilité durable et de l'Électrification des transports.
 - .1 Tome VII —Matériaux (Most recent edition).
- .3 Bureau de normalisation du Québec (BNQ) :
 - .1 NQ 2560-114, Civil Engineering Work Aggregates.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for [aggregate materials] and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Samples:
 - .1 Allow continual sampling by the mandated laboratory during production.
 - .2 Provide the mandated laboratory with access to source and processed material for sampling.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 Common Product Requirements.
- .2 Transportation and Handling: handle and transport aggregates to avoid segregation, contamination and degradation.
- .3 Storage: store washed materials or materials excavated from underwater 24 hours minimum to allow free water to drain and for materials to attain uniform water content.



Part 2 Products

2.1 MATERIALS

- .1 Aggregate quality: sound, hard, durable material free from soft, thin, elongated or laminated particles, organic material, clay lumps or minerals, free from adherent coatings and injurious amounts of disintegrated pieces or other deleterious substances.
- .2 Flat and elongated particles of coarse aggregate: to ASTM D4791.
 - .1 Greatest dimension to exceed 5 times least dimension.
- .3 Fine aggregates satisfying requirements of applicable section to be one, or blend of following:
 - .1 Screenings produced in crushing of quarried rock, boulders, gravel or slag.
 - .2 Natural sand.
- .4 Coarse aggregates satisfying requirements of applicable section to be one of or blend of following:
 - .1 Crushed rock.
 - .2 Gravel and crushed gravel composed of naturally formed particles of stone.
 - .3 Light weight aggregate, including slag and expanded shale.
- .5 The following materials must be used:
 - .1 Stone, gravel, or unsorted sand, produced by crushing or screening.

Screen	MG-20	MG-112
Use	Foundation	Sub-base
112 mm		-
56 mm		-
40 mm		-
31,5 mm	100	100
20 mm	90-100	-
14 mm	68-93	-
5 mm	35-60	12-60
1,25 mm	15-38	-
315 µm	5-17	-
80 µm	2-7	0-10

.2 The particle size grading must respect the limits fixed above, from tests done in accordance with NQ 2560-114.

2.2 SOURCE QUALITY CONTROL

.1 Inform Consultant of proposed source of aggregates and provide access for sampling2 weeks minimum before starting production.



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- .2 If materials from proposed source do not meet, or cannot reasonably be processed to meet, specified requirements, locate alternative source.
- .3 Advise [Departmental Representative] [DCC Representative] [Consultant] [4] weeks minimum in advance of proposed change of material source.
- .4 Acceptance of material at source does not preclude future rejection if it fails to conform to requirements specified, lacks uniformity, or if its field performance is found to be unsatisfactory.

Part 3 Execution

3.1 PREPARATION

- .1 Processing:
 - .1 Process aggregate uniformly using methods that prevent contamination, segregation and degradation.
 - .2 Blend aggregates, as required, including reclaimed materials that meet physical requirements of specification is permitted in order to satisfy gradation requirements for material and, percentage of crushed particles, or particle shapes specified.
 - .1 Use methods and equipment approved in writing by Consultant.
- .2 When operating in stratified deposits use excavation equipment and methods that produce uniform, homogeneous aggregate gradation.
- .3 Where necessary, screen, crush, wash, classify and process aggregates with suitable equipment to meet requirements.
 - .1 Use only equipment approved in writing by Consultant.

.4 Stockpiling:

- .1 Stockpile aggregates on site in locations as indicated unless directed otherwise.

 Do not stockpile on completed pavement surfaces.
- .2 Stockpile aggregates in sufficient quantities to meet project schedules.
- .3 Stockpiling sites to be level, well drained, and of adequate bearing capacity and stability to support stockpiled materials and handling equipment.
- .4 Except where stockpiled on acceptably stabilized areas, provide compacted sand base not less than 300 mm in depth to prevent contamination of aggregate. Stockpile aggregates on ground but do not incorporate bottom 300 mm of pile into Work.
- .5 Separate different aggregates by strong, full depth bulkheads, or stockpile far enough apart to prevent intermixing.
- .6 Do not use intermixed or contaminated materials. Remove and dispose of rejected materials as directed by Consultant within 48 hours of rejection.
- .7 Stockpile materials in uniform layers of maximum thickness of 300 mm.



AGGREGATE MATERIALS

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- .8 Uniformly spot-dump aggregates delivered to stockpile in trucks and build up stockpile as specified.
- .9 Do not cone piles or spill material over edges of piles.
- During winter operations, prevent ice and snow from becoming mixed into stockpile or in material being removed from stockpile.

3.2 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.
- .3 Leave aggregate stockpile site in tidy, well drained condition, free of standing surface water.
- .4 Leave any unused aggregates in neat compact stockpiles.
- .5 For temporary or permanent abandonment of aggregate source, restore source to condition meeting requirements of authority having jurisdiction.
- .6 Restrict public access to temporary or permanently abandoned stockpiles by means acceptable to Consultant.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 01 45 00 Quality control.
- .3 Section 01 74 21 Waste management and disposal

1.2 MEASUREMENT PROCEDURES

.1 Excavation and preparation of the infrastructure are payable by the square meter, according to the excavated surface.

1.3 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM C117-[04], Standard Test Method for Material Finer than 0.075 mm (No.200) Sieve in Mineral Aggregates by Washing.
 - .2 ASTM C136-[05], Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - .3 ASTM D422-63[2002], Standard Test Method for Particle-Size Analysis of Soils.
 - .4 ASTM D698-[00ae1], Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³) (600 kN-m/m³).
 - .5 ASTM D1557-[02e1], Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³) (2,700 kN-m/m³).
 - .6 ASTM D4318-[05], Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-8.1-[88], Sieves, Testing, Woven Wire, Inch Series.
 - .2 CAN/CGSB-8.2-[M88], Sieves, Testing, Woven Wire, Metric.
- .3 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-A3000-[03], Cementitious Materials Compendium (Consists of A3001, A3002, A3003, A3004 and A3005).
 - .1 CSA-A3001-[03], Cementitious Materials for Use in Concrete.
 - .2 CSA-A23.1/A23.2-[04], Concrete Materials and Methods of Concrete Construction/Methods of Test and Standard Practices for Concrete.

1.4 **DEFINITIONS**

.1 Excavation classes: two classes of excavation will be recognized; common excavation and rock excavation.



- .1 Rock: solid material in excess of 1.00 m³ and which cannot be removed by means of heavy duty mechanical excavating equipment [with [0.95 to 1.15] m³ bucket]. Frozen material not classified as rock.
- .2 Common excavation: excavation of materials of whatever nature, which are not included under definitions of rock excavation.
- .2 Waste material: excavated material unsuitable for use in Work or surplus to requirements.
- .3 Borrow material: material obtained from locations outside area to be graded, and required for construction of fill areas or for other portions of Work.
- .4 Unsuitable materials:
 - .1 Weak, chemically unstable, and compressible materials.
 - .2 Frost susceptible materials:
 - .1 Fine grained soils with plasticity index less than 10 when tested to ASTM D4318, and gradation within limits specified when tested to ASTM D422 ASTM C136: Sieve sizes to CAN/CGSB-8.1 CAN/CGSB-8.2.
 - .2 Table:

Sieve Designation	% Passing
2.00 mm	100
0.10 mm	45 - 100
0.02 mm	10 - 80
0.005 mm	0 - 45

.3 Coarse grained soils containing more than 20 % by mass passing 0.075 mm sieve.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Make submittals in accordance with Section 01 33 00 Submittal Procedures.
- .2 Quality Control: in accordance with Section 01 45 00 Quality Control:
 - .1 Submit condition survey of existing conditions.
 - .2 Submit for review by Consultant proposed dewatering and heave prevention methods as described in PART 3 of this Section.
 - .3 Inform Consultant when bottom of excavation is reached.
 - .4 Submit to Consultant inspection results report as described in PART 3 of this Section.
- .3 Preconstruction Submittals:
 - .1 Submit construction equipment list for major equipment to be used in this section prior to start of Work.
 - .2 Submit records of underground utility locates, indicating: location plan of existing utilities as found in field.
- .4 Samples:



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- .1 Submit samples in accordance with Section 01 33 00 Submittal Procedures.
- .2 Inform Consultant at least 4 weeks prior to beginning Work, of proposed source of fill materials and provide access for sampling.

1.6 QUALITY ASSURANCE

- .1 Qualification Statement: submit proof of insurance coverage for professional liability.
- .2 Submit design and supporting data at least [2] weeks prior to beginning Work.
- .3 Design and supporting data submitted to bear stamp and signature of qualified professional engineer registered or licensed in Province of Quebec, Canada.
- .4 Keep design and supporting data on site.
- .5 Do not use soil material until written report of soil test results are reviewed by Consultant.
- .6 Health and Safety Requirements:
 - Do construction occupational health and safety in accordance with Section 01 35 29.06 Health and Safety Requirements.

1.7 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials in accordance with Section 01 74 21 Construction/Demolition Waste Management and Disposal.
- .2 Divert excess aggregate materials from landfill to local quarry for reuse as directed by Consultant.

1.8 EXISTING CONDITIONS

- .1 Buried services:
 - .1 Before commencing work establish location of buried services on and adjacent to site.
 - .2 Arrange with appropriate authority for relocation of buried services that interfere with execution of work: pay costs of relocating services.
 - .3 Remove obsolete buried services within 2 m of foundations: cap cut-offs.
 - .4 Size, depth and location of existing utilities and structures as indicated are for guidance only. Completeness and accuracy are not guaranteed.
 - .5 Prior to beginning excavation Work, notify Consultant establish location and state of use of buried utilities and structures. Authorities having jurisdiction to clearly mark such locations to prevent disturbance during Work.
 - Maintain and protect from damage, water, sewer, gas, electric, telephone and other utilities and structures encountered.
 - .7 Record location of maintained, re-routed and abandoned underground lines.
 - .8 Confirm locations of recent excavations adjacent to area of excavation.
- .2 Existing buildings and surface features:



- .1 Conduct, with Consultant, condition survey of existing buildings, trees and other plants, lawns, fencing, service poles, wires, rail tracks, pavement, survey bench marks and monuments which may be affected by Work.
- .2 Protect existing buildings and surface features from damage while Work is in progress. In event of damage, immediately make repair as directed by Consultant.
- .3 Where required for excavation, cut roots or branches as directed by Consultant.

Part 2 Products

2.1 MATERIALS

- .1 Type 1 and Type 2 fill: properties to Section 31 05 16 Aggregate Materials and the following requirements:
 - .1 Crushed, pit run or screened stone, gravel or sand.
 - .2 Gradations to be within limits specified when tested to ASTM C136 ASTM C117. Sieve sizes to CAN/CGSB-8.1 CAN/CGSB-8.2.
 - .3 Table:

Sieve designation	% Passing
	Fill
75 mm	100
50 mm	
37,5 mm	
25 mm	
19 mm	
12,5 mm	
9,5 mm	
4,75 mm	
2,00 mm	
0,425 mm	0 - 30
0,180 mm	
0,075 mm	0 - 8



Part 3 Execution

3.1 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- .2 Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- .3 Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.2 SITE PREPARATION

- .1 Remove obstructions, ice and snow, from surfaces to be excavated within limits indicated.
- .2 Cut pavement or sidewalk neatly along limits of proposed excavation in order that surface may break evenly and cleanly in accordance with Section 02 41 13 Selective Site Demolition

3.3 PREPARATION/PROTECTION

- .1 Protect existing.
- .2 Keep excavations clean, free of standing water, and loose soil.
- .3 Where soil is subject to significant volume change due to change in moisture content, cover and protect to Consultant approval.
- .4 Protect natural and man-made features required to remain undisturbed. Unless otherwise indicated or located in an area to be occupied by new construction, protect existing trees from damage.
- .5 Protect buried services that are required to remain undisturbed.

3.4 STOCKPILING

- .1 Stockpile fill materials in areas designated by Consultant.
 - .1 Stockpile granular materials in manner to prevent segregation.
- .2 Protect fill materials from contamination.
- .3 Implement sufficient erosion and sediment control measures to prevent sediment release off construction boundaries and into water bodies.

3.5 DEWATERING AND HEAVE PREVENTION

- .1 Keep excavations free of water while Work is in progress.
- .2 Provide for Consultant's review details of proposed dewatering or heave prevention methods, including dikes, well points, and sheet pile cut-offs.



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- .3 Avoid excavation below groundwater table if quick condition or heave is likely to occur.
 - .1 Prevent piping or bottom heave of excavations by groundwater lowering, sheet pile cut-offs, or other means.
- .4 Protect open excavations against flooding and damage due to surface run-off.
- .5 Dispose of water in accordance with Section 01 35 43 Environmental Procedures and in manner not detrimental to public and private property, or portion of Work completed or under construction
 - .1 Provide and maintain temporary drainage ditches and other diversions outside of excavation limits.

3.6 EXCAVATION

- .1 Remove concrete, paving, demolished foundations and rubble, and other obstructions encountered during excavation in accordance with Section 02 41 13 Selective Site Demolition
- .2 Excavation must not interfere with bearing capacity of adjacent foundations.
- .3 Do not disturb soil within branch spread of trees or shrubs that are to remain.
 - .1 If excavating through roots, excavate by hand and cut roots with sharp axe or saw.
- .4 Keep excavated and stockpiled materials safe distance away from edge of trench.
- .5 Restrict vehicle operations directly adjacent to open trenches.
- .6 Dispose of surplus and unsuitable excavated material off site.
- .7 Do not obstruct flow of surface drainage or natural watercourses.
- .8 Obtain Consultant approval of completed excavation.
- .9 Remove unsuitable material from trench bottom including those that extend below required elevations to extent and depth as directed by Consultant.
- .10 Correct unauthorized over-excavation as follows:
 - .1 Fill with Type [2] fill compacted to not less than 95 % of corrected Standard Proctor maximum dry density in accordance with Section 31 05 10 Maximum Dry density.
- .11 Hand trim, make firm and remove loose material and debris from excavations.
 - .1 Where material at bottom of excavation is disturbed, compact foundation soil to density at least equal to undisturbed soil.
 - .2 Clean out rock seams and fill with concrete mortar or grout to approval of Consultant.

3.7 BACKFILLING

.1 Vibratory compaction equipment.



- .2 Do not proceed with backfilling operations until completion of following:
 - .1 Consultant has inspected and approved installations.
 - .2 Consultant has inspected and approved of construction below finish grade.
 - .3 Inspection, testing, approval, and recording location of underground utilities.
 - .4 Removal of concrete formwork.
 - .5 Removal of shoring and bracing; backfilling of voids with satisfactory soil material.
- .3 Areas to be backfilled to be free from debris, snow, ice, water and frozen ground.
- .4 Do not use backfill material which is frozen or contains ice, snow or debris.
- .5 Place backfill material in uniform layers not exceeding 150 mm compacted thickness up to grades indicated. Compact each layer before placing succeeding layer.
- .6 Backfilling around installations:
 - .1 Place bedding and surround material as specified elsewhere.
 - .2 Do not backfill around or over cast-in-place concrete within 24 hours after placing of concrete.
 - .3 Place layers simultaneously on both sides of installed Work to equalize loading.

3.8 RESTORATION

- .1 Upon completion of Work, remove waste materials and debris in accordance to Section [01 74 21 Construction/Demolition Waste Management and Disposal], trim slopes, and correct defects as directed by Consultant.
- .2 Replace topsoil as indicated by Consultant.
- .3 Reinstate lawns to elevation which existed before excavation.
- .4 Reinstate pavements disturbed by excavation to thickness, structure and elevation which existed before excavation.
- .5 Clean and reinstate areas affected by Work as directed by Consultant.
- .6 Protect newly graded areas from traffic and erosion and maintain free of trash or debris.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 01 61 00 Common product requirements.
- .3 Section 01 74 11 Cleaning.
- .4 Section 01 74 21 Waste management and disposal.
- .5 Section 31 05 10 Corrected maximum dry density.
- .6 Section 31 05 16 Aggregate materials.
- .7 Section 32 12 16 Asphalt pavement.

1.2 MEASUREMENT AND PAYMENT

.1 Measure granular sub-base in square metres of material incorporated into Work and accepted by Consultant.

1.3 REFERENCES

- .1 ASTM International
 - .1 ASTM C117-[04], Standard Test Methods for Material Finer Than 0.075 mm Sieve in Mineral Aggregates by Washing.
 - .2 ASTM C131-[06], Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
 - .3 ASTM C136-[06], Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - .4 ASTM D422-[63(2007)], Standard Test Method for Particle-Size Analysis of Soils.
 - .5 ASTM D698-[07e1], Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400ft-lbf/ft³) (600kN-m/m³).
 - .6 ASTM D1557-[09], Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000ft-lbf/ft³) (2,700kN-m/m³).
 - .7 ASTM D1883-[07e2], Standard Test Method for CBR (California Bearing Ratio) of Laboratory Compacted Soils.
 - .8 ASTM D4318-[10], Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-8.1-[88], Sieves, Testing, Woven Wire, Inch Series.
 - .2 CAN/CGSB-8.2-[M88], Sieves, Testing, Woven Wire, Metric.



- .3 Bureau de normalisation du Québec (BNQ)
 - .1 NQ 2560-114-II/2002, Civil Engineering Work Aggregates Part II: Sub-base course, capping layer, surface course and shoulder (aggregates used for roadways).

1.4 ACTION AND INFORMATIONAL SUBMITTALS

.1 Submit in accordance with Section 01 33 00 - Submittal Procedures.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 Common Product Requirements.
- .2 Storage and Handling Requirements:
 - .1 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

.1 Granular sub-base material: in accordance with Section 31 05 16 - Aggregate Materials.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrate previously installed under other Sections or Contracts are acceptable for granular sub-base installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Consultant.
 - .2 Inform Consultant of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 PREPARATION

- .1 Temporary Erosion and Sedimentation Control:
 - .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
 - .2 Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
 - .3 Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.



3.3 PLACING

- .1 Place granular sub-base after subgrade is inspected and approved by Consultant.
- .2 Construct granular sub-base to depth and grade in areas indicated.
- .3 Ensure no frozen material is placed.
- .4 Place material only on clean unfrozen surface, free from snow or ice.
- .5 Begin spreading sub-base material on crown line or high side of one-way slope.
- .6 Place granular sub-base materials using methods which do not lead to segregation or degradation.
- .7 For spreading and shaping material, use spreader boxes having adjustable templates or screeds which will place material in uniform layers of required thickness.
- .8 Place material to full width in uniform layers not exceeding 300150 mm compacted thickness.
 - .1 Consultant may authorize thicker lifts if specified compaction can be achieved.
- .9 Shape each layer to smooth contour and compact to specified density before succeeding layer is placed.
- .10 Remove and replace portion of layer in which material has become segregated during spreading.

3.4 COMPACTION

- .1 Compaction equipment to be capable of obtaining required material densities.
- 2 Efficiency of equipment not specified to be proved at least as efficient as specified equipment at no extra cost and written approval must be received from Consultant before use.
- .3 Compact to density of not less than 95% of maximum dry density for MG-112 and not less than 98% maximum dry density for MG-20.
- .4 Shape and roll alternately to obtain smooth, even and uniformly compacted sub-base.
- .5 Apply water as necessary during compaction to obtain specified density.
- .6 In areas not accessible to rolling equipment, compact to specified density with mechanical tampers.
- .7 Correct surface irregularities by loosening and adding or removing material until surface is within specified tolerance.

3.5 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.



GRANULAR SUB-BASE

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.2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

3.6 SITE TOLERANCES

.1 Finished sub-base surface to be within 10 mm of elevation as indicated but not uniformly high or low.

3.7 PROTECTION

.1 Maintain finished sub-base in condition conforming to this section until succeeding base is constructed, or until granular sub-base is accepted by Consultant.



Part 1	General
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1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 01 45 00 Quality control.
- .3 Section 01 61 00 Common product requirements
- .4 Section 01 74 21 Waste management and disposal.
- .5 Section 01 74 11 Cleaning.
- .6 Section 02 41 13.14 Asphalt pavement removal.
- .7 Section 31 05 16 Aggregate materials.
- .8 Section 32 11 23 Sub-base layer.

1.2 MEASUREMENT AND PAYMENT

.1 Asphalt concrete pavement will be measured in square metres of asphalt surface in place.

1.3 REFERENCES

- .1 Cahier des charges et devis généraux CCDG (2016), ministère des Transports du Ouébec.
 - .1 Section 13
- .2 Collection Normes Ouvrages routiers du ministère des Transports du Québec, (most recent edition).

1.4 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for asphalt paving mix, aggregate, and coatings and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Samples:
 - .1 Submit asphalt concrete mix design and trial mix test results for approval.
 - .2 Inform Consultant of proposed source of aggregates and provide access for sampling at least 1 week prior to commencing work.
- .4 Test and Evaluation Reports:
 - .1 Materials to be tested by independent testing laboratory approved by Consultant.



AGRICULTURE AND AGRI-FOOD CANADA Repair of asphalted access

ASPHALT PAVING FOR BUILDING SITES

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Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

.2 Submit test certificates showing suitability of materials at least 1 week prior to commencing work.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 Common Product Requirements.
- .2 Contractor must transport asphalt with insulated truck bins to conserve the temperature of the mix during transport to site.

Part 2 Products

2.1 MATERIALS

- .1 Asphalt concrete aggregates:
 - .1 Aggregates according to Section 31 05 16 Aggregate materials, and according to the following requirements.
 - .2 Aggregate type and composition:

Туре	Tar grade	Aggregate characteristics (1)	Use
ESG-14	PG 58-34	3 b 2	Couche unique

- (1) The aggregates used for asphalt must respect the specifications of Tables 1, 2, and 3 of NQ 2560 114/2014 and of Standard 4202 of Transports Québec, according to mix type.
- .3 A maximum of 20% of recycled asphalt aggregates is allowed. A maximum of 5% of postfabrication asphalt shingles are allowed, in accordance with Standard 4202 of Transports Québec.
- .4 Performance class of PG 58-34 for all asphalt mixes used in this contract, in accordance with Standard 4201 of Transports Québec.

.5

2.2 EQUIPMENT

- .1 Pavers: mechanical grade controlled self-powered pavers capable of spreading mix within specified tolerances, true to line, grade and crown indicated.
- .2 Rollers: sufficient number of rollers of type and weight to obtain specified density of compacted mix.
- .3 Vibratory rollers for parking lots and driveways:
 - .1 Minimum drum diameter: 750 mm.



ASPHALT PAVING FOR BUILDING SITES

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Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

- .4 Haul trucks: of sufficient number and of adequate size, speed and condition to ensure orderly and continuous operation and as follows:
 - .1 Boxes with tight metal bottoms.
 - .2 Covers of sufficient size and weight to completely cover and protect asphalt mix when truck fully loaded.
 - .3 In cool weather or for long hauls, insulate entire contact area of each truck box.
- .5 Suitable hand tools.

2.3 MIX DESIGN

- .1 Job mix formula provided by the Contractor must be verified and reproduced in laboratory by the mandated materials control firm for approval. The mix formulas and constituents including the bituminous binder must be provided at least 1 week before the beginning of work, and approved by the Consultant.
- .2 The mix formula must be prepared by a laboratory approved by the Consultant.
- .3 The mix formula must be determined according to the LC method, to Standard 4202 of Transports Québec.
- .4 Mix composition must not be modified without approval by Consultant. If a new material source is proposed, a new mix formula must be approved by Consultant.
- Dust recuperated at the mixing station must be reintroduced into the mix, in quantities approved by the Consultant.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for asphalt paving installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Consultant.
 - .2 Inform Consultant of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 [SUBGRADE] PREPARATION AND INSPECTION

- .1 Verify grades of subgrade drains and other items set in paving area for conformity with elevations and sections before placing asphalt layer.
- .2 Obtain written approval of subgrade by Consultant before placing asphalt layer.

3.3 PLANT AND MIXING REQUIREMENTS

.1 In accordance with ASTM D995.



3.4 ASPHALT CONCRETE PAVING

- .1 Place asphalt mix only when previous course is dry and air temperature is above 5 degrees C.
- .2 Place asphalt concrete in one lift.
- .3 Minimum 135 degrees C mix temperature required when spreading.
- .4 Maximum 160 degrees C mix temperature permitted at any time.
- .5 Compact each course with roller as soon as it can support roller weight without undue cracking or displacement.
- .6 Compact parking lot and driveway asphalt concrete to density not less than 95 % of density obtained with Marshall specimens prepared in accordance with ASTM D1559 from samples of mix being used. Roll until roller marks are eliminated.
- .7 Keep roller speed slow enough to avoid mix displacement and do not stop roller on fresh pavement.
- .8 Moisten roller wheels with water to prevent pick up of material.
- .9 Compact mix with hot tampers or other equipment approved in writing by Consultant, in areas inaccessible to roller.
- .10 Finish surface to be within 10 mm of design elevation and with no irregularities greater than 10 mm in 4.5 m.
- .11 Repair areas showing checking, rippling or segregation as directed by Consultant.

3.5 JOINTS

- .1 Remove surplus material from surface of previously laid strip. Do not deposit on surface of freshly laid strip.
- .2 Paint contact surfaces of existing structures such as manholes, curbs or gutters with bituminous material prior to placing adjacent pavement.
- .3 For cold joints, cut back to full depth vertical face and tack face with hot asphalt.
- .4 For longitudinal joints, overlap previously laid strip with spreader by 50 mm.

3.6 TESTING

- .1 Inspection and testing of asphalt pavement will be carried out by designated testing laboratory in accordance with Section 01 45 00 Quality Control.
- .2 Costs of tests will be paid under cash allowance by owner.

3.7 NON-COMPLIANT BATCH

.1 In the case of a non-compliancy, the Owner reserves the right to refuse a batch and to order the re-do of Work, at the cost of the Contractor, for all types of contracts.



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.2 If the non-compliancy applies to a pavement aggregate contract payable per tonne or per square metre, the Owner can pay the quantity using a unit price subject to a F1 correction factor. The correction factor is calculated as follows:

Characteristics	Correction factor
% passing the 80 μm sieve	0,4 % of submitted unit price for each 0,1 %, out-of-specs (F80)
Grain size analysis total	1,4 % of submitted unit price for each 1 unit out-of-specs (Ftg)
Tar content %	0,6 % of submitted unit price for each 0,01 % out-of-specs (Fb)

- .1 The F1 correction factor applied to the payment is equal to 100% minus the sum of F80, Ftg, and Fb correction factors.
- .2 F1=100-(F80+Ftg+Fb) expressed in percentage. If the F1 correction factor is less than 70%, the batch is refused.

.3 Thickness and compactness

.1 Core sampling of the asphalt for approval of the thickness and compactness of the pavement is carried out by the laboratory mandated by the Owner, according to a random chance table with a frequency of 1 sample per 300 m.t. of asphalt, with a minimum of 3 samples per road. The sampling and approval tests are at the charge of the Owner.

.4 Thickness

A correction factor for a non-compliant thickness is added when the average measured thickness per project (unit price table) is more than 3.0 mm thinner than the specified thickness for the surface layer, or is more than 5.0 mm thinner than the specifiec thickness for the base layer, or for a single layer. The core samples used to measure the thickness are also used to measure the compactness of the asphalt. The correction factor is the result of the square the average thickness (Dm) divided by the specified thickness (Ds). The formula is (Dm)²/(Ds)². The correction factor can never be greater than 1 for the thickness. When the average measured thickness for the layer is more than 9.0 mm (for the base layer) or more than 6.0 mm (for the surface layer) thinner than specified, the batch is automatically rejected, and the work is redone at the cost of the Contractor. Core samples that are more than 10.0 mm thicker than specified are considered to be only 10.0 mm thicker than specified. The other core samples are considered to have their respective measured thicknesses.

.5 Compactness

- .1 A correction factor is added when the degree of compactness measured per road is less than the minimal requirement of 93%.
- .2 If the degree of compactness is inferior to 93%, the prix paid is the submitted unit price, multiplied by the % paid. This percentage is calculated with the following formula:



Centre of Sherbrooke

ASPHALT PAVING FOR BUILDING SITES

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 $PRe = PU \times (1-Fc)$ Fc = 0,125 (93-D)

PRe: revised unit price for the asphalt

PU: contract unit price

.3 The average degree of compactness is calculated using a minimum of 3 core samples for each batch of 1 500 m.t. or less, on the same road and contract.

AVERAGE DEGREE OF COMPACTNESS (D)	% PAID	
89	50,0	
90	62,5	
91	75,0	
92	87,5	
93	100,0	

.4 If the degree of compactness is less than 89%, the Work is rejected and redone at the cost of the Contractor.

3.8 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.

3.9 PROTECTION

- .1 Keep vehicular traffic off newly paved areas until paving surface temperature has cooled below 38 degrees C.
 - .1 Do not permit stationary loads on pavement until 24 hours after placement.
- .2 Provide access to buildings as required.
 - .1 Arrange paving schedule so as not to interfere with normal use of premises.



CONCRETE WALKS, CURBS, AND GUTTERS

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Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

Part 1		General	
1.1		RELATED REQUIREMENTS	
	.1	Section 01 74 11 - Cleaning.	
	.2	Section 03 10 00 - Concrete forming and accessories.	
	.3	Section 03 30 00 – Cast-in-place concrete.	
	.4	Section 31 00 00.01 – Earthworks.	
	.5	Section 31 05 16 – Aggregate materials.	
	.6	Section 31 23 33.01 – Excavating and backfilling.	
	.7 Section 32 92 23 – Sodding.		
1.2		REFERENCES	
	.1	American Society for Testing and Materials International (ASTM)	
		.1 ASTM D1751	
		ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (600 kN-m/m³).	
	.2	Canadian General Standards Board (CGSB)	
		.1 CAN3-A23.1S1	
		.2 CAN3-A23.1S2	
		.3 CAN/CGSB-3.3	
	.3	Canadian Standards Association (CSA International)	
		.1 CSA-A23.1/A23.2;	
		.2 CAN/CSA G30.18M;	
		.3 CAN/CSA G30.15M;	
	.4	NQ 1809-500	
	.5	.5 Standards collection – Ouvrage routier du ministère des Transports du Québec, most recent edition	

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submittals in accordance with Section 01 33 00 Submittal Procedures.
- .2 Inform Consultant of proposed source of materials and provide access for sampling at least 1 week prior to commencing work.

1.4 DELIVERY, STORAGE AND HANDLING

.1 Waste Management and Disposal:



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CONCRETE WALKS, CURBS, AND GUTTERS

Section 32 16 15 Page 2

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

.1 Separate waste materials in accordance with Section 01 47 21 - Construction/Demolition Waste Management and Disposal.

Part 2 Products

2.1 MATERIALS

- .1 Concrete mixes and materials: in accordance with Section 03 30 00 Cast-in-Place Concrete
- .2 Type VII concrete (curbs molded in place) and/or type V concret (curbs and walks castin-place) with cement type GUb-SF.
- Aggregates used in the cement concrete must be according to NQ2560-114 and MTQ 3101.
 - .1 Large aggregates intrinsic characteristics: category 3
 - .2 Large aggregates fabrication characteristics: category c
 - .3 Fine aggregates intrinsic characteristics: category 3

.4 Admixtures:

- .1 Must not contain calcium chloride, neither added nor formed by chemical reaction between the components. The use of any admixture is subject to approval by the laboratory.
- .2 Air entraining admixture
 - .1 The air voids in the cement mixture must have the correct measurements and spacing. The spacing of air bubbles (ASTM-C-457) must be equal or less than 230 μm.
- .3 Accelerant agents, retarding agents, water reducers, and superplasticizers
 - .1 To ASTM-C-494. All admixtures of these types must be used in a solution. The solution must be mixed to conserve its homogeneity.
 - .2 The use of chlorides is prohibited in all concrete that contains steel rods. Mineral and puzzolanic admixtures to ASTM-C-494.
- .5 Curing Compound: in accordance with Section 03 30 00 Cast-in-Place Concrete.
- .6 Granular base: material to Section 31 05 16 Aggregate Materials
- Non-staining mineral type form release agent: chemically active release agents containing compounds that react with free lime to provide water-soluble soap.

Part 3 Execution

3.1 GRADE PREPARATION

.1 Do grade preparation work in accordance with Section 31 23 33.01 - Excavating and Backfilling.



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CONCRETE WALKS, CURBS, AND GUTTERS

Section 32 16 15 Page 3

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

- .2 Construct embankments using excavated material free from organic matter or other objectionable materials.
 - .1 Dispose of surplus and unsuitable excavated material off site.

3.2 GRANULAR BASE

- .1 Obtain Consultant's approval of subgrade before placing granular base.
- .2 Place granular base material to lines, widths, and depths as indicated.
- .3 Compact granular base in maximum 150 mm layers to at least 95% of maximum density to ASTM D698.

3.3 CONCRETE

- .1 Obtain Consultant's approval of granular base prior to placing concrete.
- .2 Do concrete work in accordance with Section 03 30 00 Cast-in-Place Concrete.
- .3 Provide edging as indicated with 20 mm radius edging tool.
- .4 Slip-form pavers equipped with string line system for line and grade control may be used if acceptable quality of work can be demonstrated. Hand finish surfaces.

3.4 TOLERANCES

.1 Finish surfaces to within 3 mm in 3 m as measured with 3 m straightedge placed on surface.

3.5 EXPANSION AND CONTRACTION JOINTS

- .1 Install expansion joints at intervals of 6 m.
- .2 When sidewalk is adjacent to curb, make joints of curb, gutters and sidewalk coincide.

3.6 ISOLATION JOINTS

- .1 Install isolation joints around manholes and catch basins and along length adjacent to concrete curbs, catch basins, buildings, or permanent structure.
- .2 Install joint filler in isolation joints in accordance with Section 03 30 00 Cast-in-Place Concrete.
- .3 Seal isolation joints with sealant approved by Consultant.

3.7 CURING

- .1 Cure concrete by adding moisture continuously in accordance with CSA-A23.1/A23.2 to exposed finished surfaces for at least 1 day after placing, or sealing moisture in by curing compound as directed by Consultant.
- .2 Where burlap is used for moist curing, place two prewetted layers on concrete surface and keep continuously wet during curing period.



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CONCRETE WALKS, CURBS, AND GUTTERS

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Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

.3 Apply curing compound evenly to form continuous film, in accordance with manufacturer's requirements.

3.8 BACKFILL

- .1 Allow concrete to cure for 7 days prior to backfilling.
- .2 Backfill to designated elevations with material as directed by Consultant.
 - .1 Compact and shape to required contours.

3.9 CLEANING

- .1 Proceed in accordance with Section 01 74 11 Cleaning.
- On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 01 61 00 Common product requirements.
- .3 Section 01 74 11 Cleaning.
- .4 Section 01 74 21 Waste management and disposal.
- .5 Section 32 12 16 Asphalt pavement.

1.2 MEASUREMENT FOR PAYMENT

.1 Pavement marking: measured by lump sum.

1.3 REFERENCES

- .1 Standards of the Ministère des Transports, de la Mobilité durable et de l'Électrification des transports.
 - .1 Volume VII —Matériaux (Most recent edition).
 - .2 Volume V Signalisation routière (Most recent edition).
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .3 Master Painters Institute (MPI)
 - .1 Architectural Painting Specification Manual [current edition].
 - .1 MPI #32 Traffic Markings Paint, Alkyd.

1.4 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature and data sheets for pavement markings and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit 2 copies of WHMIS MSDS.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 Common Product Requirements.
- Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.



- .3 Storage and Handling Requirements:
 - .1 Store materials off ground and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Paint and Markings:
 - .1 To MPI #32, Alkyd marking.
 - .2 Paints: in accordance with MPI recommendation for surface conditions.
 - .3 Colour: to MPI listed, white.
- .2 Thinner: to MPI listed manufacturer.
- .3 Glass reflective beads: type suitable for application to wet paint surface for light reflectance.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates and surfaces to receive pavement markings previously installed under other Sections or Contracts are acceptable for product installation in accordance with MPI instructions prior to pavement markings installation.
 - .1 Visually inspect substrate in presence of Consultant.
- .2 Pavement surface: dry, free from water, frost, ice, dust, oil, grease and other deleterious materials.
- .3 Proceed with Work only after unacceptable conditions have been rectified.

3.2 EQUIPMENT REQUIREMENTS

- .1 Paint applicator: approved pressure type [mobile] with positive shut-off distributor capable of applying paint in single, double and dashed lines and capable of applying marking components uniformly, at rates specified, and to dimensions as indicated.
- .2 The line width is $120 \text{ mm} \pm 5 \text{ mm}$.
- .3 Distributor: capable of applying reflective glass beads as overlay on freshly applied paint.

3.3 APPLICATION

.1 Pavement markings: laid out as shown on plans...



- .2 Unless otherwise approved by Consultant, apply paint only when air temperature is above 10 degrees C, wind speed is less than 60 km/h and no rain is forecast within next 4 hours.
- .3 Apply traffic paint evenly at rate of $3 \text{ m}^2/\text{L}$.
- .4 Do not thin paint unless approved by Consultant.
- .5 Symbols and letters to dimensions indicated.
- .6 Paint lines of uniform colour and density with sharp edges.
- .7 Thoroughly clean distributor tank before refilling with paint of different colour.
- .8 Apply glass beads at rate of 0.5 kg/L of painted area immediately after application of paint.

3.4 TOLERANCE

.1 Paint markings: within plus or minus 12 mm of dimensions indicated for line length, and within plus or minus 5 mm of dimensions indicated for line width.

3.5 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.
 - .1 Remove insulation material spilled during installation and leave work area ready for application of wall board.

3.6 PROTECTION

- .1 Protect pavement markings until dry.
- .2 Repair damage to adjacent materials caused by pavement marking application.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 01 35 29.06 Health and safety.
- .3 Section 01 61 00 Common product requirements.
- .4 Section 01 74 11 Cleaning.
- .5 Section 01 74 21 Waste management and disposal.
- .6 Section 31 00 00.01 Earthworks.
- .7 Section 32 16 15 Concrete walks, curbs, and gutters.
- .8 Section 32 92 23 Sodding.

1.2 MEASUREMENT PROCEDURES

.1 Preparation of sub-grade for placing of topsoil will not be measured for payment but will be included in the item for sodding.

1.3 REFERENCES

- .1 Agriculture and Agri-Food Canada
 - .1 The Canadian System of Soil Classification, Third Edition, 1998.
- .2 Canadian Council of Ministers of the Environment
 - .1 PN1340-[2005], Guidelines for Compost Quality.
- .3 U.S. Environmental Protection Agency (EPA)/Office of Water
 - .1 EPA 832R92005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.

1.4 **DEFINITIONS**

- .1 Compost:
 - .1 Mixture of soil and decomposing organic matter used as fertilizer, mulch, or soil conditioner.
 - .2 Compost is processed organic matter containing 40% or more organic matter as determined by Walkley-Black or Loss On Ignition (LOI) test.
 - .3 Product must be sufficiently decomposed (i.e. stable) so that any further decomposition does not adversely affect plant growth (C:N ratio below 25), and contain no toxic or growth inhibiting contaminates.
 - .4 Composed bio-solids to: CCME Guidelines for Compost Quality, Category (A).



1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 Submittal Procedures.
- .2 Quality control submittals :
 - .1 Soil testing: submit certified test reports showing compliance with specified performance characteristics and physical properties as described in PART 2 SOURCE QUALITY CONTROL.
 - .2 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

Part 2 Products

2.1 TOPSOIL

- .1 Topsoil for grassy areas: mixture of particulates, micro organisms and organic matter which provides suitable medium for supporting intended plant growth.
 - .1 Soil texture based on The Canadian System of Soil Classification, to consist of 20 to 70 % sand, minimum 7 % clay, and contain 2 to 10 % organic matter by weight.
 - .2 Contain no toxic elements or growth inhibiting materials.
 - .3 Finished surface free from:
 - .1 Debris and stones over 50 mm diameter.
 - .2 Course vegetative material, 10 mm diameter and 100 mm length, occupying more than 2% of soil volume.
 - .4 Consistence: friable when moist.

2.2 SOIL AMENDMENTS

- .1 Fertilizer:
 - .1 Fertility: major soil nutrients present in following amounts:
 - .2 Nitrogen (N): 20 to 40 micrograms of available N per gram of topsoil.
 - .3 Phosphorus (P): 40 to 50 micrograms of phosphate per gram of topsoil.
 - .4 Potassium (K): 75 to 110 micrograms of potassium per gram of topsoil.
 - .5 Calcium, magnesium, sulfur and micro-nutrients present in balanced ratios to support germination and/or establishment of intended vegetation.
 - .6 Ph value: 6.5 to 8.0.

.2 Peatmoss:

- .1 Derived from partially decomposed species of Sphagnum Mosses.
- .2 Elastic and homogeneous, brown in colour.
- .3 Free of wood and deleterious material which could prohibit growth.



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TOPSOIL PLACEMENT AND GRADING

Section 32 91 19.13 Page 3

- .4 Shredded particle minimum size: 5 mm.
- .3 Sand: washed coarse silica sand, medium to course textured.
- .4 Fertilizer: industry accepted standard medium containing nitrogen, phosphorous, potassium and other micro-nutrients suitable to specific plant species or application or defined by soil test.

2.3 SOURCE QUALITY CONTROL

- .1 Advise Consultant of sources of topsoil to be utilized with sufficient lead time for testing.
- .2 Contractor is responsible for amendments to supply topsoil as specified.
- .3 Soil testing by recognized testing facility for PH, P and K, and organic matter.
- .4 Testing of topsoil will be carried out by independent testing laboratory.
 - .1 Soil sampling, testing and analysis to be in accordance with Provincial standards.

Part 3 Execution

3.1 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- .2 Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- .3 Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.2 PREPARATION OF EXISTING GRADE

- .1 Verify that grades are correct.
 - .1 If discrepancies occur, notify Consultant and do not commence work until instructed by Consultant.
- .2 Grade soil, eliminating uneven areas and low spots, ensuring positive drainage.
- .3 Remove debris, roots, branches, stones in excess of 50 mm diameter and other deleterious materials.
 - .1 Remove soil contaminated with calcium chloride, toxic materials and petroleum products.
 - .2 Remove debris which protrudes more than 75 mm above surface.
 - .3 Dispose of removed material off site.
- .4 Cultivate entire area which is to receive topsoil to minimum depth of 100 mm.



TOPSOIL PLACEMENT AND GRADING

Section 32 91 19.13 Page 4

Repair of asphalted access roads and modification of a parking lot Research and Development Centre of Sherbrooke

.1 Cross cultivate those areas where equipment used for hauling and spreading has compacted soil.

3.3 PLACING AND SPREADING OF TOPSOIL/PLANTING SOIL

- .1 Place topsoil after Consultant has accepted subgrade.
- .2 Spread topsoil in uniform layers not exceeding 150 mm.
- .3 For sodded areas keep topsoil 15 mm below finished grade.
- .4 Spread topsoil to following minimum depths after settlement.
 - .1 150 mm for seeded areas.
 - .2 135 mm for sodded areas.
 - .3 300 mm for flower beds.
 - .4 500 mm for shrub beds.
- .5 Manually spread topsoil/planting soil around trees, shrubs and obstacles.

3.4 FINISH GRADING

- .1 Grade to eliminate rough spots and low areas and ensure positive drainage.
 - .1 Prepare loose friable bed by means of cultivation and subsequent raking.
- .2 Consolidate topsoil to required bulk density using equipment approved by Consultant.
 - .1 Leave surfaces smooth, uniform and firm against deep footprinting.

3.5 ACCEPTANCE

.1 Consultant will inspect and test topsoil in place and determine acceptance of material, depth of topsoil and finish grading.

3.6 SURPLUS MATERIAL

.1 Dispose of materials except topsoil not required off site.

3.7 CLEANING

- .1 Proceed in accordance with Section 01 74 11 Cleaning.
- .2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.



Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 Submittal procedures.
- .2 Section 01 35 29.06 Health and safety.
- .3 Section 01 61 00 Common product requirements.
- .4 Section 01 74 11 Cleaning.
- .5 Section 01 74 21 Waste management and disposal.
- .6 Section 31 00 00.01 Earthworks.
- .7 Section 32 16 15 Concrete walks, curbs, and gutters.
- .8 Section 32 91 19.13 Topsoil placement and grading.

1.2 MEASUREMENT AND PAYMENT

.1 Payment for sodding will be made at unit price bid per square metre, including topsoil placement.

1.3 REFERENCES

- .1 Standards of the Ministère des Transports, de la Mobilité durable et de l'Électrification des transports.
 - .1 Volume IV —Abords de route (Édition la plus récente).

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Scheduling:
 - .1 Schedule sod laying to coincide with preparation of soil surface.
 - .2 Schedule sod installation when frost is not present in ground.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for sod and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements of seed mix, seed purity, and sod quality.



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.4 Test Reports: submit certified test reports showing compliance with specified performance characteristics and physical properties of seed mix, seed purity, and sod quality.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials in accordance with supplier's recommendations.
 - .2 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Number One Turf Grass Nursery Sod: sod that has been especially sown and cultivated in nursery fields as turf grass crop.
 - .1 Turf Grass Nursery Sod types:
 - .1 Number One Kentucky Bluegrass Sod: Nursery Sod grown solely from seed of cultivars of Kentucky Bluegrass, containing not less than 50% Kentucky Bluegrass cultivars.
 - .2 Number One Kentucky Bluegrass Sod Fescue Sod: Nursery Sod grown solely from seed mixture of cultivars of Kentucky Bluegrass and Chewing Fescue or Creeping Red Fescue, containing not less than 40% Kentucky Bluegrass cultivars and 30% Chewing Fescue or Creeping Red Fescue cultivar[s].
 - .3 Number One Named Cultivars: Nursery Sod grown from certified seed.
 - .2 Turf Grass Nursery Sod quality:
 - .1 Not more than 1 broadleaf weed and up to 1% native grasses per 40 square metres.
 - Density of sod sufficient so that no soil is visible from height of 1500 mm when mown to height of 50 mm.
 - .3 Mowing height limit: 35 to 65 mm.
 - .4 Soil portion of sod: 6 to 15 mm in thickness.
- .2 Commercial Grade Turf Grass Nursery:
 - .1 Mow sod at height directed by Consultant within 36 hours prior to lifting, and remove clippings.



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.2 Not more than 5 broadleaf weeds and up to 20% native grasses per 40 square metres.

.3 Fertilizer:

- .1 To Canada "Fertilizers Act" and Fertilizers Regulations.
- .2 Complete, synthetic, slow release with 65 % of nitrogen content in water-insoluble form

2.2 SOURCE QUALITY CONTROL

.1 When proposed source of sod is approved, use no other source without written authorization from Consultant.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for sod installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Consultant.
 - .2 Inform Consultant of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 PREPARATION

- .1 Verify that grades are correct and prepared in accordance with Section 32 91 19.13 Topsoil Placement and Grading. If discrepancies occur, notify Consultant and commence work when instructed by Consultant.
- .2 Do not perform work under adverse field conditions such as frozen soil, excessively wet soil or soil covered with snow, ice, or standing water.
- .3 Fine grade surface free of humps and hollows to smooth, even grade.
- .4 Remove and dispose of weeds; debris; stones 50 mm in diameter and larger; soil contaminated by oil, gasoline and other deleterious materials; off site in accordance with Section 01 74 21 Construction/Demolition Waste Management And Disposal.

3.3 SOD PLACEMENT

- .1 Ensure sod placement is done under supervision of certified Landscape Planting Supervisor.
- .2 Lay sod within 24 hours of being lifted if air temperature exceeds 20 degrees C.
- .3 Lay sod sections in rows, joints staggered. Butt sections closely without overlapping or leaving gaps between sections. Cut out irregular or thin sections with sharp implements.



.4 Roll sod as directed by Consultant. Provide close contact between sod and soil by light rolling. Use of heavy roller to correct irregularities in grade is not permitted.

3.4 CLEANING

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- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
 - .2 Keep pavement and area adjacent to site clean and free from mud, dirt, and debris at all times.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.
 - .1 Clean and reinstate areas affected by Work.

3.5 MAINTENANCE DURING ESTABLISHMENT PERIOD

- .1 Perform following operations from time of installation until acceptance.
 - .1 Water sodded areas in sufficient quantities and at frequency required to maintain optimum soil moisture condition to depth of 75 to 100 mm.
 - .2 Cut grass to 50 mm when or prior to it reaching height of 75 mm.
 - .3 Maintain sodded areas weed free 95%.

3.6 ACCEPTANCE

- .1 Turf Grass Nursery Sod areas will be accepted by Consultant provided that:
 - .1 Sodded areas are properly established.
 - .2 Sod is free of bare and dead spots.
 - .3 No surface soil is visible from height of 1500 mm when grass has been cut to height of 50 mm.
 - .4 Sodded areas have been cut minimum 2 times prior to acceptance.
- Areas sodded in fall will be accepted in following spring one month after start of growing season provided acceptance conditions are fulfilled.
- .3 When environmental conditions allow, all sodded areas showing shrinkage cracks shall be top-dressed and seeded with a seed mix matching the original.
- .4 Areas sodded in fall will be accepted in following spring one month after start of growing season provided acceptance conditions are fulfilled.

3.7 MAINTENANCE DURING WARRANTY PERIOD

- .1 Perform following operations from time of acceptance until end of warranty period:
 - .1 Water sodded Turf Grass Nursery Sod areas at weekly intervals to obtain optimum soil moisture conditions to depth of 100 mm.
- .2 Repair and resod dead or bare spots to satisfaction of Consultant.



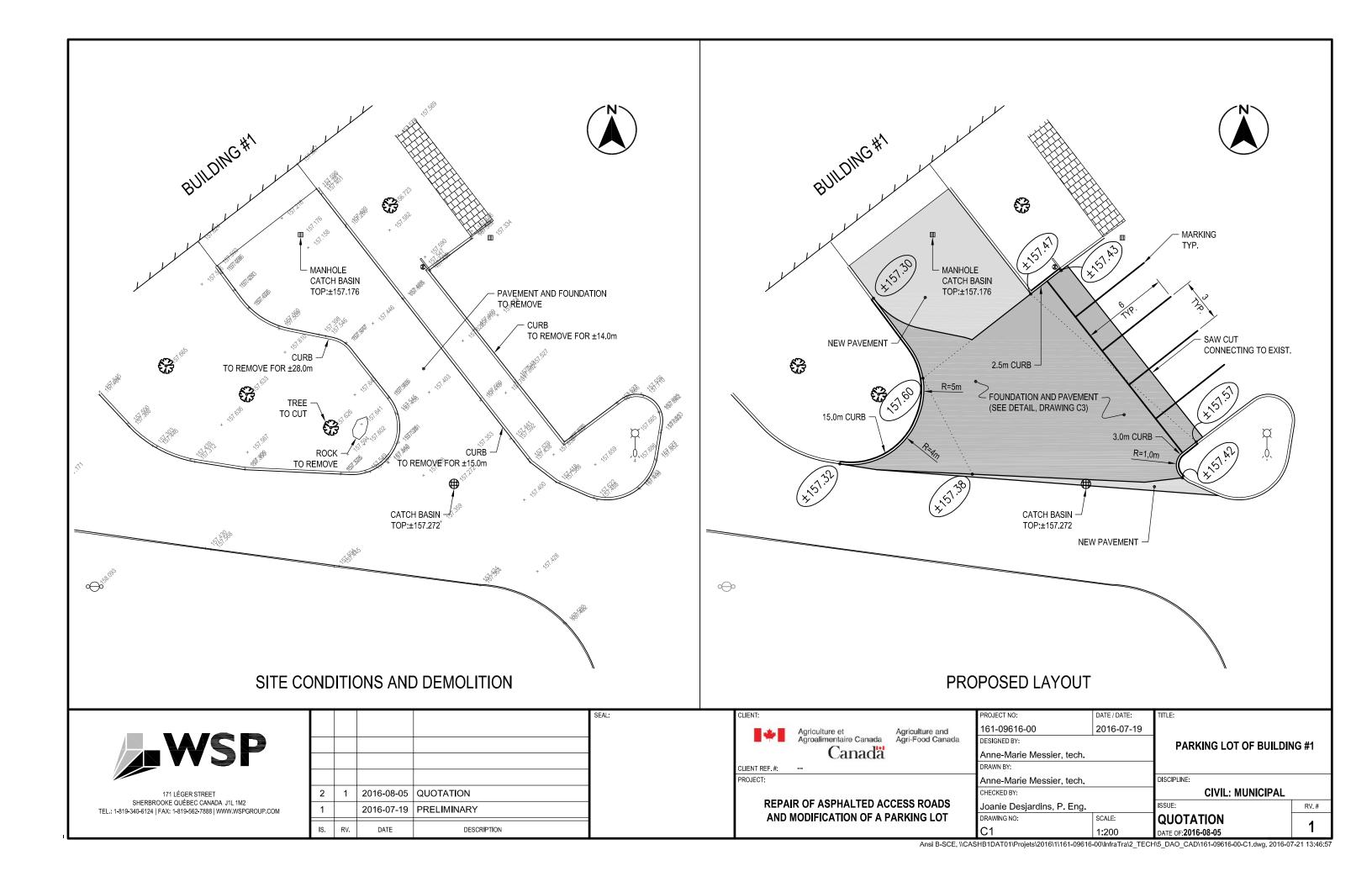
SODDING

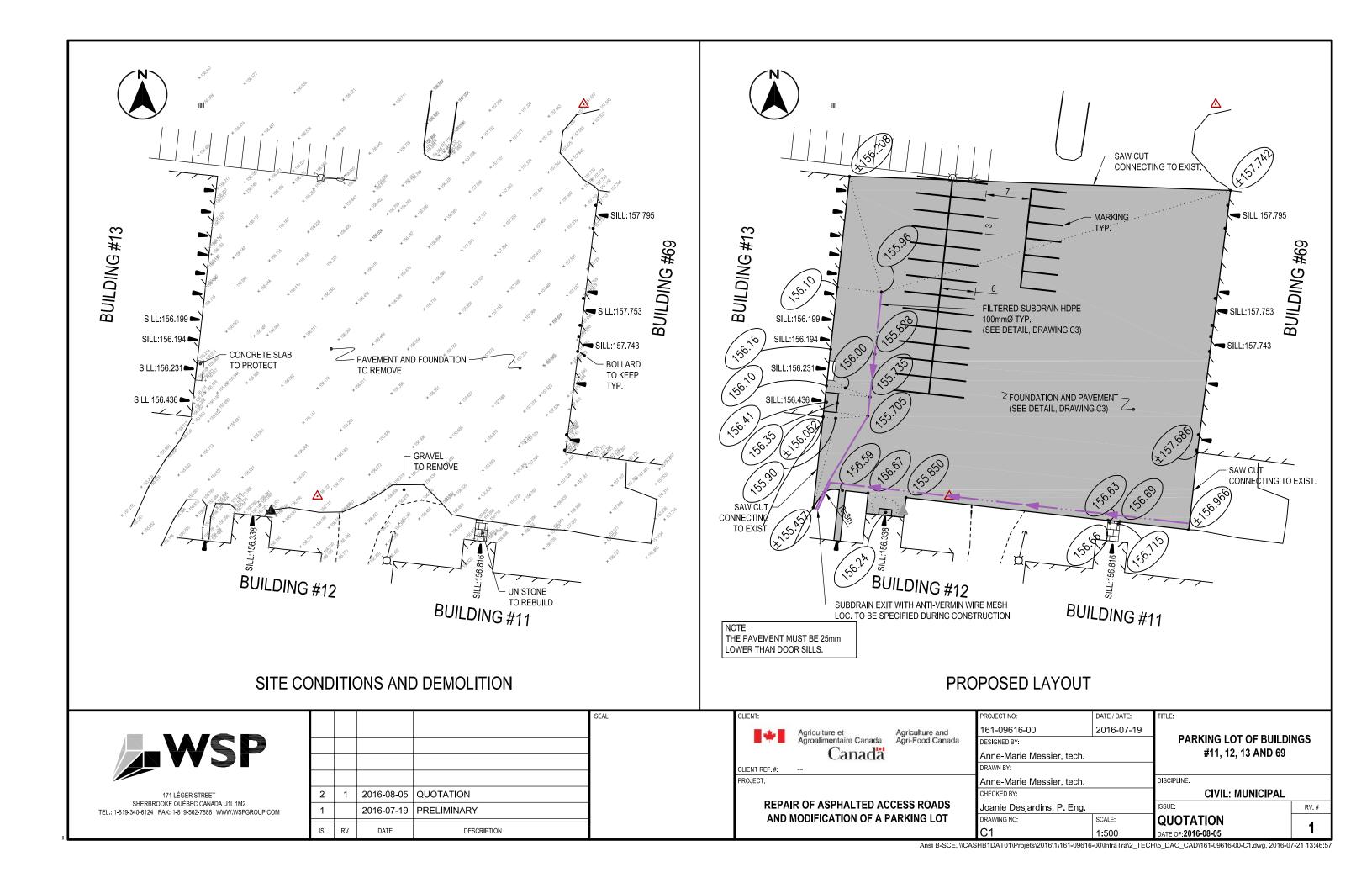
Section 32 92 23 Page 5

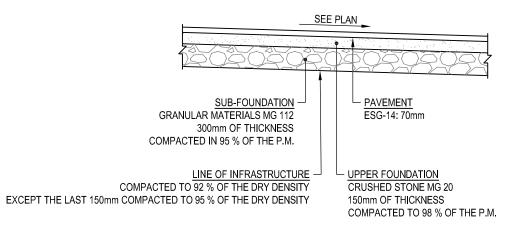
- .3 Cut grass and remove clippings [that will smother grass] [as directed by [Departmental Representative] [DCC Representative] [Consultant]] to height as follows:
 - .1 Turf Grass Nursery Sod:
 - .1 [50] mm during normal growing conditions.
 - .2 Commercial Grade Turf Grass Nursery Sod :
 - .1 [60] mm during normal growing conditions.
 - .3 Cut grass at 2 week intervals, but at intervals so that approximately one third of growth is removed in single cut.





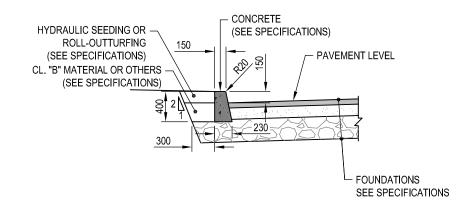






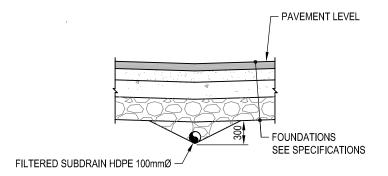
TYPICAL CROSS-SECTION ROADWAY STRUCTURE

SCALE 1:50



TYPICAL CROSS-SECTION CONCRETE CURB

SCALE 1:50



TYPICAL CROSS-SECTION FILTERED SUBDRAIN

ÉCHELLE 1:50



Appendix "F"

INSURANCE TERMS

INSURANCE TERMS

IN1	GENERAL
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- IN1.1 Worker's Compensation
- IN1.2 Indemnification
- IN1.3 Proof of Insurance
- IN1.4 Insured
- IN1.5 Payment of Deductible
- IN2 COMMERCIAL GENERAL LIABILITY
- IN2.1 Scope of Policy
- IN2.2 Period of Insurance
- IN3 AUTOMOBILE INSURANCE
- IN3.1 Scope of Policy
- IN4 BUILDER'S RISK / INSTALLATION FLOATER
- IN4.1 Scope of Policy
- IN4.2 Amount of Insurance
- IN4.3 Period of Insurance
- IN4.4 Insurance Proceeds

IN1 GENERAL

IN1.1 Worker's Compensation

 The Contractor shall provide and maintain Worker's Compensation Insurance in accordance with the legal requirements of the Province or Territory where the work is being carried out.

IN1.2 Indemnification

1) The insurance required by the provisions of these Insurance Terms shall in no way limit the Contractor's responsibility under the Indemnification clause of the General Conditions of the contract. Any additional coverage the Contractor may deem necessary to fulfill his obligations under the aforesaid clause shall be at his own discretion and expense.

IN1.3 Proof of Insurance

- Before commencement of the Work, and within thirty (30) days after acceptance of its bid, the Contactor shall deposit with Canada a CERTIFICATE OF INSURANCE (form AAFC / AAC5314) available upon request.
- 2) Upon request by Canada, the Contractor shall provide originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the provisions contained herein.

IN1.4 Insured

 Each policy shall insure the Contractor and shall include Her Majesty the Queen in right of Canada, represented by the Minister of Agriculture & Agri-Food Canada as an additional Insured, with respect to liability arising out of the operations of the contractor with regard to the work.



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INSURANCE TERMS (Continued)

IN1.5 Payment of Deductible

 The payment of monies up to the deductible amount made in satisfaction of a claim shall be borne by the Contractor.

IN2 COMMERCIAL GENERAL LIABILITY

IN2.1 Scope of Policy

- 1) The insurance coverage provided shall not be less than that provided by IBC Form 2100, as amended from time to time, and shall have:
 - (a) an Each Occurrence Limit of not less than \$5,000,000.00;
 - (b) a Products/Completed Operations Aggregate Limit of not less than \$5,000,000.00; and
 - (c) a General Aggregate Limit of not less than \$10,000,000.00 per policy year, if the policy is subject to such a limit.
- 2) The policy shall either include or be endorsed to include coverage for the following exposures or hazards if the Work is subject thereto:
 - (a) Blasting.
 - (b) Pile driving and caisson work.
 - (c) Underpinning.
 - (d) Removal or weakening of support of any building or land whether such support be natural or otherwise if the work is performed by the insured contractor.
 - (e) Asbestos.
 - (f) Non-owed Automobile Policy.

IN2.2 Period of Insurance

 Unless otherwise directed in writing by Canada, or, otherwise stipulated elsewhere herein, the policy required herein shall be in force and be maintained from the date of contract award until the day of issue of the Certificate of Completion except that the coverage for Completed Operations Liability shall, in any event, be maintained for a period of at least six (6) years beyond the date of the CERTIFICATE OF SUBSTANTIAL PERFORMANCE.

IN3 AUTOMOBILE INSURANCE

IN3.1 Scope of Policy

1) Automobile Liability Insurance in respect of licensed vehicles shall have limits of not less than one million dollars inclusive per occurrence for bodily injury, death, and damage to property.

INSURANCE TERMS (Continued)

IN4 BUILDER'S RISK / INSTALLATION FLOATER

IN4.1 Scope of Policy

- 1) The insurance coverage provided by a Builder's Risk policy or an Installation Floater policy shall not be less than that provided by IBC Forms 4042 and 4047, as amended from time to time.
- 2) The policy shall permit use and occupancy of the project, or any part thereof, where such use and occupancy is for the purposes for which the project is intended upon completion.
- 3) The policy may exclude or be endorsed to exclude coverage for loss or damage caused by any of the following:
 - (a) Asbestos.
 - (b) Fungi or spores.
 - (c) Cyber.
 - (d) Terrorism.

IN4.2 Amount of Insurance

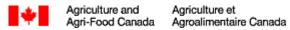
1) The amount of insurance shall not be less than the sum of the contract value plus the declared value (if any) set forth in the contract documents of all material and equipment supplied by Canada at the site of the project to be incorporated into and form part of the finished Work. If the value of the Work is changed, the policy shall be changed to reflect the revised contract value.

IN4.3 Period of Insurance

1) Unless otherwise directed in writing by Canada, or, stipulated elsewhere herein, the policy required herein shall be in force and be maintained from prior to the commencement of work until the day of issue of the CERTIFICATE OF SUBSTANTIAL PERFORMANCE.

IN4.4 Insurance Proceeds

- 1) The policy shall provide that the proceeds thereof are payable to Her Majesty or as Canada may direct in accordance with GC 10.2 Insurance Proceeds.
- 2) The Contractor shall, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.



Appendix "G"

CONTRACT DOCUMENTS

MAJOR WORKS - CONTRACT DOCUMENTS

SC01 CONTRACT DOCUMENTS

- 1) The following are the contract documents:
 - (a) Contract page when signed by Canada;
 - (b) Duly completed Bid and Acceptance Form and any Appendices attached thereto;
 - (c) Drawings and Specifications;
 - (d) AAFC General Conditions form AAFC / AAC5321-E:

(i)	GC1	General Provisions
(ii)	GC2	Administration of the Contract
(iii)	GC3	Execution and Control of the Work
(iv)	GC4	Protective Measures
(v)	GC5	Terms of Payment
(vi)	GC6	Delays and Changes in the Work
(vii)	GC7	Default, Suspension or Termination of Contract
(viii)	GC8	Dispute Resolution
(ix)	GC9	Contract Security
(x)	GC10	Insurance

- (e) Supplementary Conditions, if any;
- (f) Insurance Terms form AAFC / AAC5315-E;
- (g) Any amendment issued or any allowable bid revision received before the date and time set for solicitation closing;
- (h) Any amendment incorporated by mutual agreement between Canada and the Contractor before acceptance of the bid; and
- Any amendment or variation of the contract documents that is made in accordance with the General Conditions.
- 2) The language of the contract documents shall be the language of the Bid and Acceptance Form submitted.

SC02 ACCEPTANCE AND CONTRACT

 Upon acceptance of the Contractor's offer by Canada, a binding Contract shall be formed between Canada and the Contractor. The documents forming the Contract shall be the contract documents referred to in SC01 CONTRACT DOCUMENTS.



Appendix "H"

CONTRACT

CONTRACT

PURCHASING OFFICE Agriculture and Agri-Food Canada Eastern Service Centre Tender Receiving Unit 2001 Robert-Bourassa Boulevard, Suite 671-TEN Montréal, Quebec

H3A 3N2

Comments

Your tender is accepted 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 construction listed herein and on any attached sheets at the price or prices set out therefor.

Vendor / Firm Name and Address

Title		
Solicitation / Contract No.		Date
Client Reference No.		
File No.		
Financial Code(s)		○ GST ○ HST ○ QST
F.O.B Destination		
Applicable Taxes		
Included		
Destination		
Invoices - Original and two copies to be	sent to :	
Address Enquiries to:		
Telephone No. Ext.	Fax No.	
Total Estimated Cost	Currency Type	е
For the Minister		
Signature	Date)



FORMS

- Bid Bond
- Certificate of Insurance
- Labour and Material Payment BondPerformance Bond
- T4-A Certification

BID BOND

BOND NUMBER:				AMOUNT:	
KNOW ALL PERSONS BY THESE PRE	ESENTS, that				as Principal,
hereinafter called the Principal, and					as Surety,
hereinafter called the Surety, are, subjectight of Canada as represented by the M					
	Il money of Canada, for the				
Surety bind themselves, their heirs, exe				and severally, firmly by the	nese presents.
SIGNED AND SEALED this	day of	, 2	0		
WHEREAS, the Principal has submitted	a written tender to the Crow	wn, dated the	e	day of	, 20,
for					
NOW, THEREFORE, THE CONDITION	S OF THIS OBLIGATION a	re such that	if:		
(a) the Principal, should his tender be after closing date of the tender, do (14) days after the prescribed form required by the terms of the tender in the amount of 50% of the Contra	es execute within a period s s are presented to him for s as accepted, and does furn	specified by t signature, ex nish a Perfor	he Crown, or, ecute such fur mance Bond a	if no period be specified t ther contractual documen and a Labour and Materia	therein, within fourteen its, if any, as may be I Payment Bond, each
(b) the Principal does pay to the Crow into by the Crown for the work, sup former,					
then this obligation shall be void; otherw	rise it shall remain in full for	ce and effect			
PROVIDED, HOWEVER, that the Suret this bond.	y and the Principal shall not	be liable to	the Crown for	an amount greater than tl	he amount specified in
PROVIDED FURTHER that the Surety s served upon the Surety at its Head Office					nd process therefore
IN TESTIMONY WHEREOF, the Princip with its corporate seal duly attested by t					
SIGNED, SEALED AND DELIVERED in	the presence of:		No	ote: Affix Corporate seal	if applicable.
Principal					
Witness					
Surety					





To be completed by the Insurer

CERTIFICATE OF INSURANCE

CONTRACT					
Description and locat	ion of work				Contract No.
					Project No.
INSURER			BROKER		
Company name			Company name		
Unit/Suite/Apt.	Street number	Number suffix	Unit/Suite/Apt.	Street number	Number suffix
Street name			Street name	'	
Street type	Street direction	PO Box or Route Number	Street type	Street direction	PO Box or Route Number
Municipality (City, To	wn, etc.)		Municipality (City, Town	n, etc.)	
Province/State	Postal/ZIP code		Province/State	Postal/ZIP code	
INSURED			ADDITIONAL INSURE	 D	
Contractor name				-	
Unit/Suite/Apt.	Street number	Number suffix	Her Majesty the Queer Agriculture and Agri-Fo		as represented by the Minister of
Street name					
Street type	Street direction	PO Box or Route Number			
Municipality (City, To	wn, etc.)				
Province/State	Postal/ZIP code				
					sured, in connection with the ter of Agriculture and Agri-Food
POLICY					
Ту	/pe	Number	Inception date	Expiry date	Limit of liability (\$)
Commercial General	Liability				
Builder's Risk "All Ri	sks"				
Installation Floater "A	All Risks"				
Other (list)					
Each of these policie Additional Insured. To any policy or coverage	he Insurer agrees to notify I	nd provisions as specified in Ins Her Majesty and the Named ins	surance Terms and each ured in writing thirty (30)	policy has been end days prior to any m	dorsed to cover Her Majesty as an aterial change in, or cancellation of
Name o	of Insurer's Officer or Autho	rized Employee	Telephone n	umber .	Ext.
	Signature		Date		



Agriculture and

LABOUR AND MATERIAL PAYMENT BOND

BOND NUMBER:			AMOUNT:			
KNOW ALL PERSONS BY TH	ESE PRESENTS, that			as Principal,		
hereinafter called the Principal	nereinafter called the Principal, and					
•	re, subject to the conditions hereinaft d by the Minister of Agriculture and Ag	•	,	,		
dollars (\$), lawful money of Canada, for the	payment of which sum, w	ell and truly to be made, th	e Principal and the		
Surety bind themselves, their h	neirs, executors, administrators, succe	essors and assigns, jointly	and severally, firmly by th	ese presents.		
SIGNED AND SEALED this _	day of	, 20				
WHEREAS, the Principal has e	entered into a Contract with the Crown	n dated the	day of	, 20,		
for						
which contract is by reference	made a part hereof, and is hereinafte	r referred to as the Contra	act.			

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such that, if payment is promptly made to all Claimants who have performed labour or services or supplied material in connection with the Contract and any and all duly authorized modifications and extensions of the Contract that may hereafter be made, notice of which modifications and extensions to the Surety being hereby waived, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

- 1. For the purpose of this bond, a Claimant is defined as one having a direct contract with the Principal or any Sub-Contractor of the Principal for labour, material or both, used or reasonably required for use in the performance of the Contract, labour and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone services or rental of equipment (but excluding rental of equipment where the rent pursuant to an agreement is to be applied towards the purchase price thereof) directly applicable to the Contract.
- 2. For the purpose of this Bond, no payment is required to be made in respect of a claim for payment for labour or services performed or material supplied in connection with the Contract that represents a capital expenditure, overhead or general administration costs incurred by the Principal during the currency or in respect of the Contract.
- 3. The Principal and the Surety hereby jointly and severally agree with the Crown that if any Claimant has not been paid as provided for under the terms of his contract with the Principal or a Sub-Contractor of the Principal before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's labour or service was done or performed or materials were supplied by such Claimant, the Crown may sue on this bond, have the right to prosecute the suit to final judgment for such sum or sums as may be due and have execution thereon; and such right of the Crown is assigned by virtue of Part VIII of the Financial Administration Act to such Claimant.
- 4. For the purpose of this bond the liability of the Surety and the Principal to make payment to any claimant not having a contract directly with the Principal shall be limited to that amount which the Principal would have been obliged to pay to such claimant had the provisions of the applicable provincial or territorial legislation on lien or privileges been applicable to the work. A claimant need not comply with provisions of such legislation setting out steps by way of notice, registration or otherwise as might have been necessary to preserve or perfect any claim for lien or privilege which the claimant might have had. Any such claimant shall be entitled to pursue a claim and to recover judgment hereunder subject to the terms and notification provisions of the Bond.
- 5. Any material change in the Contract between the Principal and the Crown shall not prejudice the rights or interest of any Claimant under this Bond who is not instrumental in bringing about or has not caused such change.



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6. No suit or action shall be commenced hereunder by any Claimant:	
(a) Unless such Claimant shall have given written notice within the time limits Surety above named, stating with substantial accuracy the amount claims registered mail to the Principal and the Surety at any place where an office such persons or served in any manner in which legal process may be see matter of the Contract is located. Such notice shall be given	ed. Such notice shall be served by mailing the same by ce is regularly maintained for the transaction of business by
 in respect of any claim for the amount or any portion thereof required Sub-Contractor of the Principal under either the terms of the Claiman the Sub-Contractor of the Principal within one hundred and twenty (1 under this Contract; 	t's Contract with the Principal or the Claimant's Contract with
(ii) in respect of any claim other than for the holdback or portion thereof after the date upon which such Claimant did or performed the last of for which such claim is made under the Claimant's Contract with the	the service, work or labour or furnished the last of the materials
(b) After the expiration of one (1) year following the date on which the Principunder the guarantees provided in the Contract;	oal ceased work on the said Contract, including work performed
(c) Other than in a court of competent jurisdiction in the province or district or thereof is situated and not elsewhere, and the parties hereto hereby agree	
7. The amount of this bond shall be reduced by and to the extent of any payme	nt or payments made in good faith hereunder.
8. The Surety shall not be entitled to claim any moneys relating to the Contract unchanged and, without restricting the generality of the foregoing, the Surety any moneys relating to the Contract held by the Crown are paid to the Surety	shall pay all valid claims of Claimants under this Bond before
9. The Surety shall not be liable for a greater sum that the amount specified in	this bond.
IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed it with its corporate seal duly attested by the signature of its authorized signing at	
SIGNED, SEALED AND DELIVERED in the presence of:	Note: Affix Corporate seal if applicable.
Principal	
Witness	
Surety	
·	

BOND NUMBER:

PERFORMANCE BOND

BOND NUMBER:			AM	IOUNT:
KNOW ALL PERSONS BY THESE PRE	ESENTS, that			as Principal,
hereinafter called the Principal, and				as Surety,
hereinafter called the Surety, are, subject right of Canada as represented by the M				
dollars (\$), lawfu	Il money of Canada, for the pa	yment of v	which sum, well and truly to be	made, the Principal and the
Surety bind themselves, their heirs, exec	cutors, administrators, success	ors and a	assigns, jointly and severally, fire	nly by these presents.
SIGNED AND SEALED this	day of	, 20	² 0	
WHEREAS, the Principal entered into a	Contract with the Crown dated	d the	day of	, 20,
for				
which Contract is by reference made a p	part hereof, and is hereinafter r	eferred to	as the Contract.	
the obligations on the part of the Principal otherwise it shall remain in full force and 1. Whenever the Principal shall be, and (a) if the work is not taken out of the I (b) if the work is taken out of the Principal work in accordance with the Control (i) it shall be between the Surety (ii) the selection of such completin (c) if the work is taken out of the Principal undertake the completion of the work the Crown under the Contract, (d) be liable for and pay all the exces (e) not be entitled to any Contract more to such earned Contract moneys however, and without restricting the Contract moneys earned by the P 2. The Surety shall not be liable for a gr 3. No suit or action shall be instituted by from the date on which final payment	deffect, subject, however, to the declared by the Crown to be, Principal's hands, remedy the cipal's hands and the Crown detection and the completing contractor and the Crown, a cork, assume the financial responses costs of completion of the Completion of the Completion and the liable generality of the foregoing, which is the completion of the completion of the completion of the Crown, and the liable generality of the foregoing, which is the Crown herein against the sunder the Contract is payable.	ne followin in default of default of default of directs the is entered to the apparter reasonsibility of the upon the operator held decified in a Surety possibility of the decified in the decified in a Surety possibility of the decified in the decified i	ng conditions: t under the Contract, the Surety is t the Principal, e Surety to undertake the complete d into for the completion of the way proval of the Crown, onable notice to the Surety, does for the cost of completion in excent date of his default on the Contract e Surety under this Bond shall re completion of the Contract to the ld by the Crown may be paid to the this Bond. oursuant to these presents after the	shall: etion of the work, complete the vork, s not direct the Surety to cess of the moneys available to eact and any holdbacks relating emain unchanged provided, e satisfaction of the Crown, any the Surety by the Crown. the expiration of two (2) years
IN TESTIMONY WHEREOF, the Princip with its corporate seal duly attested by the				
SIGNED, SEALED AND DELIVERED in	the presence of:		Note: Affix Corpora	ite seal if applicable.
Principal		_		
Witness		_		
Surgty				



T4-A CERTIFICATION

The Contractor shall complete and submit this T4-A Certification within fourteen (14) calendar days of Notification of Contract award and within fourteen (14) calendar days immediately following any change to the information already provided under the Contract. Failure to provide this information or failure to provide the correct information shall result in a fundamental breach of the Contract.

The Contractor shall enter a [x] in one of the boxes below opposite the description that best

Note	: The information provided in Sec	ction 2 must correspond with that provide	ed in Section 1.
Cor	porate or unincorporated business	or individual's name:	
Stre	et Name or Box #:		
City,	Town or Village:		
Prov	ince:		
Post	al Code:		
Con	tractor shall complete Section 2(a)	or 2(b) or 2(c), whichever is applicable to	its situation.
	corporated:	., .,	
11 1110	•		
	Business Number (BN): GST / HST Number:	, or	. or
	T2 Corporation Tax Number	(T2N):, wh	ichever is applicable
(b)	If unincorporated:		
	Social Insurance Number (SIN):	, and	
	Business Number (BN): GST / HST Number:	, or , whicheve	er is applicable
	Note: The Unincorporated	I Business Name must be the same as th	e name associated wi
	the Revenue Canada Busi	ness Number or the GST Number.	
(c)	If individual:		
	Social Insurance Number (SIN): _	, and	
	Business Number (BN): GST / HST Number:	, or , whicheve	er is applicable
		ame must be the same as the name ass	
	Insurance Number.	anie must be the same as the name ass	ociated with the Soci
	HEREBY CERTIFY that I/We have	examined the information provided abo	ove. including the lec
WE			