

NCC Tender File #	AL1461
Project Description	Lac Philippe – Summer 2013 - Sewage Disposal System
Site Visit	A MANDATORY site visit will be held on Wednesday, September 25, 2013 at 10am Ottawa time. The exact meeting place is the main Gatineau Park entrance to Lac Philippe off of hwy 366, Gatineau Park, Chelsea, Qc. All costs incurred by the Bidder to attend the site visit will be at their expense. The NCC will not reimburse any Bidder for expenses related to the site visit. Please contact Tony Fares at 613-239-5678 ext. 5573 to confirm your attendance at this MANDATORY site visit and to gain access to the grounds
Closing date and time	Wednesday, October 2, 2013 at 3pm Ottawa time



RETURN TENDERS TO:

National Capital Commission

40 Elgin Street, 3rd Floor, Service Centre
Ottawa, ON K1P 1C7

NCC Contract Number

TENDER CLOSING DATE Wednesday, October 2, 2013
AND TIME: at 3pm Ottawa time

DE	SCRIPTION O	F WORK:	Lac Philippe – Summer 2013 - Sewage Disposal System	
1.	BUSINESS N	AME ANI	ADDRESS OF BIDDER	
	Name:			
	Address:			
	Telephone nu	mber:	Fax number:	
2.	THE OFFER			
			ational Capital Commission (NCC) to perform and complete the work for the tender documents for the total tender amount (to be expressed in number	
	Sub Total	\$		
	GST/QST –	Φ		
	14.975%	>		
	TOTAL	\$		

3. TENDER VALIDITY PERIOD

The tender shall not be withdrawn for a period of 60 days following the date and time of tender closing.

4. CONTRACT DOCUMENTS

- 1. The following are the contract documents:
 - (a) Invitation to Tender & Acceptance Form when signed by the NCC;
 - (b) Duly completed Invitation to Tender & Acceptance Form and any Appendices attached thereto;
 - (c) Drawings and Specifications;
 - (d) General Conditions (GC1 to GC10);
 - (e) Supplementary Conditions, if any;
 - (f) Insurance Terms;
 - (g) Fair Wages and Hours of Labour Labour Conditions;
 - (h) Occupational Health and Safety Requirements;
 - (i) Addenda
 - (j) Schedules of Wage Rates for Federal Construction Contracts;
 - (k) Any amendments issued or any allowable tender revision received before the date and time set for tender closing;
 - (l) Any amendment incorporated by mutual agreement between the NCC and the Contractor before acceptance of the tender; and
 - (m) Any amendment or variation of the contract documents that is made in accordance with the General Conditions;
 - (n) Security Requirements.
- 2. Schedules of Wage Rates for Federal Construction contracts are included by reference and may be accessed from the Website: http://www.hrsdc.gc.ca/asp/gateway.asp?hr=en/lp/lo/lswe/fw/schedule.shtml&hs=cgp.
- 3. The language of the contract documents shall be the language of the Invitation to Tender & Acceptance Form submitted.

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NCC Tender File # AL1461 NCC Contract Number

5. APPENDICES

The tender includes Appendix(ces) Nos 1 and 11 to the Invitation to Tender & Acceptance Form.

6. ACCEPTANCE AND CONTRACT

Upon acceptance of the Contractor's offer by the NCC, a binding Contract shall be formed between the NCC and the Contractor. The documents forming the Contract shall be the contract documents referred to in 4 – CONTRACT DOCUMENTS.

7. CONSTRUCTION TIME

The Contractor shall perform and complete the Work no later than October 31, 2013.

8. UNIT PRICE TABLE

The Bidder agrees that

- (a) the Unit Price Table designates that part of the Work to which a Unit Price Arrangement applies.
- (b) the Price per Unit and the Estimated Total Price must be entered for each item listed;
- (c) the Price per Unit as tender governs in calculating the Total Estimated Amount, and any errors in the extension of the Price per Unit and in the addition of the Estimated Total Prices shall be corrected by the NCC in order to obtain the Total Estimated Amount; and
- (d) the following table is the Unit Price Table for the purposes of the tender and the Contract:

UNIT PRICE TABLE

Note: Transmit the estimated total of the unit price table, under item 2, The Offer of this Invitation to Tender & Acceptance Form.

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ITEM#	DESCRIPTION	QTY	UOM	UNIT PRICE	LS price or total for item
1.0	General Items				
1.1	Mobilization and Demobilization	Global	LS		
1.2	Testing and Commissioning	Global	LS		
2.0	Works at Lagoon				
2.1	Civil Works	Global	LS		
2.2	Electrical and Mechanical Works	Global	LS		
2.3	Structural Works	Global	LS		
2.4	Environmental Protection Measures	Global	LS		
3.0	Excavation, Hauling and Disposal of Contaminated Material	allowance	LS	\$4,000.00	\$4,000.00
4.0	Contingency Allowance	allowance	LS	\$4,000.00	\$4,000.00
				SUB-TOTAL EXCL TAXES	

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9.	The basis of award is low total cost to the Commission including all taxes.
10.	I/We acknowledge receipt of the following addenda and have included for the requirement of it/them in my/our tendered
	price:(Bidder to ender
	number of addenda issued, if any).
11.	TENDER SECURITY 1. The Bidders shall enclose tender security with its tender in accordance with GI08 TENDER SECURITY REQUIREMENTS.
	2. If the security furnished does not comply fully with the requirements referred to in paragraph 1) herein, the tender shall be disqualified.
	3. If a security deposit is furnished as tender security, it shall be forfeited in the event that the tender is accepted by the NCC and the Contractor fails to provide Contract Security in accordance with GC9 CONTRACT SECURITY, provided that the NCC may, if it is in the public interest, waive the forfeiture of the security deposit.
12.	REVISIONS
	Item 1c) of GC10.3.2.1 (refer under GC10 Insurance, section 10.3.2 Commercial General Liability, sub-section 10.3.2.1 Scope of Policy) is deleted.
13.	INVOICING Send the original invoice and 1 copy to: Accounts Payable National Capital Commission 202-40 Elgin Street Ottawa, ON K1P 1C7 Or by email at the following address: payables@ncc-ccn.ca To ensure prompt payment, please prepare your invoice in accordance with the prices quoted. Errors in invoicing can cause delay of payment. Submit your invoice to the address shown above and clearly indicate the Contract number.
	hereby offer to supply to the NCC in accordance with the terms and conditions set out herein, the construction work listed we and on any attached sheets at the submitted price(s).
	Name and title of person authorized to sign on behalf of Bidder (please print or type) Signature Date
	r tender is accepted to supply to the NCC, in accordance with the terms and conditions set out herein, referred to herein or shed hereto, the construction services listed herein and on any attached sheets at the price(s) set out therefore.
N	ame and title of the person authorized to sign on behalf of the NCC (please print or type) Date

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LIST OF SUB-CONTRACTORS

INVITATION TO TENDER & ACCEPTANCE FORM

APPENDIX 1

- 1) 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 NCC Representative. The Bidder understands that for each part of the work identified as Mandatory, 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 tender will be disqualified.
- 2) The Bidder certifies that tenders for the part(s) of the Work listed below were received from the following subcontractors:

	NON-MANDATORY REQUIREM	<u>IENT</u> :
(a)	Any other work not listed below	
	Type of Work:	Sub-contractor:
	identified. Failure to disclose the disqualification of your tender.	name of the sub-contractor for any work identified will result in th
	disqualification of your tender.	
(a)	n/a	
	Sub-contractor:	
	Address:	
(b)	<u>n/a</u>	
	Sub-contractor:	
	Address:	
(e)	-<u>n/a</u>	
	Sub-contractor:	
	Address:	
(d)	<u>n/a</u>	
	Sub contractor:	
	Address	

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New supplier Nouveau fournisseu
Update / Mise à jour

Supplier No. / No du fournisseur

For NCC use only / À l'usage de la CCN seulement

SUPPLIER – DIRECT PAYMENT AND TAX INFORMATION FORM FOURNISSEUR – FORMULAIRE DE PAIEMENT DIRECT ET RENSEIGNEMENTS POUR FINS D'IMPÔT

PART 'A' – IDENTIFICATION / PARTIE 'A' - IDENTIFICATION				
Legal name of entity or individual / Nom légal de l'entité ou du particulier	Operating name of entity Nom commercial de l'enti			
	Nom commercial de l'ent	ite ou du particulier (s	ii dillere da florii le	gai)
Former Public Servant in receipt of a PSSA Pension / Ancien fonctionnaire qui	•		Yes / Oui	☐ No / Non
An entity, incorporated or sole proprietorship, which was created by a Former partnership made of former public servants in receipt of PSSA pension or whe interest in the entity. / Une entité, constituée en société ou à propriétaire uniqu pension en vertu de la LPFP, ou un partenariat formé d'anciens fonctionnaires entités dans lesquelles ils détiennent le contrôle ou un intérêt majoritaire.	re the affected individual has e, créée par un ancien fonction	a controlling or major onnaire touchant une	Yes / Oui	☐ No / Non
Address / Adresse				
	Tele	ephone no. /	Fax no	
	No. d	le elephone :	No. De télé	copieur :
Postal code / Code postal	eeeiib		()	
PART 'B' - STATUS OF SUPPLIER / PARTIE 'B' - STATUT DU FOURNI	Last Name / Nom de fam	nille First name / F	Prénom Ini	tial / Initiale
(1) Sole proprietor Propriétaire unique If sole proprietor, provide Si propriétaire unique, indiquez :	_			
(2) Partnership / Société SIN – mandatory for (1) & (2) NAS – obligatoire pour (1) & (2) de personnes	Corporation /Société	Business No.	(BN) / No de l'entr	reprise (NE)
GST/HST / TPS et de TVH	QST / TVQ (Québec)			
Number / Numéro :	Number / Numéro :	erit 🔲		
The regions of the re	Not registered / non insc	:iii		
Type of contract / Genre de contrat Contract for services only Contrat de services seulement Type of goods and/or services offered / Genre de biens et/ou services ren	es 🗀	Contract for goods de biens seulement		
DART (O) FINANCIAL INSTITUTION (DARTIE (O) DENOTIONEMENT	O OUR LUNGTITUTION FIN	NANOIÈ DE		
PART 'C' – FINANCIAL INSTITUTION / PARTIE 'C' – RENSEIGNEMENT Please send a void cheque with this form / Veuillez, s.v.p., envoyer un				
Branch number / Institution no. /	n oposinion do unoque di	Account no. /		
No de la succursale No de l'institution :		No de compte :		
Institution name / Address / Nom de l'institution :				
DART (D) DAVMENT NOTIFICATION (DARTIE (D) AVIO DE DAIEME	Postal Code /	Code postal :		
PART 'D' – PAYMENT NOTIFICATION / PARTIE 'D' – AVIS DE PAIEMEI E-mail address / Adresse courriel :	NI .			
PART 'E' – CERTIFICATION / PARTIE 'E' – CERTIFICATION				
I certify that I have examined the information provided above and it is correct and complete, and fully discloses the identification of this supplier.	Je déclare avoir examiné exacts et constituent une fournisseur.			
Where the supplier identified on this form completes part C, he hereby requests and authorizes the National Capital Commission to directly deposit into the bank account identified in part C, all amounts payable to the supplier.	Lorsque le fournisseur inc demande et autorise la C dans le compte bancaire	ommission de la capitale	nationale à déposer	directement
Name of authorized person / Title / Titre Nom de la personne autorisée		Signature		Date
Telephone number of contact person / Numéro de téléphone de la person	ne ressource : ()			
IMPORTANT	,			
Please fill in and return to the National Capital Commission with one of <u>your</u> <u>business cheque unsigned and marked « VOID</u> » (for verification purposes).	Veuillez remplir ce form	nulaire et le retourner à		
business cheque unsigned and marked « VOID » (for verification purposes).	nationale avec <u>un spéci</u> <u>la mention « ANNULÉ</u> »			né et portant
Mail or fax to : Procurement Assistant, Procurement Services National Capital Commission 202-40 Elgin Street Ottawa, ON K1P 1C7 Fax : (613) 239-5007	nationale avec un spéci		on). onnement ionnement vitale nationale	<u>né et portant</u>

SUPPLIER – DIRECT PAYMENT AND TAX INFORMATION FORM

FOURNISSEUR – FORMULAIRE DE PAIEMENT DIRECT ET RENSEIGNEMENTS AUX FINS D'IMPÔT

Supplier Tax Information

Pursuant to paragraph 221(1) (d) of the Income Tax Act, NCC must declare form T-1204, contractual payments of government for services, all payments made to suppliers during the calendar year in accordance to related service contracts (including contracts for mixed goods and services).

The paragraph 237(1) of the Income Tax Act and the article 235 of the Income Tax Regulations require the supplier to provide all necessary information below to the organization who prepares the fiscal information forms.

Questions: Marcel Sanscartier, Manager, Accounts Payable and Receivable – (613) 239-5241.

Direct payment information

All amounts payable by NCC to the supplier will be deposited directly into the account you identified in part C. A NCC payment advice notice will also be sent to you by e-mail detailing the particularities of the payment.

Until we process your completed form, we will still pay you by check.

You must notify the NCC of any changes to your financial institution, branch or account number. You will then have to complete a new form.

The account you identified has to hold Canadian funds at a financial institution in Canada.

The advantages of direct payment

Direct payment is a convenient, dependable and timesaving way to receive your invoice payment. Direct payment is completely confidential.

There is less risk of direct payment being lost, stolen, or damaged as may happen with cheques.

Funds made by direct payment will be available in your bank account on the same day that we would have mailed your cheque.

Renseignements sur les fournisseurs aux fins d'impôt

En vertu de l'alinéa 221(1) (d) de la Loi de l'impôt sur le revenu, la CCN est tenu de déclarer, à l'aide du formulaire T-1204, Paiements contractuels de services du gouvernement, tous paiements versés aux fournisseurs pendant une année civile en vertu de marchés de services pertinents (y compris les marchés composés à la fois de biens et de services).

Le paragraphe 237 (1) de la Loi de l'impôt sur le revenu et l'article 235 du Règlement de l'impôt sur le revenu obligent les fournisseurs à fournir toutes les informations demandées ci-dessous à l'organisme qui prépare les formulaires de renseignements fiscaux.

Questions: Marcel Sanscartier, Gestionnaire, comptes fournisseurs et comptes clients – (613) 239-5241.

Renseignements sur le paiement direct

Tous les montants versés par la CCN au fournisseur seront déposés directement dans le compte identifié à la partie C. Un avis de paiement de la CCN détaillant les particularités du paiement vous sera envoyé par courriel

Nous continuerons à vous payer par chèque jusqu'à ce que nous ayons traité votre formulaire.

Vous devez aviser la CCN de tout changement d'institution financière, de succursale ou de numéro de compte. Vous devrez donc remplir un nouveau formulaire.

Le compte que vous désignez doit être un compte en monnaie canadienne, détenu dans une institution financière au Canada.

Avantages du paiement direct

Le paiement direct est une méthode pratique, fiable, qui permet de gagner du temps dans la réception de vos paiements de factures. Le paiement direct est entièrement confidentiel.

Avec les paiements direct, il y a moins de risques de perte, de vol ou de dommage, comme cela peut se produire dans le cas des chèques.

Les paiements effectués par paiement direct sont versés dans votre compte le jour même où nous aurions posté votre chèque.



SPECIAL INSTRUCTIONS TO BIDDERS

- SI01 Tender Documents
- SI02 Enquiries during the Solicitation Period
- SI03 [Mandatory] Site Visit
- SI04 Revision of Tender
- SI05 Tender Results
- SI06 Negotiations
- SI07 Tender Validity PeriodSI08 Construction Documents
- SI09 Public Tender Opening

SI01 TENDER DOCUMENTS

- 1) The following are the tender documents:
 - (a) Invitation to Tender & Acceptance Form and any Appendices attached thereto;
 - (b) Special Instructions to Bidders; and
 - (c) General Instructions to Bidders.

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

SI02 ENQUIRIES DURING THE SOLICITATION PERIOD

- 1) Enquiries regarding this tender must be submitted in writing to the following: Sr. Contract Officer, Allan Lapensée, telephone number 613-239-5678 ext. 5051, facsimile number 613-239-5007 or e-mail address allan.lapensee@ncc-ccn.ca as early as possible within the solicitation period. Except for the approval of alternative materials as described in GI15 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 result in an answer not being provided.
- 2) To ensure consistency and quality of the information provided to Bidders, the Sr. Contract 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 tender sent throughout the solicitation period are to be directed ONLY to the Sr. Contract Officer named above. Non-compliance with this requirement during the solicitation period can, for that reason alone, result in disqualification of a tender.

SI03 [MANDATORY] SITE VISIT

1) A MANDATORY site visit will be held on Wednesday, September 25, 2013 at 10am Ottawa time. The exact meeting place is the main Gatineau Park entrance to Lac Philippe off of hwy 366, Gatineau Park, Chelsea, Qc. All costs incurred by the Bidder to attend the site visit will be at their expense. The NCC will not reimburse any Bidder for expenses related to the site visit. Please contact Tony Fares at 613-239-5678 ext. 5573 to confirm your attendance at this MANDATORY site visit and to gain access to the grounds.

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SPECIAL INSTRUCTIONS TO BIDDERS

SI04 REVISION OF TENDER

1) A tender may be revised by letter or facsimile in accordance with GI10 of the General Instructions to Bidders. The facsimile number for receipt of revisions is 613-239-5012.

SI05 TENDER RESULTS

1) Following solicitation closing, tender results may be obtained by calling the Sr. Contract Officer, Allan Lapensée, telephone number 613-239-5678 ext. 5051, facsimile number 613-239-5007 or e-mail address allan.lapensee@ncc-ccn.ca.

SI06 NEGOTIATIONS

- 1) In the event that the lowest compliant tender exceeds the amount of funding the NCC has allocated for the construction phase of the work:
 - (a) by 15% or less, the NCC, at its sole discretion, shall either:
 - (i) cancel the invitation to tender; or
 - (ii) obtain additional funding and, subject to the provisions of GI11 and GI09 of the General Instructions to Bidders, award the Contract to the Bidder submitting the lowest compliant tender; or
 - (iii) revise the scope of the work accordingly and negotiate, with the Bidder submitting the lowest compliant tender, a corresponding reduction in its tender price.
 - (b) by more than 15%, the NCC, at its sole discretion, shall either:
 - (i) cancel the invitation to tender; or
 - (ii) obtain additional funding and, subject to the provisions of GI11 and GI09 of the General Instructions to Bidders, award the Contract to the Bidder submitting the lowest compliant tender; or
 - (iii) revise the scope of the work accordingly and invite those who submitted compliant tenders at the original invitation to tender to re-tender the work.
- 2) If negotiations or a re-tender are undertaken as is contemplated in subparagraphs 1)(a)(iii) or 1)(b)(iii) above, Bidders shall retain the same subcontractors and suppliers as they carried in their original tenders.
- 3) If the NCC elects to negotiate a reduction in the tender price as is contemplated in subparagraph 1)(a)(iii) herein and the negotiations fail to reach an agreement, the NCC shall then exercise either of the options referred to subparagraphs 1)(a)(i) or 1)(a)(ii).

SI07 TENDER VALIDITY PERIOD

1) The NCC reserves the right to seek an extension to the tender validity period prescribed in 3 of the Invitation to Tender & Acceptance Form. Upon notification in writing from the NCC, Bidders shall have the option to either accept or reject the proposed extension.

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SPECIAL INSTRUCTIONS TO BIDDERS

- 2) If the extension referred to in paragraph 1) of SI07 is accepted, in writing, by all those who submitted tenders, then the NCC shall continue immediately with the evaluation of the tenders 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 tenders then the NCC shall, at its sole discretion, either:
 - (a) continue to evaluate the tenders of those who have accepted the proposed extension and seek the necessary approvals; or
 - (b) cancel the invitation to tender.
- 4) The provisions expressed herein do not in any manner limit the NCC's rights in law or under GI11 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, may be available free of charge upon request by the contractor. If not, obtaining more copies shall be the responsibility of the contractor including costs.

SI09 PUBLIC TENDER OPENING

1) A public tender opening will be held on October 2, 2013 shortly after 3pm Ottawa time at 40 Elgin Street, Ottawa, Ontario in room 306.

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- GI01 Completion of Tender
- GI02 Identity or Legal Capacity of the Bidder
- GI03 Goods and Services Tax / Harmonized Sales Tax
- GI04 Québec Sales Tax
- GI05 Capital Development and Redevelopment Charges
- GI06 Registry and Pre-qualification of Floating Plant
- GI07 Listing of Subcontractors and Suppliers
- GI08 Tender Security Requirements
- GI09 Submission of Tender
- GI10 Revision of Tender
- GI11 Acceptance of Tender
- GI12 Procurement Business Number
- GI13 Bid Depository
- GI14 Compliance with Applicable Laws
- GI15 Approval of Alternative Materials
- GI16 Performance Evaluation

GI01 Completion of Tender

- 1) The tender shall be:
 - (a) submitted on the Invitation to Tender and Acceptance Form provided through the Government Electronic Tendering Service (GETS) or on a clear and legible reproduced copy of such Invitation to Tender and Acceptance Form that must be identical in content and format to the Invitation to Tender and Acceptance Form provided through GETS;
 - (b) based on the Tender Documents listed in the Special Instructions to Bidders;
 - (c) correctly completed in all respects;
 - (d) signed by a duly authorized representative of the Bidder; and
 - (e) accompanied by
 - (i) tender security as specified in GI08; and
 - (ii) any other document or documents specified elsewhere in the solicitation where it is stipulated that said documents are to accompany the tender.
- Subject to paragraph 6) of GI11, any alteration to the pre-printed or pre-typed sections of the Invitation to Tender and Acceptance Form, or any condition or qualification placed upon the tender shall be cause for disqualification. Alterations, corrections, changes or erasures made to statements or figures entered on the Invitation to Tender and Acceptance Form by the Bidder shall be initialled by the person or persons signing the tender. Initials shall be original(s). Alterations, corrections, changes or erasures that are not initialled shall be deemed void and without effect.
- 3) Unless otherwise noted elsewhere in the Tender Documents, facsimile copies of tenders are not acceptable.

GI02 Identity or Legal Capacity of the Bidder

1) In order to confirm the authority of the person or persons signing the tender 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 the NCC prior to award of contract, provide satisfactory proof of:

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- (a) such signing authority; and
- (b) the legal capacity under which it carries on business.

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 tender 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 Goods and Services Tax / Harmonized Sales Tax

The National Capital Commission (NCC) is a Crown Corporation subject to the Goods and Services Tax (GST), the Ontario Provincial Sales Tax (OST) and the Quebec Sales Tax (QST). The rates quoted are exclusive of the GST and the OST/QST. The successful firm will be required to indicate separately, on all invoices or requests for payments, the amount of Goods and Services Sales Tax (GST), the amount of Ontario Sales Tax (OST) and the amount of Quebec Sales Tax (QST), to the extent applicable, that the Commission must pay. These amounts will be paid to the successful Bidder who is required to make the appropriate remittances to Revenue Canada and the respective provincial governments.

Pursuant to paragraph 221 (1)(d) of the Income Tax Act, payments made by Crown Corporations under applicable service contracts (including contracts involving a mix of goods and services) must be reported on a "T1204" slip. To comply with this requirement, the Bidder is required to provide the following information on the "Supplier – Direct Payment and Tax Information Form" (see Appendix 11).

By signing this form, the Bidder/Proponent certifies that he/she has examined the information provided on the form and that it is correct, complete, and fully discloses the identification of the Contractor.

This "Supplier – Direct Payment and Tax Information Form" must be completed and returned to the Commission prior to any contract being awarded to your firm (see Appendix 11).

GI04 Quebec Sales Tax

1) See GI03.

GI05 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 tender 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.

GI06 Registry and Pre-qualification of Floating Plant

Dredges or other floating plant to be used in the performance of the Work must be on 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, if applicable, and this certificate must accompany the tender. Plant so qualified by Industry Canada may be accepted on this project.

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GI07 Listing of Subcontractors and Suppliers

Notwithstanding any list of Subcontractors that the Bidder shall be required to submit as part of the tender, the Bidder submitting the lowest acceptable tender shall, within 24 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 may result in the disqualification of its tender.

GI08 Tender Security Requirements

1) The Bidder shall submit tender security with the tender in the form of a bid bond or a security deposit in an amount that is equal to not less than 10% of the tender amount including all applicable taxes.

The maximum amount of tender security required with any tender is \$2,000,000.00.

2) A bid bond shall be in an approved form, properly completed, with original signature(s) and issued by an approved company whose bonds are acceptable to the NCC either at the time of solicitation closing or as identified on the list displayed at the following Website:

http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12027

The approved form for the bid bond is enclosed at the end of this section.

- 3) A security deposit shall be an original, properly completed, signed where required and be either:
 - (a) a bill of exchange, bank draft or money order payable to the NCC;
 - (b) bonds of, or unconditionally guaranteed as to principal and interest by, the Government of Canada; or
- 4) A bill of exchange, bank draft or money order referred to in subparagraph 3)(a) of GI08 shall be certified by or drawn on:
 - (a) a corporation or institution that is a member of the Canadian Payments Association;
 - (b) a corporation that accepts public deposits and repayment of the deposits is unconditionally guaranteed by Her Majesty in right of a province;
 - (c) a corporation that accepts deposits that are insured by the Canada Deposit Insurance Corporation or the "Régie de l'assurance-dépôts du Québec" to the maximum permitted by law;
 - (d) a corporation, association or federation incorporated or organized as a credit union or cooperative credit society that conforms to the requirements of a credit union which are more particularly described in paragraph 137 (6)(b) of the *Income Tax Act*; or
 - (e) Canada Post Corporation.
- 5) If a bill of exchange, bank draft or money order is 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 paragraph 4) of GI08, either by letter or by a stamped certification on the bill of exchange, bank draft, or money order.
- 6) For the purposes of this section, 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 time, a certain sum of money to, or to the order of, the NCC.

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- 7) Bonds referred to in subparagraph 3)(b) of GI08 shall be provided on the basis of their market value current at the date of solicitation closing, and shall be:
 - (a) payable to bearer;
 - (b) accompanied by a duly executed instrument of transfer of the bonds to the NCC 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 NCC pursuant to the Domestic Bonds of Canada Regulations.
- As an alternative to a security deposit an irrevocable standby letter of credit is acceptable to the NCC and the amount shall be determined in the same manner as a security deposit referred to above.
- 9) An irrevocable standby letter of credit referred to in paragraph 8) of GI08 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:
 - (i) is to make a payment to, or to the order of, the NCC as the beneficiary;
 - (ii) is to accept and pay bills of exchange drawn by the NCC;
 - (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 NCC by way of the financial institution's draft against presentation of a written demand for payment signed by the NCC Contract Administrator 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 for Documentary Credits, 2007 Revision, ICC Publication No. 600;
 - (g) clearly specify that it is irrevocable or deemed to be irrevocable pursuant to article 6 c) of the International Chamber of Commerce (ICC) Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600; and
 - (h) 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.
- 10) Tender security shall lapse or be returned as soon as practical following:
 - (a) the solicitation closing date, for those Bidders submitting non-compliant tenders; and

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- (b) the administrative tender review, for those Bidders submitting compliant tenders ranked fourth to last on the schedule of tenders; and
- (c) the award of contract, for those Bidders submitting the second and third ranked tenders; and
- (d) the receipt of contract security for the successful Bidder; or
- (e) the cancellation of the solicitation, for all Bidders.
- 11) Notwithstanding the provisions of paragraph 10) of GI08 and provided more than three (3) compliant tenders have been received, if one or more of the tenders ranked third to first is withdrawn or rejected for whatever reason, then the NCC reserves the right to hold the security of the next highest ranked compliant tender in order to retain the tender security of at least three (3) valid and compliant tenders.

GI09 Submission of Tender

- 1) The Invitation to Tender and Acceptance Form, duly completed with 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 front page of the Invitation to Tender and Acceptance Form for the receipt of tenders.
- 2) Unless otherwise specified in the Special Instructions to Bidders:
 - (a) the tender 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 tender, the Bidder shall ensure that the following information is clearly printed or typed on the face of the tender envelope:
 - (a) Solicitation Number;
 - (b) Name of Bidder.
- 5) Timely and correct delivery of the tender is the sole responsibility of the Bidder. The tender must be received on or before the date and time set for solicitation closing. Late tenders shall be disqualified.

GI10 Revision of Tender

- A tender submitted in accordance with these instructions may be revised by letter or facsimile (fax number only 613-239-5012 provided the revision is received at the office designated for the receipt of tenders, on or before the date and time set for the closing of the solicitation. The letter or facsimile shall:
 - (a) be on the Bidder's letterhead or bear a signature that identifies the Bidder;
 - (b) for the Total Bid Amount, clearly identify the amount of the current revision. The total aggregate sum of all revisions submitted, including the current revision, shall be shown separately; and
 - (c) for the Price per unit portion of a tender, clearly identify the current revision(s) to the Price(s) per unit and the specific item(s) to which each revision applies. If a revision is to be applied to a specific Item that was previously amended then, in addition to the amount of the current

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revision, the total aggregate sum of all revisions submitted, including the current revision, for that Item shall be shown separately.

- 2) A letter or facsimile submitted to confirm an earlier revision shall be clearly identified as "CONFIRMATION ONLY", for each contemplated change.
- 3) Failure to comply with any of the above provisions shall result in the rejection of the non-compliant revision(s) only. The tender shall be evaluated based on the original tender submitted and all other compliant revision(s).

GI11 Acceptance of Tender

- 1) The NCC may accept any tender, whether it is the lowest or not, or may reject any or all tenders.
- 2) Without limiting the generality of paragraph 1) of GI11, the NCC may reject a tender if any of the following circumstances are present:
 - (a) the Bidder, or any employee or subcontractor included as part of the tender, have 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 tender are suspended or are in the process of being suspended, which suspension or pending suspension would render that employee or subcontractor ineligible to tender on the Work, or the portion of the Work the employee or subcontractor is to perform;
 - (d) with respect to current or prior transactions with the NCC
 - (i) the Bidder is bankrupt or if, for whatever reason, its activities are rendered inoperable for an extended period;
 - (ii) evidence, satisfactory to the NCC, 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 tender;
 - (iii) the NCC 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 tender; or
 - (iv) the NCC determines that the Bidder's performance on other contracts is sufficiently poor to jeopardize the successful completion of the requirement being tendered on.
- 3). In assessing the Bidder's performance on other contracts pursuant to subparagraph 2)(d)(iv) of GI11, the NCC 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;

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- (c) the overall management of the Work and its effect on the level of effort demanded of the NCC 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 GI11, the NCC may reject any based on an unfavourable assessment of the:
 - (a) adequacy of the tender price to permit the work to be carried out and, in the case of a tender providing 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) If the NCC intends to reject a tender pursuant to a provision of paragraphs 1), 2), 3) or 4) of GI11, other than subparagraph 2)(b)of GI11, the NCC shall so inform the Bidder and provide the Bidder ten (10) days within which to make representation, prior to making a final decision on the tender rejection.
- 6) The NCC may waive informalities and minor irregularities in tenders received, if the NCC determines that the variation of the tender from the exact requirements set out in the Tender Documents can be corrected or waived without being prejudicial to other Bidders.

GI12 Procurement Business Number

1) Not applicable.

GI13 Bid Depository

1) If the solicitation advertisement states that a Bid Depository shall be used, the Bidder shall obtain bids in accordance with local Bid Depository rules and procedures.

GI14 Compliance with Applicable Laws

- By submission of a tender, 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 tender and entry into any ensuing contract for the performance of the work.
- 2) For the purpose of validating the certification in paragraph 1) of GI14, 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 GI14 shall result in the disqualification of the tender.

GI15 Approval of Alternative Materials

1) When materials are specified by trade names or trademarks, or by manufacturers' or suppliers' names, the tender shall be based on use of the named materials. During the solicitation period,

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alternative materials may be considered provided full technical data is received in writing by the Contracting Officer at least seven (7) calendar days, unless otherwise noted in the Tender documents, prior to the solicitation closing date. If the alternative materials are approved for the purposes of the tender, an addendum to the tender documents shall be issued.

GI16 Performance Evaluation

1) Bidders shall take note that the performance of the Contractor during and upon completion of the work shall be evaluated by the NCC. The evaluation shall be based on the quality of workmanship, timeliness of completion of the work, project management, contract management and management of health and safety. Should the Contractor's performance be considered unsatisfactory, the Contractor's bidding privileges on future work may be suspended indefinitely. Contractor Evaluation Report Form is enclosed at the end of this section.

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BID BOND

	Bond Number
	Amount _\$
KNOW ALL MEN BY THESE PRESENTS, that	as Principal,
hereinafter called the Principal, and	as Surety, hereinafter
called the Surety, are, subject to the conditions hereinafter contained, he	ld and firmly bound unto the National Capital Commission as
Obligee, hereinafter called the NCC, In the amount of	dollars
(\$), lawful money of Canada, for the payme	ent of which sum, well and truly to be made, the Principal and
the Surety bind themselves, their heirs, executors, administrators, success	ssors and assigns, jointly and severally, firmly by these presents.
SIGNED AND SEALED this day of	, WHEREAS, the Principal has
submitted a written tender to the NCC, dated the day	y of , ,
for:	
NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are su	ich that if:
(a) The Principal, should his tender be accepted within the period leadys after closing date of the tender:	be specified by the NCC, or, if no period be specified, within sixty (60)
	if no period be specified therein, within fourteen (14) days after the ute such further contractual documents, if any, as may be required by
furnish a Performance Bond and a Labour and Material F satisfactory to the NCC, or other security acceptable to the	Payment Bond, each in the amount of 50% of the Contract price and e NCC; or
	ne amount of the Principal's tender and the amount of the Contract s which were specified in the said tender, if the latter amount be in
then, this obligation shall be void; otherwise it shall remain in full force an	nd effect.
PROVIDED, HOWEVER , that the Surety and the Principal shall not be I the bond.	liable to the NCC for an amount greater than the amount specified in
PROVIDED FURTHER that the Surety shall not be subject to any suit o served upon the Surety at its Head Office in Canada, within twelve (12) n	
IN TESTIMONY WHEREOF, the Principal has hereto set its hand and af with its corporate seal duly attested by the signature of its authorized sign	
SIGNED, SEALED AND DELIVERED in the presence of:	Note: Affix Corporate seal if applicable.
Principal	
Witness	
Surety	



CONTRACTOR PERFORMANCE EVALUATION REPORT FORM FORMULAIRE - RAPPORT D'ÉVALUATION DU RENDEMENT DE L'ENTREPRENEUR

Date		Contract no. / No du contrat					
Description of work / Description des travaux							
Contractor's business name / Nom de l'entreprise de l'entrepreneur		Contractor's site su	perintendent / Co	ntremaître de l'entreprend	∍ur		
Contractor's business address / Adresse de l'entrepri	se de l'entrepreneur						
NCC representative / Représentant de la CC	:N						
Name / Nom		phone no. /	N°. de téléphone	E	E-mail address / Adresse	électroniqu	ıe
Contract information / Information sur le co	ontrat						
Contract award amount / Montant du marché adjugé			Contract award date	e / Date de l'adju	dication du marché		
Final amount / Montant final			Actual contract com	npletion date / Da	te réelle d'achèvement du	contrat	
Number of change orders / Nombre d'ordres de chan	gement		Final certificate date	e / Date du certifi	cat final		
Quality of workmanship / Qualité des travai	ux exécutés		Category /	Catégorie	Scale / Échelle	Points	/ Pointage
This is the rating of the quality of the workmanship. A		uality of	Unacceptable / Inac		0 – 5		9-1
the materials and equipment incorporated in the work set out in the plans and specifications.	must meet the require	ements	Not satisfactory / No		6 – 10		
Il s'agit de l'évaluation de la qualité des travaux exéc			Satisfactory / Satisf	aisant	11 – 16		
travaux, la qualité des matériaux et de l'équipement détablies dans les plans et devis.	doit satisfaire les exiger	nces	Superior / Supérieu	r	17 - 20		
Time / Délai d'exécution							
This is the rating of the timeliness of completion cons date compared with the original (or amended) contractor for conditions beyond the control of the contractor.			Unacceptable / Inac	cceptable	0 – 5	l	
Il s'agit de l'évaluation du délai d'exécution des traval	ux en prenant en consi	dération	Late / En retard		6 – 10		
la date actuelle d'achèvement des travaux par rappor modifiée) et en tenant compte des conditions indéper	rt à la date originale (οι	J	On time / À temps Ahead of schedule	/ En avance sur	11 – 16 17 - 20		
l'entrepreneur.	-1		le calendrier		17 - 20		
Project management / Gestion de proje	et				0.5		
This is the rating of how the project, as described in t was managed including co-ordination, quality control.		fications,	Unacceptable / Inac	•	0 – 5		
development and implementation.	, ellective scriedule		Not satisfactory / No		6 – 10		
Voici l'évaluation de la façon dont le projet décrit dan	s les documents contra	ictuels a	Satisfactory / Satisf		11 – 16		
été géré, y compris la coordination, le contrôle de la c calendrier efficace et la mise en œuvre.	qualité, l'élaboration d'ι	ın	Superior / Supérieur 17 - 20				
			Criteria not applicable / Critère non-applicable			N/A / S/O	
Contract management / Gestion de co	ntrat						
			Unacceptable / Inac	cceptable	0 – 5	l	
This is the rating of how the contract was administered provisions expressed in the "front end" portion of the		ne	Not satisfactory / No	on-satisfaisant	6 – 10		
Voici l'évaluation de la façon dont le contrat a été adr		aux	Satisfactory / Satisf	aisant	11 – 16		
dispositions comprises dans la partie « prioritaire » d			Superior / Satisfaisa	ant	17 - 20		
			Criteria not a	applicable / Critèr	e non-applicable		N/A / S/O
Health and safety / Santé et sécurité							
This is the rating of the effectiveness of how the occupational health and safety provisions (whether identified in the contract or those of provincial legislation or those			Unacceptable / Inac	cceptable	0 – 5	l	
otherwise applicable) were managed and administered	ed.		Not satisfactory / No	on-satisfaisant	6 – 10		
Voici l'évaluation de l'efficacité avec laquelle les disp			Satisfactory / Satisf	aisant	11 – 16		
la sécurité au travail (dans le contrat, dans les règlements provinciaux ou dans tout autre document) ont été gérées et administrées.		Superior / Satisfaisa	ant	17 - 20			
				Total point	ts / Pointage total		/100
Comments / Commentaires							
Name / Nom	Title / Titre			Signature		Da	te
				=			

INSTRUCTIONS AND ADDITIONAL INFORMATION (Contractor Performance Evaluation Report) INSTRUCTIONS ET RENSEIGNEMENTS SUPPLÉMENTAIRES (Rapport d'évaluation du rendement de l'entrepreneur)

QUALITY OF WORKMANSHIP – QUALITÉ DES TRAVAUX EXÉCUTÉS

The NCC representative is to consider how the workmanship compares with:

- the norms in the area in which the work was carried out
- the contractor's compliance with any quality provisions outlined in the drawings and specification
- the quality of workmanship provided by other contractors on similar projects in the same facility/facilities

Le représentant de la CCN doit évaluer la qualité de l'exécution en fonction de ce qui suit :

- le respect des normes s'appliquant aux travaux réalisés
- la conformité de l'entrepreneur aux exigences de qualité comprises dans les dessins et dans les devis
- la qualité de l'exécution des travaux accomplis par d'autres entrepreneurs dans le cadre de projets similaires réalisés dans la même installation ou dans des installations semblables.

TIME / DÉLAIS D'EXÉCUTION

For the purpose of evaluation the contractor's time performance, consideration must be given to conditions beyond the contractor's control including NCC / Consultant / Client performance.

Consider conditions beyond the contractor's control, e.g.,

- availability of, and access to the site
- changes in soil or site conditions
- weather extremes
- strikes
- material / equipment supply problems originating from manufacturers/suppliers
- quality of plans and specifications
- major change(s) in scope
- cumulative effect of changes
- was the NCC able to meet its obligations?
- timely decisions, clarifications, approvals, payments in due time
- delays caused by other contractors in the same facility

Afin d'évaluer le rendement de l'entrepreneur en matière de délai d'exécution, on doit prendre en considération les conditions indépendantes de la volonté de l'entrepreneur, y compris le rendement de la CCN, de l'expert-conseil et du client.

Prendre en considération les conditions indépendantes de la volonté de l'entrepreneur, par exemple :

- disponibilité du chantier et accès au chantier
- modifications des conditions du sol ou du chantier
- température
- grèves
- problèmes d'approvisionnement en matériel et en équipement provenant des manufacturiers/fournisseurs
- qualité des plan et devis
- modifications importantes à l'étendue des travaux
- effets cumulatifs des modifications
- la CCN a-t-elle été capable de remplir ses obligations?
- décisions, clarifications, approbations, paiements en temps opportun
- les retards occasionnés par d'autres entrepreneurs travaillant dans la même installation.

The NCC representative's estimate of a reasonable maximum time allowance resulting from conditions beyond the contractor's control is L'estimation, par le représentant de la CCN, du temps maximum alloué pour les conditions indépendantes de la volonté de l'entrepreneur est

The period of delay attributable to the contractor is La période de retard attribuable à l'entrepreneur est

Did the contractor make an effective effort / Est-ce que l'entrepreneur s'est efforcé :

- to meet the schedule / de respecter l'échéancier des travaux
- to clean up deficiencies in a reasonable time / de corriger les vices dans un délai raisonnable

Have you recommended assessments and damages for late completion under the contract? Avez-vous recommandé des dédommagements pour retard d'exécution aux termes du marché?

	Yes
	Oui
	Yes

Yes

Oui

No
Non

Nο

Non No

Non

PROJECT MANAGEMENT / GESTION DU PROJET

The extent to which the contractor takes charge of and effectively manages the work has a direct effect on the inputs required of the NCC.

La mesure dans laquelle l'entrepreneur assume efficacement la gestion des travaux a une incidence directe sur les services qu'on attend de la CCN

Consideration should be given to: Did the contractor

- employ a knowledgeable site superintendent
- required additional input from the NCC staff above that which is normal for a project of similar size and nature
- promptly commence the work
- provide realistic schedules and updates in accordance with the terms of the contract
- provide a comprehensive work plan and adhere to its milestones
- order material promptly and in such a way as to expedite the progress
- provide shop drawings promptly and were they of sufficient detail

Il faut examiner si l'entrepreneur a :

- fait appel aux services d'un surintendant de chantier expérimenté
- demandé au personnel de la CCN une plus grande contribution que ce qui est normal pour un projet de cette importance et de cette nature
- commencé les travaux dans les plus brefs délais
- fourni un calendrier réaliste et des mises à jour conformément aux modalités du contrat
- présenté un plan de travail complet et a respecté les échéances
- commandé le matériel rapidement et de façon à accélérer l'avancement des travaux
- fourni rapidement des dessins d'atelier comprenant suffisamment de détails

PROJECT MANAGEMENT (cont'd) / GESTION DU PROJET (suite)

- effectively manage and complete all Division 1 work site activities
- promptly provide reasonable quotations for changes to the original scope of work
- cooperate when issued directions by the NCC representative
- interpret the contract documents accurately
- establish effective quality control procedures
- effectively coordinate and manage the work of its subcontractors
- promptly correct defective work as the project progressed
- promptly clean-up all deficiencies and incomplete work after issuance of the Interim Certificate of Completion
- satisfactorily clean the work site periodically and at the completion of the project

- géré et achevé efficacement toutes les activités sur le chantier de la Division 1
- proposé rapidement des prix raisonnables pour les modifications à l'énoncé des travaux initial
- accepté les directives du représentant de la CCN
- interprété les documents contractuels avec exactitude
- mis en place des procédures de contrôle de la qualité efficaces
- coordonné et géré efficacement les travaux confiés à des soustraitants
- corrigé promptement le travail défectueux en cours de projet
- corrigé rapidement les travaux non acceptables et terminé les travaux incomplets après réception du certificat provisoire d'achèvement
- nettoyé de façon satisfaisante le chantier périodiquement ainsi qu'à la fin du projet.

CONTRACT MANAGEMENT / GESTION DU CONTRAT

The effectiveness of the contractor to administer the contract in accordance with the provisions expressed in the "front end" portion of the contract documents.

Consideration should be given to: Did the contractor

- in the time frame specified, provide its contract security, Insurance Certificate fully executed and WSIB form where applicable
- submit progress claims in the correct format, accurately representing the work successfully completed and material delivered to the site but not yet installed for each payment period
- submit a Statutory Declaration correctly completed with each progress
- submit an updated Schedule if so specified
- pay subcontractors and suppliers in a timely fashion in accordance with the terms and conditions of its subcontracts
- promptly appoint a competent site superintendent
- notify the NCC representative of all its subcontracting activities
- apply for, obtain and pay for all necessary permits, licenses and certificates
- cooperate with other contractors sent onto the site of the work
- remove a superintendent or unsuitable worker when requested by the NCC representative to do so
- effectively protect the work and the contract documents provided by
- comply with all warranty provisions up to the date of the Contractor Performance Evaluation Report Form (CPERF)
- effectively manage the site during a suspension or termination of the work to mitigate any additional costs to the NCC
- deal promptly with any claims from creditors
- maintain complete records of the project
- provide information promptly when requested to do so
- expedite and co-operate in the settlement of all disputes

Efficacité avec laquelle l'entrepreneur a administré le contrat conformément aux dispositions continues dans la partie « prioritaire » des documents contractuels.

Il faut examiner si l'entrepreneur a :

- fourni, dans le délai prescrit, une garantie contractuelle, un certificat d'assurance dûment signés et le formulaire de la CSST, le cas échéant
- présenté des réclamations périodiques dans le bon format, en décrivant avec précision les travaux exécutés et le matériel livré sur le chantier mains non encore installé, pour chaque période de paiement
- présenté une déclaration solennelle correctement remplie avec chaque réclamation périodique
- fourni un calendrier à jour, sur demande
- payé rapidement les sous-traitants et les fournisseurs conformément aux conditions des contrats de sous-traitance
- désigné dans les plus brefs délais un surintendant de chantier qualifié
- tenu au courant le représentant de la CCN de toutes les activités de sous-traitance
- demandé, obtenu et payé tous les permis, licences et certificats nécessaires
- collaboré avec les autres entrepreneurs envoyés sur le lieu des travaux
- remplacé un surintendant ou un travailleur inapte à la demande du représentant de la CCN
- protégé efficacement les travaux et les documents relativement aux travaux et au contrat fournis par la CCN
- respecté toutes les dispositions de garantie jusqu'à la date du Formulaire Rapport d'évaluation du rendement de l'entrepreneur (FRERE)
- géré efficacement le chantier pendant une suspension des travaux ou lors de leur achèvement, afin de limiter tout coût supplémentaire pour la CCN
- traité dans les plus brefs délais les demandes de paiement des créanciers
- tenu des dossiers complets sur le projet
- fourni promptement les renseignements demandés
- accélère et coopère dans le règlement des différends

HEALTH AND SAFETY / SANTÉ ET SÉCURITÉ

The effectiveness to which the contractor managed and administered the occupational health and safety provisions as stipulated in the contract documents and those required by provincial legislation or those that would otherwise be applicable to the site of the work.

Consideration should be given to: Did the contractor

- provide the NCC with a copy of its health and safety program prior to award of contract
- provide the NCC with a copy of its site specific hazardous assessment prior to award of contract
- apply for and obtain the provincial Notice of Project prior to commencement of the work
- apply for and obtain the Building Permit prior to commencement of the work
- provide a competent superintendent who
 - is qualified in health and safety matters because of her/his knowledge, training and experience
 - is familiar with the OH&S Act and its Regulations that apply to the site of the work
 - remedies any potential or actual danger of health and safety to those employed at the work site
- respond in a timely manner to any non-compliance safety issues noted by the NCC or a representative of the authority having jurisdiction
- implement its safety program in a proactive manner

Efficacité avec laquelle l'entrepreneur a géré et administré les dispositions relatives à la santé et à la sécurité au travail telles que stipulées dans les documents contractuels et dans les règlements provinciaux ou ceux s'appliquant normalement au lieu des travaux.

Il faut examiner si l'entrepreneur a :

- fourni à la CCN une copie de son programme en matière de santé et de sécurité avant l'octroi du contrat
- fourni à la CCN une copie de son évaluation des dangers pouvant survenir sur les lieux avant l'octroi du contrat
- demandé et obtenu l'avis de projet provincial avant le début des travaux
- demandé et obtenu le permis de construction avant le début des travaux
- engagé un surintendant qui :
 - est qualifié en matière de santé et de sécurité de par ses connaissances, sa formation et son expérience
 - connaît bien les dispositions de la Loi sur la santé et la sécurité au travail et de son règlement qui s'applique sur le lieu des travaux
 - remédie à tout danger possible ou réel en matière de santé et de sécurité pouvant toucher toutes les personnes travaillant sur le lieu des travaux
- traité rapidement tous les problèmes de non-conformité à la sécurité relevés par la CCN ou par un représentant de l'autorité qui a juridiction
- mis en œuvre son programme de sécurité de façon proactive

Canada Canada

GC1 GENERAL PROVISIONS

GC1.1	INTERPRE	ETATION			
	GC1.1.1	Headings and References			
	GC1.1.2	Terminology			
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GC1.1 INTERPRETATION

GC1.1.1 Headings and References

- 1) 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

1) In the Contract

"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;

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"Contract Security" means any security given by the Contractor to the NCC in accordance with the Contract:

"Contractor" means the person contracting with the NCC 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 the NCC;

"Certificate of Completion" means a certificate issued by the NCC when the Work reaches Completion;

"Certificate of Measurement" means a certificate issued by the NCC 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 the NCC when the Work reaches Substantial Performance;

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

"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;

"NCC" means the National Capital Commission;

"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;

"Security screening" is a generic term that applies to all types and levels of personnel security screening including Reliability Status, Site Access, and CONFIDENTIAL, SECRET and TOP SECRET security clearances conducted by the NCC;

"Sensitive Information and Assets" means information or assets that have been identified by the NCC as TOP SECRET, SECRET, CONFIDENTIAL or protected;

"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;

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GC1 GENERAL PROVISIONS

"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;

"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

- 1) 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.
- 2) 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 the NCC, ready for use by the NCC or is being used for the intended purposes; and
 - (b) the Work is, in the opinion of the NCC, capable of completion or correction at a cost of not more than
 - (i) 3% of the first \$500,000;
 - (ii) 2% of the next \$500,000; and
 - (iii) 1% 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) the NCC and the Contractor agree not to complete a part of the Work within the specified time;

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GC1 GENERAL PROVISIONS

the cost of that part of the Work that was either beyond the control of the Contractor to complete or the NCC 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

1) 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 the NCC.

GC1.2 CONTRACT DOCUMENTS

GC1.2.1 General

- 1) 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.
- 3) Nothing contained in the contract documents shall create a contractual relationship between the NCC 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 Invitation to Tender 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 drawing; and
 - (c) drawings of larger scale govern over those of smaller scale.

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GC1.2.3 Security and Protection of Documents and Work

- 1) The Contractor shall guard and protect all sensitive contract information (TOP SECRET, SECRET, CONFIDENTIAL and PROTECTED) including printed and digital documents, drawings, information, models, copies thereof and processing systems, whether supplied by the NCC or the Contractor, against loss or compromise and damage from any cause.
- 2) The Contractor shall limit access to sensitive NCC information only to those with a "need-to-know" and who have been successfully security screened to at least the level of sensitivity of the information.
- 3) The Contractor shall ensure all contract information indicated in paragraph 1) is guarded and protected by any subcontractors, agents or suppliers and access limited only to those with a "need-to-know" and who have been successfully security screened to at least the level of sensitivity of the information.
- 4) The Contractor shall keep confidential all information provided to the Contractor by or on behalf of the NCC 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 the NCC, 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 the NCC, except any source that is known to the Contractor to be under an obligation to the NCC not to disclose the information.
- 5) When the Contract, the Work, or any information referred to in paragraph 4) is identified as TOP SECRET, SECRET, CONFIDENTIAL or PROTECTED by the NCC, 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 the NCC.
- 6) Without limiting the generality of paragraphs 4) and 5) of GC1.2.3, when the Contract, the Work, or any information referred to in paragraph 4) is identified as TOP SECRET, SECRET, CONFIDENTIAL or PROTECTED by the NCC, the NCC 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 the NCC 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 status, site access security clearances and other procedures.
- 7) The Contractor shall report any suspected or actual security incidents immediately to the NCC involving loss, compromise or damage of NCC information or assets.
- 8) The Contractor shall safeguard the Work and the Contract, the specifications, drawings and any other information provided by the NCC to the Contractor, and shall be liable to the NCC for any loss or damage from any causes.

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GC1 GENERAL PROVISIONS

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 the NCC.
- 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 RIGHTS AND REMEDIES

1) 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 TIME OF THE ESSENCE

1) Time is of the essence of the Contract.

GC1.6 INDEMNIFICATION BY CONTRACTOR

- 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 the NCC charging or claiming that the Work or any part thereof provided or furnished by the Contractor to the NCC infringes any patent, industrial design, copyright trademark, trade secret or other proprietary right enforceable in Canada.
- 2) The Contractor shall indemnify and save the NCC 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 INDEMNIFICATION BY THE NCC

- Subject to the Crown Liability and Proceedings Act, the Patent Act, and any other law that affects the NCC's rights, powers, privileges or obligations, the NCC 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 the NCC's title to the Work site if owned by the NCC, 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 the NCC to the Contractor.

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GC1 GENERAL PROVISIONS

GC1.8 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 labour conditions 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 the NCC. The Contractor shall furnish evidence of compliance with such laws and regulations to the NCC at such times as the NCC may reasonably request.
- 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 the NCC.
- 4) Within 10 days of making a tender pursuant to paragraph 3) of GC1.8, the Contractor shall notify the NCC 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 the NCC 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 the NCC.
- 7) 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 the NCC with proof of registration with the provincial sales tax authorities in the said province.
- 9) For the purpose of the payment of any applicable tax or the furnishing of security for the payment of any applicable tax 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 the NCC after the time of purchase in accordance with GC3.10 MATERIAL PLANT AND REAL PROPERTY BECOME PROPERTY OF THE NCC, 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 tax payable, at the time of the use or consumption of that Material, Plant or interest of the Contractor in accordance with the relevant legislation.

GC1.9 WORKERS' COMPENSATION

Prior to award of contract, at the time of submitting its first progress claim, 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.

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Canada Canada

GC1 GENERAL PROVISIONS

2) At any time during the term of the Contract, when requested by the NCC, 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 the NCC determines that the Work is of a class or kind that involves national security, the NCC may order the Contractor to:
 - (a) provide the NCC 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 the NCC, 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 UNSUITABLE WORKERS

1) The NCC 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 the NCC, 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 the NCC.
- 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 the NCC.

GC1.13 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

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GC1 GENERAL PROVISIONS

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 SUCCESSION

1) 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 ASSIGNMENT

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

GC1.17 NO BRIBE

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 the NCC 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 Lobbyists Registration 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.
- 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, the NCC 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.

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GC1 GENERAL PROVISIONS

GC1.19 INTERNATIONAL SANCTIONS

- 1) Persons and companies in Canada, and Canadians outside of Canada are bound by economic sanctions imposed by the Government of Canada. As a result, the the NCC cannot accept delivery of goods or services that originate, either directly or indirectly, from the countries or persons subject to economic sanctions.
 - Details on existing sanctions can be found at: http://www.dfait-maeci.gc.ca/trade/sanctions-en.asp.
- 2) It is a condition of the Contract that the Contractor not supply to the NCC 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.

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GC2 ADMINISTRATION OF THE CONTRACT

- GC2.1 NCC 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 NCC REPRESENTATIVE'S AUTHORITY

- 1) The NCC shall designate an NCC Representative and shall notify the Contractor of the name, address and telephone number of the NCC Representative.
- 2) The NCC Representative shall perform the NCC's duties and functions under the contract.
- 3) The NCC Representative shall be authorized to issue notices, instructions and directions to the Contractor and to accept on behalf of the NCC any notice, order or other communication from the contractor relating to the Work.
- 4) The NCC Representative shall, within a reasonable time, review and respond to submissions made by the Contractor in accordance with the requirements of the Contract.

GC2.2 INTERPRETATION OF CONTRACT

- If, at any time before the NCC 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 the NCC.

2) The Contractor shall perform the Work in accordance with any decisions of the NCC that are made under paragraph 1) of GC2.2 and in accordance with any consequential directions given by the NCC.

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GC2 ADMINISTRATION OF THE CONTRACT

3) If the Contractor fails to comply with any instruction or direction issued by the NCC pursuant to the Contract, the NCC may employ such methods as the NCC deems advisable to do what the Contractor failed to do, and the Contractor shall, on demand, pay the NCC an amount that is equal to the aggregate of all costs, expenses and damages incurred or sustained by the NCC by reason of the Contractor's failure to comply with such instruction or direction, including the cost of any methods employed by the NCC in doing what the Contractor failed to do.

GC2.3 NOTICES

- 1) 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 SITE MEETINGS

In consultation with the NCC, 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

- 1) The NCC 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. The NCC 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) The NCC shall reject Work or Material which in the NCC'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 the NCC, on demand, all reasonable costs and expenses that were incurred by the NCC in having the examination performed.
- 3) The Contractor shall provide the NCC 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 the NCC 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, the NCC shall be given access to such Work whenever it is in progress.

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GC2 ADMINISTRATION OF THE CONTRACT

- 4) The Contractor shall furnish the NCC with such information respecting the performance of the Contract as the NCC may require, and render every possible assistance to enable the NCC 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 the NCC's instructions, or by laws or ordinances of the place of the Work, the Contractor shall give the NCC reasonable notice of when such Work shall be ready for review and inspection. The Contractor shall arrange for and shall give the NCC 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 the NCC, 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

- 1) Prior to commencing the Work, the Contractor shall designate a Superintendent and shall notify the NCC 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 the NCC, the Contractor shall remove any Superintendent who, in the opinion of the NCC, is incompetent or has been guilty of improper conduct, and shall forthwith designate another Superintendent who is acceptable to the NCC.
- 4) The Contractor shall not substitute a Superintendent without the written consent of the NCC. If a Superintendent is substituted without such consent, the NCC 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 the NCC has been substituted.

GC2.7 NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR

- 1) 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:
 - (a) of that person's race, national origin, colour, religion, age, sex or marital status;
 - (b) of the race, national origin, colour, religion, age, sex, or marital status of any person having any relationship or association with that person; or
 - (c) a complaint has been made or information has been given by or in respect of that person relating to an alleged failure by the Contractor to comply with subparagraphs 2)(a) and 2)(b) of GC2.7.

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GC2 ADMINISTRATION OF THE CONTRACT

- 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 the NCC by registered mail or courier service; and
 - (c) when the Labour Conditions are applicable under the circumstances of the complaint, forward a copy of the complaint to HRSDC - Labour to the attention of the appropriate Director as described in the Labour Conditions ("HRSDC - Labour" means the labour component of the federal Department of Human Resources and Skills Development).
- 4) Within twenty four (24) hours immediately following receipt of a direction from the NCC 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 the NCC believes to be in breach of the provisions of paragraph 2) of GC2.7.
- 5) No later than thirty (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, the NCC 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, the NCC shall take the necessary action to have the breach remedied, and shall determine all supplementary costs incurred by the NCC as a result.
- 8) The NCC 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.C. 1985, c. 17 (2nd Supp.);
 - (b) a written award issued pursuant to the Canadian Human Rights Act, RS.C. 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 the NCC is of the opinion that the Contractor has breached any of the provisions of this clause, the NCC 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.

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GC2 ADMINISTRATION OF THE CONTRACT

GC2.8 ACCOUNTS AND AUDITS

- 1) 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 the NCC or by persons designated to act on behalf of the NCC.
- 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 two years after the date that a Certificate of Completion has been issued or until the expiration of such other period of time as the NCC 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.

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- 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 AND FAIR WAGES
- GC3.9 TRUCK HAULAGE RATES (CANCELLED)
- GC3.10 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF THE NCC
- GC3.11 DEFECTIVE WORK
- GC3.12 CLEANUP OF SITE
- GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK

GC3.1 PROGRESS SCHEDULE

- 1) The Contractor shall:
 - (a) prepare and submit to the NCC, 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 the NCC of any revisions to the schedule required as the result of any extension of time for completion of the Contract that was approved by the NCC; and
 - (d) prepare and submit to the NCC, at the time of issuance of an Certificate of Substantial Performance, an update of any schedule clearly showing a detailed timetable that is acceptable to the NCC for the completion of any unfinished Work and the correction of all listed defects.

GC3.2 ERRORS AND OMISSIONS

The Contractor shall report promptly to the NCC 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 the NCC 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 the NCC 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.
- 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.

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GC3.4 EXECUTION OF THE WORK

- 1) 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.
- 4) When requested in writing by the NCC, the Contractor shall make appropriate alterations in the method, Plant or workforce at any time the NCC 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 the NCC.
- 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

- 1) Unless otherwise specified in the Contract, all Material incorporated in the Work shall be new.
- 2) 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 the NCC to substitute a similar item for the one specified.
- 3) If the NCC 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, the NCC may approve the substitution, subject to the following:
 - (a) the request for substitution shall be made in writing to the NCC and shall be substantiated by information in the form of the manufacturer's literature, samples and other data that may be required by the NCC;
 - (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;

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- (c) substitution of Material shall be permitted only with the prior written approval of the NCC, 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 the NCC; and
- (d) the Contractor shall be responsible for all additional expenses incurred by the NCC, 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 the NCC in writing of the Contractor's intention to subcontract.
- 3) 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) The NCC may for reasonable cause, object to the intended subcontracting by notifying the Contractor in writing within six (6) days of receipt by the NCC of a notification referred to in paragraph 2) of GC3.6.
- 5) If the NCC 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 the NCC.
- 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 the NCC's consent to a subcontracting shall be construed to relieve the Contractor from any obligation under the Contract or to impose any liability upon the NCC.

GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS

- The NCC 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, the NCC 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;

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- (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 the NCC 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 the NCC 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 for 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 the NCC 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,

the NCC 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 AND FAIR WAGES

- 1) The Labour Conditions and the Schedules of Wage Rates form part of these General Conditions.
- 2) 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 the Canada and have been honourably discharged therefrom.
- 3) The Contractor shall maintain good order and discipline among the Contractor's employees and workers engaged in the Work 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 THE NCC

- 1) 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 the NCC for the purposes of the Work and they shall continue to be the property of the NCC:
 - (a) in the case of Material, until the NCC indicates that the Materials shall not be required for the Work; and

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- (b) in the case of Plant, real property, licences, powers and privileges, until the NCC indicates that the interest vested in the NCC therein is no longer required for the purposes of the Work.
- 2) Material or Plant, that is the property of the NCC 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 the NCC.
- 3) The NCC 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 the NCC.

GC3.11 DEFECTIVE WORK

- 1) 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 the NCC, it is not expedient to correct defective Work or Work not performed as provided for in the Contract documents, the NCC 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 the NCC 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 the NCC.
- 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 the NCC'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

- 1) 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 the NCC 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

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- (b) rectify and make good any defect or fault that appears in or comes to the attention of the NCC 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 the NCC, 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 the NCC;
- (d) provide, to the NCC prior to the issuance of the Certificate of Completion, a list of all extended warranties and guarantees referred to in paragraph (c) above.
- 2) The NCC 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.

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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 THE NCC
- GC4.4 CONTAMINATED SITE CONDITIONS

GC4.1 PROTECTION OF WORK AND PROPERTY

- 1) 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 the NCC to the Contractor.
- 2) The Contractor shall provide all facilities necessary for the purpose of maintaining security, and shall assist any person authorized by the NCC to inspect or to take security measures in respect of the Work and its site.
- 3) The NCC may direct the Contractor to do such things and to perform such work as the NCC 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 the NCC are protected and are not removed, defaced, altered nor destroyed.
- 2) The NCC may direct the Contractor to do such things and to perform such work as the NCC 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 the NCC.

GC4.3 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY THE NCC

 Subject to paragraph 2) of GC4.3, the Contractor is liable to the NCC 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 the NCC for use in connection with the Contract, whether or not that loss or damage is attributable to causes beyond the Contractor's control.

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GC4 PROTECTIVE MEASURES

- 2) The Contractor is not liable to the NCC 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 the NCC except for the purpose of performing the Contract.
- 4) When the Contractor fails to make good any loss or damage for which the Contractor is liable under paragraph 1) within a reasonable time, the NCC may cause the loss or damage to be made good at the Contractor's expense, and the Contractor shall thereupon be liable to the NCC for the cost thereof and shall, on demand, pay to the NCC an amount equal to that cost.
- 5) The Contractor shall keep records of all Material, Plant and real property supplied by the NCC as the NCC requires and shall satisfy the NCC, 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 the NCC 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, the NCC 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 the NCC's determination.
- 4) If the Contractor's services are required by the NCC, the Contractor shall follow the direction of the NCC with regard to any excavation, treatment, removal and disposal of any polluting substance or material.
- 5) The NCC, at the NCC'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.
- 6) 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.

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GC5 TERMS OF PAYMENT

- GC5.2 AMOUNT PAYABLE
- GC5.3 INCREASED OR DECREASED COSTS
- GC5.4 PROGRESS PAYMENT
- GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK
- GC5.6 FINAL COMPLETION
- GC5.7 PAYMENT NOT BINDING ON THE NCC
- GC5.8 CLAIMS AND OBLIGATIONS
- GC5.9 RIGHT OF SETOFF
- GC5.10 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION
- GC5.11 DELAY IN MAKING PAYMENT
- GC5.12 INTEREST ON SETTLED CLAIMS
- GC5.13 RETURN OF SECURITY DEPOSIT

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 the NCC.
- 2) An amount is "due and payable" when it is due and payable by the NCC to the Contractor according to GC5.4 PROGRESS PAYMENT, GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK or GC5.6 FINAL COMPLETION.
- 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 NCC.
- 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. Ottawa 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, the NCC shall pay the Contractor, at the times and in the manner hereinafter set out, the amount by which the amounts payable by the NCC to the Contractor in accordance with the Contract exceed the amounts payable by the Contractor to the NCC, 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.
- 2) When making any payment to the Contractor, the failure of the NCC to deduct an amount payable to the NCC 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) No payment other than a payment that is expressly stipulated in the Contract, shall be made by the NCC to the Contractor for any extra expense or any loss or damage incurred or sustained by the Contractor.

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GC5 TERMS OF PAYMENT

GC5.3 INCREASED OR DECREASED COSTS

- 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 arising pursuant to the Labour Conditions.
- 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 tender; or
 - (b) after the date of submission of the last revision, if the Contractor's tender 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 the NCC 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 PROGRESS PAYMENT

- 1) On the expiration of a payment period, the Contractor shall deliver to the NCC:
 - (a) a written progress claim in a form acceptable to the NCC 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 with respect to the Labour Conditions 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.
- 2) Within 10 days of receipt of a progress claim and statutory declaration from the Contractor, the NCC 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 the NCC:
 - (a) is in accordance with the Contract; and
 - (b) was not included in any other progress report relating to the Contract.

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GC5 TERMS OF PAYMENT

- 3) Subject to GC5.2 AMOUNT PAYABLE, and paragraph 5) of GC5.4, the NCC shall pay the Contractor an amount that is equal to:
 - (a) 95% of the value that is indicated in the NCC's progress report if a labour and material payment bond has been furnished by the Contractor; or
 - (b) 90% of the value that is indicated in the NCC's progress report if a labour and material payment bond has not been furnished by the Contractor.
- 4) Subject to GC5.2, "Amount Payable", and paragraph 5) of GC5.4, the NCC shall pay the Contractor an amount that is equal to 90% of the value that is indicated in the NCC's progress report
- 5) In the case of the Contractor's first progress claim, it is a condition precedent to the NCC'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 and has provided evidence of compliance with workers' compensation legislation applicable to the place of the Work in accordance with GC1.9 WORKERS' COMPENSATION.

GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK

- 1) If, at any time before the issuance of a Certificate of Completion, the NCC determines that the Work has reached Substantial Performance as described in subparagraph 1) (b) of GC1.1.4 SUBSTANTIAL PERFORMANCE, the NCC 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 the NCC; 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.
- 3) Subject to GC5.2 AMOUNT PAYABLE and paragraph 4) of GC5.5, the NCC 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 the NCC's estimate of the cost to the NCC of rectifying defects described in the Certificate of Substantial Performance; and
 - (c) an amount that is equal to the NCC's estimate of the cost to the NCC of completing the parts of the Work described in the Certificate of Substantial Performance other than defects listed therein.
- 4) The NCC 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 the NCC:

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- (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 with respect to the Labour Conditions, 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 the NCC 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, the NCC 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, the NCC shall issue a Certificate of Measurement that shall, subject to GC8, be binding upon and conclusive between the NCC and the Contractor as to the quantities referred to therein.
- 2) Subject to GC5.2 AMOUNT PAYABLE and paragraph 3) of GC5.6, the NCC 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) The NCC 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 the NCC:
 - 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 PAYMENT NOT BINDING ON NCC

 Neither acceptance of a progress claim or progress report, nor any payment made by the NCC under the Contract, nor partial or entire use or occupancy of the Work by the NCC shall constitute an acceptance by the NCC 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 the NCC to pay the Contractor.

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- Whenever requested to do so by the NCC, 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, the NCC 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 the NCC'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 the NCC:
 - (a) such amount as may be paid by the NCC 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.
- 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 the NCC 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 the NCC 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:

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- (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 the NCC.
- 8) Upon receipt of a notice of claim, the NCC 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) The NCC shall notify the Contractor in writing in a timely manner of receipt of any claim and of the intention of the NCC to withhold funds. At any time thereafter and until payment is made to the claimant, the Contractor may be entitled to post, with the NCC, security in a form acceptable to the NCC in an amount equal to the value of the claim, and upon receipt of such security the NCC 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, the NCC may set off any amount payable to the NCC 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 the NCC 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 the NCC 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:
 - (a) 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 the NCC, completion of the Work was delayed for reasons beyond the control of the Contractor.
- 2) If the Contractor does not complete the Work by the day fixed for its completion but completes it thereafter, the Contractor shall pay the NCC an amount equal to the aggregate of:
 - (a) all salaries, wages and travelling expenses incurred by the NCC in respect of persons overseeing the performance of the Work during the period of delay;

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- (b) the cost incurred by the NCC 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 the NCC during the period of delay as a result of the Work not being completed by the day fixed for its completion.
- 3) The NCC may waive the right of the NCC 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 the NCC, 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 the NCC in making any payment when it is due pursuant to GC5 TERMS OF PAYMENT, shall not be a breach of the Contract by the NCC.
- 2) Subject to paragraph 3) of GC5.11, the NCC 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, on 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; 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 the NCC and the Contractor under the Contract.
- 2) A claim is deemed to have been settled when an agreement in writing is signed by the NCC and the Contractor setting out the amount of the claim to be paid by the NCC 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) The NCC shall pay to the Contractor simple interest on the amount of a settled claim at the Average Bank Rate plus 3 per cent 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

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

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- GC6.1 CHANGES IN THE WORK
- GC6.2 CHANGES IN SUBSURFACE CONDITIONS
- GC6.3 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC NTEREST
- 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
- GC6.6 ALLOWABLE COSTS FOR CONTRACT CHANGES UNDER GC6.4.1
 - GC6.6.1 General
 - GC6.6.2 Hourly Labour Rates
 - GC6.6.3 Material, Plant and Equipment Costs
 - GC6.6.4 Allowance to the Contractor or Subcontractor

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.
- 2) 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

- 1) 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.

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- 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

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- 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

- 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 an allowance for supervision, co-ordination,
 administration, overhead, margin and the risk of undertaking the work within the stipulated amount,
 which allowance shall be equal to
 - (a) 20% of the aggregate costs referred to herein for that portion of the Work done by the Contractor's own forces, if the aggregate cost of the Work does not exceed \$50,000;
 - (b) 15% of the aggregate costs referred to herein for that portion of the Work that is done by subcontract, if the aggregate cost of the Work does not exceed \$50,000; or
 - (c) a negotiated percentage of the aggregate costs referred to herein or a negotiated amount
 - (i) if the aggregate cost of the Work exceeds \$50,000; or
 - (ii) if the Contractor and Canada agree in writing.
- 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 an allowance determined in accordance with paragraph 1) of GC6.4.1.
- 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 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

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- (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% 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 GST / HST 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%, either party to the Contract may make a written request to the other party to negotiate an

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amended price per unit for that portion of the item which exceeds 115% of the estimated tendered quantity, and to facilitate approval of any amended price per unit, the Contractor shall, on request, provide Canada with

- (a) 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% 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% 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% of the tendered quantity actually been performed or supplied.

GC6.5 DELAYS AND EXTENSION OF TIME

- 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.

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- 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.

GC6.6 ALLOWABLE COSTS FOR CONTRACT CHANGES UNDER GC6.4.1

GC6.6.1 General

- 1) The Contractor shall submit a cost estimate breakdown for each contemplated change, in accordance with paragraph 4) of GC6.4.1 PRICE DETERMINATION PRIOR TO UNDERTAKING CHANGES. The breakdown shall itemize all labour, material, plant and equipment costs estimated by the Contractor and subcontractors, and the amount of each allowance.
- 2) It is the responsibility of the Contractor to ensure that all prices included in the Contractor's breakdown to the NCC, including those of subcontractors, are fair and reasonable in view of the terms expressed herein.
- 3) The labour hours required for the contemplated change shall be based on the estimated number of hours to perform the work.
- 4) Time spent by a working foreman may be included in the number of labour hours, at a rate agreed to in writing by the Contractor and the NCC.
- 5) Time attributable to material handling, productivity factors and approved rest periods is to be included in the number of hours required by the contemplated change and will not be paid as a separate item under hourly rates.
- 6) Allowances referred to in section 04 below are not to be included in the hourly labour rates.
- 7) Credit for work deleted will only be for the work directly associated with the change.
- 8) When a change deletes work which has not yet been performed, the NCC is entitled to an adjustment in the Contract Amount equal to the cost the Contractor would have incurred had the work not been deleted.
- 9) Allowances referred to in Section 04 below shall not be applied to any credit amounts for deleted work.
- 10) In those cases where the change involves additions and deletions to the work, the allowances referred to in section 04 below shall apply only when the cost of the additions minus the cost of the deletions would result in an increase in the Contract Amount. The percentage allowance shall only be applied to that portion of the costs of the additions that is in excess of the cost of the deletions.

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11) If the contemplated change in the work necessitates a change in the contract completion date, or has an impact on the work, the Contractor shall identify and include the resulting cost in the breakdown.

GC6.6.2 Hourly Labour Rates

- 1) The hourly labour rates listed in the Contractor's breakdown shall be determined in accordance with the collective agreements that are applicable at the site of the work and shall include:
 - (a) the base rate of pay;
 - (b) vacation pay:
 - (c) benefits which includes:
 - (i) welfare contributions;
 - (ii) pension contributions;
 - (iii) union dues;
 - (iv) training and industry funds contributions; and
 - (v) other applicable benefits, if any, that can be substantiated by the Contractor.
 - (d) statutory and legislated requirements, assessed and payable under statutory authority, which includes:
 - (i) Employment Insurance contributions;
 - (ii) Canada Pension Plan or Québec Pension Plan contributions;
 - (ii) Worker's Compensation Board or Commission de la santé et de la sécurité du travail premiums;
 - (iv) Public Liability and Property Damage insurance premiums; and
 - (v) health tax premiums.
- 2) In the case of nonunion labour, all rates claimed shall be in accordance with the terms of the Labour Conditions forming part of this contract and the Contractor must provide satisfactory proof of the rates actually paid.

GC6.6.3 Material, Plant and Equipment Costs

 The costs of all purchases and rentals must be based on the actual amount paid to the suppliers by the Contractor or subcontractor and said costs are to include all applicable discounts.

GC6.6.4 Allowance to the Contractor or Subcontractor

- 1) The allowances determined in accordance with paragraph 1) of GC6.4.1 PRICE DETERMINATION PRIOR TO UNDERTAKING CHANGES shall be considered as full compensation for:
 - (a) supervision, co-ordination, administration, overhead, margin and the risk of undertaking the work within the stipulated amount; and

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- (b) miscellaneous additional costs related to:
 - (i) the purchase or rental of material, plant and equipment;
 - (ii) the purchase of small tools and supplies;
 - (iii) safety and protection measures; and
 - (iv) permits, bonds, insurance, engineering, as built drawings, commissioning and site office.

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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

- 1) By giving notice in writing to the Contractor in accordance with GC2.3 NOTICES, the NCC, 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 the NCC 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 the NCC within six days of the NCC 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 the NCC, upon demand, an amount that is equal to the amount of all loss and damage incurred or sustained by the NCC 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 the NCC, the NCC may pay the Contractor the amount, if any, of the holdback or a progress claim as determined by the NCC 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 the NCC 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 the NCC without compensation.
- 6) When the NCC 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 the NCC to retain that Plant, Material, or interest, it shall revert to the Contractor.

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GC7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT

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 Bankruptcy and Insolvency Act, the Contractor shall immediately forward a copy of the proposal or the notice of intention to the NCC.

GC7.2 SUSPENSION OF WORK

- 1) When, in the NCC's opinion, it is in the public interest to do so, the NCC 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.
- 2) When a notice of suspension is received by the Contractor, the Contractor shall suspend all operations in respect of the Work except those that the NCC determines are necessary for the care and preservation of the Work, Plant and Material.
- 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 the NCC.
- 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, the NCC 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 the NCC and the Contractor. If the NCC 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

- 1) The NCC 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, the NCC 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 the NCC and all amounts that are due to the NCC from the Contractor pursuant to the Contract.
- 4) In no event shall the total amount payable by the NCC 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

1) If the Work is taken out of the Contractor's hands, or the Contractor is in breach of, or in default under, the Contract, the NCC may convert a security deposit to the NCC's own use.

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GC7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT

- 2) If the NCC converts a security deposit, the amount realized shall be deemed to be an amount due from the NCC to the Contractor under the Contract.
- 3) Any balance of the amount realized that remains after payment of all losses, damage and claims of the NCC and others shall be paid by the NCC to the Contractor if, in the opinion of the NCC, it is not required for the purposes of the Contract.

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GC8 DISPUTE RESOLUTION

- 1) The Contractor may, within 10 days after the communication to the Contractor of any decision or direction referred to in GC6.1 CHANGES IN THE WORK and GC2.2 INTERPRETATION OF CONTRACT, protest that decision or direction.
- 2) A protest referred to in paragraph 1) of GC8 shall be in writing, contain full reasons for the protest, be signed by the Contractor and be given to the NCC.
- 3) If the Contractor gives a protest pursuant to paragraph 2) of GC8, any compliance by the Contractor with the decision or direction that was protested shall not be construed as an admission by the Contractor of the correctness of that decision or direction, or prevent the Contractor from taking whatever action the Contractor considers appropriate in the circumstances.
- 4) The giving of a protest by the Contractor pursuant to paragraph 2) of GC8 shall not relieve the Contractor from complying with the decision or direction that is the subject of the protest.
- 5) Subject to paragraph 6) of GC8, the Contractor shall take any action referred to in paragraph 3) of GC8 within 3 months after the date of the Certificate of Completion referred to in GC5.6 FINAL COMPLETION and not afterwards, except where it is otherwise provided by law.
- 6) The Contractor shall take any action referred to in paragraph 3) of GC8 resulting from a direction under GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK, within 3 months after the expiry of a warranty or guarantee period and not afterwards, except where it is otherwise provided by law.
- 7) Subject to paragraph 8) of GC8, if the NCC determines that the Contractor's protest is justified, the NCC shall pay the Contractor the cost of the additional labour, Plant and Material necessarily incurred by the Contractor in carrying out the protested decision or direction.
- 8) Costs referred to in paragraph 7) of GC8 shall be calculated in accordance with GC6.4 DETERMINATION OF PRICE.

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NCC Canada

GC9 CONTRACT SECURITY

- GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY
- GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY
- GC9.3 IRREVOCABLE STANDBY LETTER OF CREDIT

GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY

- The Contractor shall, at the Contractor's expense and within 7 days after the date that the Contractor receives notice that the Contractor's bid was accepted by the NCC, obtain and deliver Contract Security to the NCC in one or more 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.
- 5) In addition to the limitation imposed in paragraph 4) of GC9.1, the Contractor further acknowledges and agrees that it will not be entitled to have access to the site, nor to commence work pursuant to this contract until it has delivered the Contract Security as specified herein.

GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY

- 1) The Contractor shall deliver to the NCC (a), (b) or (c):
 - (a) A performance bond and a labour and material payment bond each in an amount that is equal to not less than 50% of the Contract Amount including taxes
 - (b) A labour and material payment bond in an amount that is equal to not less than 50% of the Contract Amount including taxes, and a security deposit in an amount that is equal to not less than 10% of the Contract Amount including taxes.
 - (c) A security deposit in an amount prescribed by subparagraph 1)(b) of GC9.2, plus an additional amount that is equal to 10% of the Contract Amount including taxes.
- 2) The amount of a security deposit referred to in subparagraph 1)(b) of GC9.2 shall not exceed \$2,000,000 regardless of the Contract Amount including taxes.
- 3) 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 the NCC.
 - (a) The approved form for the performance bond is enclosed at the end of GC9.
 - (b) The approved form for the labour and material payment bond is enclosed at the end of GC9
 - (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=12027.

4) A security deposit referred to in subparagraphs 1)(b) and 1)(c) of GC9.2 shall be in the form of:

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GC9 CONTRACT SECURITY

- (a) a bill of exchange, bank draft or money order made payable to the NCC 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.
- 5) For the purposes of subparagraph 4)(a) of GC9.2:
 - (a) 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 certain sum of money to, or to the order of, the NCC;
 - (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 5)(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 Canadian Payments Act;
 - (ii) a corporation that accepts deposits that are insured, to the maximum permitted by law, by the Canada Deposit Insurance Corporation or the Régie de l'assurance-dépôts du Québec;
 - (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 cooperative 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.
- 6) Bonds referred to in subparagraph 4)(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
 - (b) accompanied by a duly executed instrument of transfer of the bonds to the NCC 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 NCC pursuant to the Domestic Bonds of Canada Regulations.

GC9.3 IRREVOCABLE STANDBY LETTER OF CREDIT

- As an alternative to a security deposit, an irrevocable standby letter of credit is acceptable to the NCC, the amount of which shall be determined in the same manner as a security deposit referred to in GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY.
- 2) An irrevocable standby letter of credit 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:

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GC9 CONTRACT SECURITY

- (i) is to make a payment to, or to the order of, the NCC as the beneficiary;
- (ii) is to accept and pay bills of exchange drawn by the NCC;
- (ii) 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 NCC by way of the financial institution's draft against presentation of a written demand for payment signed by the NCC;
- (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 for Documentary Credits, 2007 Revision, ICC Publication No. 600;
- (g) clearly specify that it is irrevocable or deemed to be irrevocable pursuant to article 6 c) of the International Chamber of Commerce (ICC) Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600; and
- (h) 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.

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PERFORMANCE BOND

		Bond Number	
		Amount	\$
KNOW ALL MEN BY THESE PRESENTS,	that		as Principal,
hereinafter called the Principal, and			as Surety, hereinafter
called the Surety, are, subject to the conditi	ons hereinafter contained, held	and firmly bound unto the National Ca	pital Commission as
Obligee, hereinafter called the NCC, In	the amount of		dollars
(\$), lawful mone	y of Canada, for the payment o	of which sum, well and truly to be made,	, the Principal and the
Surety bind themselves, their heirs, executor	ors, administrators, successors	and assigns, jointly and severally, firmly	y by these presents.
SIGNED AND SEALED this	day of	, V	VHEREAS, the Principal has
entered into a Contract with the NCC, dated	d the day	of	
for:			
work in accordance with the Contraction (i) it shall be between the Surety (ii) the selection of such completic (c) if the work is taken out of the Prince undertake the completion of the available to the NCC under the Completion of the available for and pay all the excess (e) not be entitled to any Contract management of the provided, however, and without respectively.	fect, subject, however, to the following clared by the NCC to be, in default of the clared by the NCC directly act provided that if a contract is and the completing contractor, and contractor shall be subject to incipal's hands and the NCC, a work, assume the financial reportract, as costs of completion of the Contract, and the NCC, and contract, and the NCC, and the	ault under the Contract, the Surety shale fault of the Principal, cts the Surety to undertake the complet entered into for the completion of the vand to the approval of the NCC, after reasonable notice to the Surety, desponsibility for the cost of completion of the liability of the Surety under this Broregoing, upon the completion of the Cacks related thereto held by the NCC responsibility of the Surety under this Broregoing, upon the completion of the Cacks related thereto held by the NCC responsibility of the Surety under this Broregoing, upon the completion of the Cacks related thereto held by the NCC responsibility of the Surety under this Broregoing, upon the completion of the Cacks related thereto held by the NCC responsibility of the Surety under this Broregoing.	ion of the work, complete the work, does not direct the Surety to on in excess of the moneys Contract and any holdbacks ond shall remain unchanged
,	·		evaluation of two (2)
 No suit or action shall be instituted by the from the date on which final payment u 		ty pursuant to these presents after the 6	expiration of two (2) years
IN TESTIMONY WHEREOF, the Principal has with its corporate seal duly attested by the s			
SIGNED, SEALED AND DELIVERED in th	e presence of:	Note: Affix Corporate se	eal if applicable.
Principal			
Surety			



LABOUR AND MATERIAL PAYMENT BOND

				Bond Number	
				Amount	\$
KNOW ALL MEN BY THESI	E PRESENTS, that				as Principal,
hereinafter called the Princip	al, and			a	s Surety, hereinafter
called the Surety, are, subjec	ct to the conditions hereinafte	r contained, held ar	nd firmly bound	unto the National Capital Commission	as Obligee,
hereinafter called the NCC,	In the amount of				dollars
(\$), lawful money of Canada,	for the payment of	which sum, wel	and truly to be made, the Principal an	nd the Surety
bind themselves, their heirs,	executors, administrators, su	ccessors and assig	gns, jointly and s	everally, firmly by these presents.	
SIGNED AND SEALED this	day of		,	. WHEREAS, the Principal ha	as entered into a Contract
with the NCC, dated the	day of		,	, for:	
		which contract	ct is by referenc	e made a part hereof, and is hereinafte	er referred to as the Contract.

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 NCC 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 NCC 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 NCC 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 NCC 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.
- 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 hereinafter set forth to the Principal and the Surety above named, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail to the Principal and the Surety at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the Contract is located. Such notice shall be given
 - (i) in respect of any claim for the amount or any portion thereof required to be held back from the Claimant by the Principal or by the Sub-Contractor of the Principal under either the terms of the Claimant's Contract with the Principal or the Claimant's Contract with the Sub-Contractor of the Principal within one hundred and twenty (120) days after such Claimant should have been paid in full under this Contract;

.../2

- (ii) in respect of any claim other than for the holdback or portion thereof referred to above within one hundred and twenty (120) days after the date upon which such Claimant did or performed the last of the service, work or labour or furnished the last of the materials for which such claim is made under the Claimant's Contract with the Principal or a Sub-Contractor of the Principal
- (b) After the expiration of one (1) year following the date on which the Principal ceased work on the said Contract, including work performed under the guarantees provided in the Contract;
- (c) Other than in a court of competent jurisdiction in the province or district of Canada in which the subject matter of the Contract or any part thereof is situated and not elsewhere, and the parties hereto hereby agree to submit to the jurisdiction of such court.
- 7. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.
- 8. The Surety shall not be entitled to claim any moneys relating to the Contract and the liability of the Surety under this Bond shall remain unchanged and, without restricting the generality of the foregoing, the Surety shall pay all valid claims of Claimants under this Bond before any moneys relating to the Contract held by the NCC are paid to the Surety by the NCC.
- 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 its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its authorized signing authority, the day and year first above written.

SIGNED, SEALED AND DELIVERED in the presence of:	Note: Affix Corporate seal if applicable.		
Principal			
Witness			
Surety			





GC10.1 GC10.2 GC10.3	INSURANCE CONTRACTS INSURANCE PROCEEDS INSURANCE TERMS			
	GC10.3.1	General GC10.3.1.1	Proof of Insurance	
		GC10.5.1.1	Proof of Hisurance	
		GC10.3.1.2	Payment of Deductible	
	GC10.3.2	Commercial G	eneral Liability	
		GC10.3.2.1	Scope of Policy	
		GC10.3.2.2	Insured	
		GC10.3.2.3	Period of Insurance	
	GC10.3.3	Builder's Rick / Installation Floater		
		GC10.3.3.1	Scope of Policy	
		GC10.3.3.2	Amount of Insurance	
		GC10.3.3.3	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 the NCC in accordance with the requirements of
 GC10.
- 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 GC10; and
 - (b) provide for the payment of claims under such insurance contracts in accordance with GC10.2 INSURANCE PROCEEDS.

GC10.2 INSURANCE PROCEEDS

- 1) 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 the NCC, and:
 - (a) the monies so paid shall be held by the NCC for the purposes of the contract; or
 - (b) if the NCC elects, shall be retained by the NCC, in which event they vest in the NCC 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, the NCC may cause an audit to be made of the accounts of the Contractor and of the NCC 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 the NCC, including any costs incurred in respect of the clearing of the work and its site and any other amount that is payable by the Contractor to the NCC under the contract, minus any monies retained pursuant to subparagraph 1)(b) of GC10.2; and
 - (b) the aggregate of the amounts payable by the NCC to the Contractor pursuant to the contract up to the date of the loss or damage.

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GC10 INSURANCE



- 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 the NCC 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, the NCC 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 the NCC pursuant to paragraph 7) of GC10.2 shall be made in accordance with the contract but the amount of each payment shall be 100% of the amount claimed notwithstanding subparagraphs 3)(a) and 3)(b) of GC5.4 PROGRESS PAYMENT.

GC10.3 INSURANCE TERMS

GC10.3.1 General

GC10.3.1.1 Proof of Insurance

- 1) Before commencement of the Work, and prior to contract award, the Contractor shall deposit with the NCC a Certificate of Insurance (approved Insurance form is enclosed at the end of this section).
 - 2) Upon request by the NCC, the Contractor shall provide originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the provisions contained herein.
 - 3) The insurance policies shall be endorsed to provide the NCC with no less than 30 days notice in writing in advance of a cancellation of insurance or any reduction in coverage.

GC10.3.1.2 Payment of Deductible

 Any moneys paid or payable in respect of a deductible amount shall be borne exclusively by the Contractor.

GC10.3.2 Commercial General Liability

GC10.3.2.1 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;
 - (b) a Products/Completed Operations Aggregate Limit of not less than \$5,000,000; and
 - (c) a General Aggregate Limit of not be less than \$10,000,000 per policy year, if the policy is subject to such a limit.

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Canada

GC10 INSURANCE

- 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.

GC10.3.2.2 Insured

1) The policy shall insure the Contractor and shall include the NCC as an additional Insured, with respect to liability arising out of the operations of the Contractor with regard to the work.

GC10.3.2.3 Period of Insurance

1) Unless otherwise directed in writing by the NCC, 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.

GC10.3.3 Builder's Risk / Installation Floater

GC10.3.3.1 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.

GC10.3.3.2 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 the NCC 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.

GC10.3.3.3 Insurance Proceeds

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GC10 INSURANCE

- 1) The policy shall provide that the proceeds thereof are payable to the NCC may direct in accordance with GC10.2, "Insurance Proceeds".
- 2) The Contractor shall, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.

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CERTIFICAT OF INSURANCE ATTESTATION D'ASSURANCE

• To be completed by the insurer / À être rempli par l'assureur

CONTRACT / MARCHÉ							
Description and location of work / Description et endroit des travaux					Contract r	no. / Nº de d	contrat
INSURER / ASSUREU	R						
Name / Nom							
	No., Street / N°,	rue					
Address / Adresse	City / Ville	City / Ville		Province		Postal code / Code postal	
BROKER / COURTIER							
Name / Nom							
	No., Street / N°,	rue					
Address / Adresse	City / Ville		Province	Province		Postal code / Code postal	
INSURED / ASSURÉ	1						
Name of contractor / Nom de l'entrepreneur							
	No., Street / N°,	rue					
Address / Adresse	City / Ville	City / Ville Pr		Province		Postal code / Code postal	
ADDITIONAL INSURE	D / ASSURÉ AD	DITIIONNEL	'			L	
The National Capital Com	mission / La Comn	nission de la capitale nation	ale				
This insurer certifies that the contract made between	t the following poeen the named ins	olicies of insurance are at sured and the National Ca	present in fo	rce covering all o	perations of	the Insure	d, in connection with
the contract made between the named insured and the National Capital Commission. L'assureur atteste que les polices d'assurances suivantes sont présentement en vigueur et couvrent toutes les activités de l'assuré en fonction du marché conclu entre l'Assuré dénommé la Commission de la capitale nationale							
POLICY / POLICE			•				
Type Genre		Number Numéro		Inception Date Date d'effet	Expiry Date d'e		Limit of Liability Limites de garantie
Commercial General Liabi Responsabilité civile des e		rumoro		Date a chet	Date d o	Apriculori	Limited de garantie
Builder's Risk "All Risks"							
Assurance des chantiers des Installation Floater "All Ris	sks"						
Risques d'installation « tout Other (list) / Autre (énumé							
, , ,	,						
Each of these policies includes the coverages and provisions as specified in Insurance Terms and each policy has been endorsed to cover the National Capital Commission as an Additional Insured. The Insurer agrees to notify the National Capital Commission in writing thirty (30) days prior to any material change in, or cancellation of any policy or coverage. Chacune des présentes polices renferment des garanties et dispositions spécifiées aux Conditions d'assurance, et chaque police a été amendée pour couvrir la Commission de la capitale nationale en tant qu'assuré additionnel. L'assureur convient de donner un préavis de trente (30) jours à la Commission de la capitale nationale en cas de changement visant la garantie d'assurance ou les conditions ou de l'annulation de n'importe quelle police ou garantie.							
Name of Insurer's Office or Authorized Employee / Nom du cadre ou de la personne autorisée Telephone number / Numéro de téléphone							
Signature				Date			



FAIR WAGES AND HOURS OF LABOUR - LABOUR CONDITIONS

- 01 Interpretation
- 02 General Fair Wage Clause
- 03 Hours of Work
- 04 Labour Conditions to be Posted
- 05 The Contractor to Keep Records which are to be Kept Open for Inspection
- 06 NCC Requirements before Payment made to Contractor
- 07 Authority to pay Wages in the Event of Default by the Contractor
- 08 Conditions of Subcontracting
- 09 Non-discrimination in Hiring and Employment of Labour

01 Interpretation

1. In these Conditions

"Act" means the Fair Wages and Hours of Labour Act;

"Regulations" means the Fair Wages and Hours of Labour Regulations made pursuant to the Act;

"Contract" means the contract of which these Labour Conditions are part;

"the NCC" means the National Capital Commission;

"Contractor" means the person who has entered into the contract with the NCC;

"Regional Director" means the director of a regional office of the Department of Human Resources and Skills Development or the director's designated representative;

"Inspector" has the meaning assigned to the term by Part III of the Canada Labour Code;

"Minister" means the Minister of Labour of Canada;

"persons" means those workers employed by the contractor, subcontractor or any other person doing or contracting to do the whole or any part of the work contemplated by the contract;

02 General Fair Wage Clause

- All persons in the employ of the Contractor, subcontractor, or any other person doing or contracting to do the whole or any part of the work contemplated by the Contract, shall during the continuance of the work:
 - (a) be paid fair wages that is, such wages as are generally accepted as current for competent workers in the district in which the work is being performed for the character or class of work in which such workers are respectively engaged; and
 - (b) in all cases, be paid no less than the minimum hourly rate of pay established by the Labour Program of the Department of Human Resources and Social Development in the Schedules of Wage Rates which form a part of this Contract and these labour conditions; and
 - (c) for contracts covering work performed in the province of Quebec, be paid at least the wage rates established by that province for the purposes of the Quebec "Construction Decree".
- 2. Where there is no wage rate in the schedules referred to in paragraph 1 for a particular character or class of work, the Contractor shall pay wages for that character or class of work at a rate not less than the rate for an equivalent character or class of work.

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FAIR WAGES AND HOURS OF LABOUR - LABOUR CONDITIONS

3. Where during the term of the Contract, the Contractor receives notice from the NCC of any change in wage rates, the Contractor shall pay not less than the changed wage rate beginning on the first day after receipt, by the Contractor, of the notice of the change in wage rates.

03 Hours of Work

- 1. The hours of work in a day and in a week of persons employed in the execution of the Contract, including the hours of work in excess of which a person shall be paid overtime at a rate at least equal to one and one half times the fair wage, are the hours of work for the province in which the work is being performed as set out from time to time in an Act of that province.
- 2. The daily or weekly hours of work referred to in paragraph 1 may be exceeded in accordance with the applicable provincial law.

04 Labour Conditions to be Posted

1. For the information and the protection of all persons, the Contractor agrees to post and keep posted, in a conspicuous place on the premises where work contemplated by the Contract is being carried out or on premises occupied or used by persons engaged in carrying out such work, a copy of these Labour Conditions, and a copy of the applicable Schedules of Wage Rates along with any subsequent changes.

05 The Contractor to Keep Records which are to be Kept Open for Inspection

- 1. The Contractor agrees to keep books and records showing the names, addresses, classifications of employment and work of all workers employed under the Contract, the rate of wages to be paid, the wages paid and the daily hours worked by the workers.
- 2. The Contractor also agrees that the Contractor's books, records and premises will be open at all reasonable times for inspection by an Inspector.
- 3. The Contractor also agrees to furnish the Inspector and the NCC, on request, with such further information as is required to ascertain that the requirements of the Act, the Regulations and the Contract with respect to wages, hours of work and other labour conditions have been complied with.

06 NCC Requirements before Payment made to Contractor

- 1. The Contractor agrees that the Contractor will not be entitled to payment of any money otherwise payable under the Contract until the Contractor has filed with the NCC in support of a claim for payment a sworn statement:
 - (a) that the Contractor has kept the books and records required by these Regulations;
 - (b) that there are no wages in arrears in respect of work performed under the Contract; and
 - (c) that to the Contractor's knowledge, all the conditions in the Contract required by the Act and the Regulations have been complied with.
- 2. The Contractor also agrees that, where fair wages have not been paid by the Contractor to persons employed under the Contract, the NCC shall withhold from any money otherwise payable under the Contract to the Contractor the amount necessary to ensure that fair wages are paid to all employees until fair wages are paid.

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FAIR WAGES AND HOURS OF LABOUR - LABOUR CONDITIONS

07 Authority to pay Wages in the Event of Default by the Contractor

- 1. The Contractor agrees that where the Contractor is in default of payment of fair wages to an employee, the Contractor will pay the NCC the amount the Contractor is in default.
- The Contractor agrees that where the Contractor fails to comply with paragraph 1, the NCC will pay
 to the Receiver General, out of any money otherwise payable to the Contractor, the amount for
 which the Contractor is in default.

08 Conditions of Subcontracting

1. The Contractor and the subcontractor agree that in subcontracting any part of the work contemplated by the Contract, they will place in the subcontract the conditions respecting fair wages, hours of work and other labour conditions set out in the Contract and the requirements set out in Article 4 of the Section. The Contractor further agrees that the Contractor will be responsible for carrying out these conditions in the event the subcontractor fails to carry them out.

09 Non-discrimination in Hiring and Employment of Labour

- 1. The Contractor agrees that in the hiring and employment of workers to perform any work under the Contract, the Contractor will not refuse to employ and will not discriminate in any manner against any person because:
 - (a) 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).

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1. General

- 1.1 In this Contract "OHS" means "occupational health and safety".
- 1.2 With respect to the work to be performed under the Contract, the Contractor covenants and agrees to perform at, and to enforce conformity with, a standard equivalent to or greater than the best practices prevailing in the construction industry at that time.
- 1.3 The Contractor acknowledges that, to the extent that the following matters may be affected by conduct of the work, it is responsible for the:
 - 1.3.1 health and safety of persons on site;
 - 1.3.2 safety of property on site;
 - 1.3.3 protection of persons adjacent to the site; and,
 - 1.3.4 protection of the environment.
- 1.4 Without limiting the generality of section 1.3, the Contractor acknowledges that it is required to, and covenants and agrees to, comply and to enforce compliance with all laws or regulations that may be applicable to the conduct of the work including, without limitation:
 - (a) the provisions of the *Occupational Health and Safety Act* of Ontario and all regulations, policies or directives issued thereunder for work performed in Ontario;
 - (b) La *Loi sur la santé et la sécurité du travail* of Québec and all regulations, policies or directives issued thereunder for work performed in Québec;
 - (c) Applicable provisions of the Canada Labour Code, Part II;
 - (d) Employment standards legislation in the province(s) in which any part of the work is performed; and
 - (e) Any policies or directives issued by the NCC in respect of the subject matter of the contract.

The NCC will present any such policies or directives referred to in paragraph (e) to the Contractor in written form by not later than the pre-construction meeting. The Contractor is obliged to ensure that the relevant policies and directives have been communicated to and acknowledged by all its employees and that they will be complied with. The NCC reserves the right to require the Contractor to produce evidence satisfactory to the NCC acting reasonably that the Contractor has discharged the foregoing obligations.

- 1.5 By entering into the Contract with the NCC, the Contractor represents and warrants to the NCC that it has informed itself of and is knowledgeable about the obligations imposed by the legislation referred to in 1.4. above.
- 1.6 For purposes of the relevant provincial OHS legislative regime the Contractor acknowledges and agrees that it is the "Constructor" and covenants to discharge and accept all liability for the performance of the obligations of the "Constructor" in respect of the work provided for in the Contract. Notwithstanding a determination by the relevant authority having jurisdiction that the NCC is the "Constructor" in the event of a dispute between the Contractor and the NCC, the Contractor acknowledges and agrees that the Contractor shall be financially responsible for the implementation of protective measures necessary to fulfill the obligations of the "Constructor".

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- 1.7 As between the NCC and the Contractor, the NCC's decision as to whether the Contractor is discharging its obligations in respect of OHS issues shall be definitive. Without limiting the generality of the foregoing, in the event of any dispute with respect to instructions given by the NCC's designated representative, the Contractor may note such dispute, but must nevertheless forthwith comply with any such instructions.
- 1.8 The Contractor hereby indemnifies and agrees to hold harmless the NCC, its agents and employees, from and against any and all claims, demands, losses, costs (including legal fees on a full indemnity basis), damages, actions, suits or proceedings (hereinafter collectively referred to as "claims") by third parties that arise out of or are attributable to the Contractor's errors or omissions in the performance of the Contract. Without limiting the generality of the foregoing, this indemnification extends to any claims related to any violation of any statute or regulation relating to OHS matters.
- 1.9 The NCC shall provide the contractor:
 - 1.9.1 a written description of every known and foreseeable health and safety hazard to which persons employed in the performance of the work may be exposed because of the nature of the site;
 - 1.9.2 a list of any prescribed materials, equipment, devices and clothing necessary because of the nature of the site;
 - 1.9.3 with written information indicating the prescribed circumstances and manner to use all prescribed materials, equipment, devices and clothing listed pursuant to 1.9.2; and,
 - 1.9.4 with a copy of any NCC policies and procedures that may be applicable in relation to the work site.
- 1.10 Without limiting the generality of 1.9, prior to the commencement of the work by the contractor, the contractor shall, at the contractor's expense:
 - 1.10.1 take all reasonable care to ensure that all persons employed in the performance of the work or granted access to the work or its site are informed of any health and safety hazard described pursuant to 1.9.1;
 - 1.10.2 provide all persons employed in the performance of the work or granted access to the work or its site with prescribed materials, equipment, devices and clothing listed pursuant to 1.9.2;
 - 1.10.3 take all reasonable care to ensure that all persons employed in the performance of the work or granted access to the work or its site are familiar with the prescribed circumstances and manner all prescribed materials, equipment, devices and clothing listed pursuant to 1.9.2; and
 - 1.10.4 take all reasonable care to ensure that all persons employed in the performance of the work or granted access to the work or its site are familiar with policies and procedures referred to in 1.9.4.

2. Qualifications of Personnel

- 2.1 By entering into this agreement the contractor represents and warrants the it has the requisite experience, training, formal certification and equipment to enable it to discharge the obligations enumerated in sections 1.3. 1.4, 1.5 and 1.6 above.
- 2.2 The Contractor represents and warrants that supervisory personnel employed by the Contractor in respect of performance of any part of the work have the requisite experience, authority, training, formal certification and equipment to ensure that the obligations enumerated in sections 1.3 1.4, 1.5

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and 1.6 above are discharged and agrees to deliver such evidence as may be required by the NCC from time to time to verify same.

3. Certification

- 3.1 After receiving notification that its bid has been retained and prior to and as a condition of contract award, the Contractor covenants and agrees to deliver a Worker's Compensation Clearance Certificate. Where the duration of the project is greater than sixty days, the Contractor covenants and agrees to deliver up-dated certificates at least every 60 days. In the event of a failure by the Contractor to deliver up-dated certificates, the NCC shall be entitled to immediately terminate the contract without notice and without incurring any liability to the Contractor.
- 3.2 After receiving notification that its bid has been retained and prior to and as a condition of contract award, the Contractor covenants and agrees to deliver historical information on its injury experience including any pertinent Worker's Compensation Experience Reports. Such historical information shall report data for the previous three years.

4. Plans Policies and Procedures

- 4.1 After receiving notification that its bid has been retained and prior to and as a condition of contract award, the Contractor covenants and agrees to deliver for the review and approval of the NCC:
 - (a) A copy of the contractor's OHS policy;
 - (b) A safety program and plan specific to the work to be performed pursuant to the Contract which plan shall include a risk assessment and analysis, a description of safe working methods, injury and incident reporting protocols, regular periodic reporting on compliance with OHS obligations including any policies, practices and procedures otherwise provided for herein, and a site-specific contingency and emergency response plan; and
 - (c) Health and safety training records of personnel and alternates responsible for OHS issues on site.

The Contractor covenants and agrees to deliver the necessary material safety data sheets for the review and approval of the NCC prior to entering the site to perform work related to the relevant material.

Approval by the NCC does not amend the provisions of the Contract with respect to the allocation of liability for discharging or failing to discharge OHS obligations. Such liability remains with the Contractor notwithstanding the granting of such approval.

- 4.2 The Contractor acknowledges and agrees that prior to commencement of work it must attend a preconstruction briefing at which any special or additional practices and procedures to be followed in completing the work are to be established. Without limiting the provisions of section 1.4(e) above, the representatives of the Contractor attending the briefing will be required to deliver a signed acknowledgement that the practices and procedures set out in the pre-construction briefing have been understood and will be complied with.
- 4.3 At any time and from time to time during the performance of the work, the NCC shall have the right to audit the manner in which the Contractor is discharging its OHS obligations and to determine whether the project specification and/or OHS policies, practices and procedures are being complied with. In the event that the audit discloses any failure by the Contractor to discharge such OHS obligations, the NCC shall be entitled to forthwith rectify at the Contractor's expense any such deficiency and the NCC shall have the further right to immediately terminate the contract without notice and without incurring any liability to the Contractor.

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- 4.4 The Contractor covenants and agrees to conform with all requirements of the Workplace Hazardous Materials Information System.
- 4.5 The Contractor acknowledges and agrees that where required by any law or regulation applicable to the performance of the work it must establish and maintain a project health and safety committee. The contractor further acknowledges and agrees that it must enable staff to attend all relevant safety meetings, and that the cost of same, including costs attributable to standing down equipment is included in its bid price and is not independently recoverable.
- 4.6 Where required by the relevant provincial regulatory regime, the Contractor acknowledges and agrees that it is responsible for delivery of notice of the project to the relevant regulatory authority, and for the performance of any other administrative activity required to meet the obligations imposed in the pertinent provincial regulatory regime.
- 4.7 **(Optional depending on hazard or scope of project)**. The contractor covenants and agrees that it shall employ and assign to the work, a competent OHS professional as Health and Safety Coordinator that must:
 - (a) have a minimum two (2) years' site-related working experience specific to activities associated with.(identify specific subject matter)
 - (b) have basic working knowledge of specified occupational safety and health regulations,
 - (c) be responsible for completing health and safety training session and ensuring that personnel not successfully completing the required training are not permitted to enter the site to perform the Work.
 - (d) be responsible for implementing, enforcing daily and monitoring the site-specific Health and Safety Plan, and
 - (e) be on site during execution of the Work.

The parties acknowledge that in lieu of employing an OHS professional, the Contractor may provide same by sub-contracting for such services.

- 4.8 Upon completion of the work the Contractor covenants and agrees to participate with the NCC in a post performance interview to evaluate the performance of the Contractor in respect of the OHS obligations under the contract. Without limiting the generality of the foregoing, the interview will identify areas of compliance and non-compliance in terms of:
 - (a) actual performance of the work;
 - (b) reporting or procedural requirements;
 - (c) resolution of deficiencies.

The contractor acknowledges and agrees that the results of the post-completion interview may be relied upon by the NCC in evaluating bids subsequently submitted by the Contractor on other NCC projects.

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Canada

SECURITY REQUIREMENTS

Security Requirements

The NCC complies with Treasury Board's *Policy on Government Security* and consequently, it will require that the Contractor's employees submit to a personal security screening process (Security Clearance Form TBS/SCT 330-60E). The NCC may also perform a credit check when the duties or tasks to be performed require it or in the event of a criminal record containing a charge/offence of a financial nature.

The NCC reserves the right to not award the Contract until such time as the Contractor's core employees have obtained the required level of security screening as identified by the NCC's Corporate Security. In this case the level of security required will be **Reliability/Site Access/Secret**.

The NCC also reserves the right to request that the Contractor submit to a *Designated Organisation Screening* and/or *Facility Security Clearance*— depending on the nature of the information it will be entrusted with. In the event that the Contractor does not meet the requirements to obtain the requested clearance, the Contractor shall take the corrective measures recommended by the Canadian Industrial Security Directorate (of PWGSC) or by the NCC's Corporate Security in order to meet these requirements. If no corrective measures are possible or if the Contractor fails to take the recommended measures, then the Contractor shall be in default of its obligations under this Contract and the NCC shall have the rights and remedies listed in section 2.14, including the right to terminate the Contract without further notice to the Contractor.

Additional information

As part of their personal screening, individuals may be required to provide evidence of their status as a Canadian citizen or permanent resident as well as any other information/documentation requested by the NCC's Corporate Security in order to complete the screening.

The NCC reserves the right to refuse access to personnel who fail to obtain the required level of security screening.

The NCC reserves the right to impose additional security measures with respect to this Contract as the need

Company Security Representative

The Contractor shall appoint one Company Security Representative (CSR) as well as one alternate (for companies who have more than five employees).

Selection criteria for the CSR and the alternate are the following:

- They must be employees of the Contractor;
- They must have a security clearance (the NCC will process the clearances once the individuals have been identified).

Responsibilities of the Company Security Representative

The CSR's responsibilities are the following:

- Act as liaison between the NCC's Corporate Security and the Contractor to ensure coordination;
- In collaboration with the NCC's Corporate Security, identify the Contractor's employees who will require access to NCC information/assets/sites as well as any recurring subcontractors (and their employees) who will require similar access and may not be supervised by the Contractor at all times during such access. Ensure that accurate and complete Personnel Security Screening documentation is

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SECURITY REQUIREMENTS

submitted to the NCC's Corporate Security for the employees/subcontractors who have been identified;

- Ensure that employees/subcontractors, upon notification of having been granted a reliability status, sign the *Security Screening Certificate and Briefing Form* and return to the NCC's Corporate Security;
- Ensure that only persons who have been security screened to the appropriate level and who are on a "need-to-know basis" will have access to information and assets;
- Maintain a current list of security screened employees/subcontractors;
- Ensure proper safeguard of all information and assets, including any information/assets entrusted to subcontractors;
- If a Security incident or suspected breach of security occurs, prepare and submit to the NCC an occurrence report as soon as possible.

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SEWAGE DISPOSAL SYSTEM DIVISION 3 INDEX

DC 3063-12 Section 000000 Page 1 of 1

SPECIFICATION INDEX

Section 002224	Pay Item Description
Section 011100	Summary of Work
Section 013543	Environmental Protection
Section 018670	Instrumentation Works
Section 055000	Metal Fabrication
Section 333633	Access Ramp and Underground Piping Works

UNIT PRICED TABLE PAY ITEMS DESCRIPTION

DC 3063-12 Section 002224 Page 1 of 3

Here is the description of the Unit Price Table items. Tenderer is to submit a unit price for each item, and to establish corresponding amount and total tender price accordingly. Tenderer shall enter prices under the Provisional Item section, although those are not accounted for under the Total Tender Price.

All tender prices exclude Goods and Service Tax (GST) and Quebec Sales Tax (QST); these taxes are to be accounted for under each Payment Certificate issued during construction period.

1.0 GENERAL ITEMS

1.1 MOBILIZATION AND DEMOBILIZATION

- .1 This item is to cover the Contractor's cost of mobilization at the beginning of the construction period and demobilization at the close of the construction period. The price entered for this work shall be consistent with the costs involved but shall not, in any event, exceed five percent (5%) of the total Tender price.
- .2 If the Tenderer has entered against this item in his Tender a price in excess of five percent (5%) of the total Tender price, the Owner shall, in preparing contract documents based upon the Tender, reduce the price for the said item to an amount not exceeding five percent (5%) of the total Tender price and shall spread the surplus value over the items 2.1, 2.2 and 2.3, so that the total Tender price shall not be affected.
- .3 Sixty percent (60%) of the price for the Mobilization and Demobilization item shall be considered as relating to mobilization and the balance to demobilization. The payment for mobilization shall be included in the first payment certificate issued for the Contract subject to the Engineer being satisfied that full mobilization has been carried out. If the Engineer is not so satisfied, he shall allow a payment, which, in his opinion, reflects the degree of mobilization effected to date. The payment for demobilization shall become due following Substantial Performance of the works and subject to the Engineer being satisfied that full demobilization has been carried out. The Engineer may, in his discretion, allow partial payment for demobilization before full demobilization has been effected.

1.2 COMMISSIONING

.1 This item consists in the commissioning of the entire system, after testing and start-up of equipment would have been validated by equipment suppliers. Commissioning would be paid after Contractor would have demonstrated to the Engineer's satisfaction that the entire system is operating as per plan and specification requirements.

2.0 WORKS AT LAGOON

2.1 CIVIL WORKS

- .1 This item consists in the supply, installation, electrical connection, testing and start-up as shown on drawings of the sewage collection and treatment system, including but not limited to the following:
 - Replacement of transfer conduits and valves from cell 1 to cell 2;
 - Construction of two access ramps;
 - Supply, placement, maintenance during construction period, and demolition of coffer dams
 - Surface reinstatement at site and at access road.
- .2 This item is to be paid at lump sum price and shall include all labour and equipment to excavate, load, transport, operations related to backfill, compaction of natural ground and

UNIT PRICED TABLE PAY ITEMS DESCRIPTION

DC 3063-12 Section 002224 Page 2 of 3

imported granular materials, rejecting or recovering of excess materials, supply and installation of conduit, valves, elbows, caps, bedding and surrounding granular material, geotextile membrane, and all other labour, materials and equipment necessary to complete the work as specified and any other expenses related to this item.

.3 This item to be paid at lump sum price shall also include all labour and equipment to supply and proceed with surface reinstatement.

2.2 ELECTRICAL AND MECHANICAL WORKS

- .1 This item consists in the supply, installation, testing as shown on drawings of all instrumentation and mechanical equipment, c/w spacers, including the following:
 - Flow meter and data logger;
 - Enclosure, conduits and wiring and all associated works
 - Associated piping and valve works.
- .2 This item is to be paid at lump sum price and shall include all other labour, materials and equipment necessary to complete the work as specified, plus taking measurements on site, and any other expenses related to this item, including permits.

2.3 STRUCTURAL WORKS

- .1 This item consists in the supply, installation, testing as shown on drawings of all miscellaneous metal equipment, c/w anchors, including the following:
 - Handrails;
 - Enclosure support;
 - A-frame support for personnel access to chamber.
- .2 This item is to be paid at lump sum price and shall include all other labor, materials and equipment necessary to complete the work as specified, plus taking measurements on site, and any other expenses related to this item, including permits.

2.4 ENVIRONMENTAL PROTECTION MEASURES

- .1 This item consists in the supply, installation, maintenance, and removal at the end of the works, at location shown on drawings, of all environmental protecting measures around sewage works, and particularly the silt fence, including posts and fence.
- .2 This item is to be paid at lump sum price and shall include all labour, equipment and materials, necessary to complete the works as specified, plus removal and disposal of material at the end of the works, and any other expense related to this item.

3.0 EXCAVATION, HAULING AND DISPOSAL OF CONTAMINATED MATERIAL

- .1 When directed by NCC, and only in the case there is some contaminated soils discovered on site, the Contractor shall provide environmental consultant services from a qualified professional geotechnical engineer, to provide staff and specialized equipment to test the contaminated material and monitor the extent of the contaminated soils removal and disposal needs. Unit cost per hour to be negotiated with NCC includes professional fees, allocation for equipment rental, and contractor's mark-up. Time for preparing final report would be eligible under this item.
- .2 Contractor would not be compensated in the case no contaminated soil is found on site.

- .3 Cost of laboratory tests would be reimbursed at cost by NCC to Contractor, without mark-up, upon submittal of invoices and test results.
- .4 When directed by NCC, the Contractor shall supply an excavator (235 CAT or approved equal) and operator for the excavation of contaminated soils. Haulage shall be done by a licensed transporter of hydrocarbon impacted soils. Contractor shall segregate and haul hydrocarbon impacted soils or any other contaminated soils to a licensed waste disposal site. Unit price per cubic meter to be negotiated with NCC shall include mobilization, excavation, temporary storage on site including protective measures, hauling, landfilling disposal fees, and demobilization, including excavator and truck related labor cost, plus 15% contractor's mark-up.
- .5 In addition to the above level of work, Tenderer would have to integrate into each of the unit costs per cubic meter of contaminated material the level of work associated to each of the four categories of contaminated soils (refer to Division 3 Section 013543, Item 1.10, Table 2) as described below:

Level of Contamination < A, including cost to reused material at NCC site, for trench backfilling only.

Level of Contamination in the A - B Range, including cost for disposal of material outside NCC land, at an approved landfill site, or alternate approved solution as per Table 2.

Level of Contamination in the B – C Range, including disposal of material outside NCC land, at an approved landfill site, or alternate approved solution as per Table 2.

Level of Contamination > C, including optimal decontamination and final disposal at an authorized site, or alternate approved solution as per Table 2.

Tenderer is advised that other unexpected costs related for their negligence to manage properly contaminated soils, on site, and off site, as described under Section 013543, Item 1.10, cannot be charged to NCC, and cannot be integrated in the above-described costs to be negotiated with NCC.

4.0 CONTINGENCY ALLOWANCE

- .1 Some items of work that may be required during the course of construction but the exact requirements will depend on ground conditions, available funds or other uncertain factors encountered, are shown in the Unit Price Table under the heading "Provisional Items". Work authorized by the Owner and done under Provisional Items will be subject to a Contract Change Order. Payment of such would be taken from the Contingency Allowance.
- .2 Extra work that may need to be done, due to unidentified site conditions at time of tender, or new contract requirements as identified by Engineer or Client during construction period, would be authorized in writing by the Owner under a Contract Change Order, and would be paid from the Contingency Allowance.

NAME OF SUB-CONTRACTORS AND SERVICE PROVIDERS

Tenderer shall enter the name, address and contact person of specialized sub-contractor or service provider, for electrical and mechanical works as well as for provisional works. That page shall be filled in and submitted with the quote. Some items have been identified as to be completed by "own force", i.e. by the Contractor; at their discretion, Tenderer may enter an alternate name under those items.

PART 1 - GENERAL

1.1 GENERAL CONTEXT

- .1 The General Contractor is to supply, install, maintain and dismantle after the works cofferdams at lagoon, in order to proceed with transfer piping work. Contractor is to supply, place and compact materials for two access ramps. Contractor is to dispose of surplus material at his cost in order to match site final grade as shown on contract drawings.
- .2 The General Contractor, or their authorized mechanical work subcontractor, is to supply, install, test and start-up equipment and appurtenances. Contractor shall verify all measurements inside existing chambers prior to order material. Work includes but is not limited to the following:

Mechanical works at effluent chamber:

- 150 mm diameter piping at meter, including supports anchored to concrete floor;
- 50 mm diameter ball valve and piping;
- Valve operating rod extension and lateral supports;
- Opening at existing aluminum cover;
- Welded stainless steel plate and 150 mm diameter stub;
- 150 mm diameter connecting coupling;
- Grinding of any remaining cast iron pipe section beyond concrete wall edge at bottom of chamber.

Mechanical works at berm between cell 1 and 2:

- Replace existing 150 mm diameter transfer piping and valves by ductile iron piping and gate valves c/w mechanical joints;
- Supply, place and compact clay dyke, granular base and other backfill material at transfer pipe, as shown on drawings;
- Replace existing 200 mm gate valve and piping at existing concrete transfer chamber
- .3 The General Contractor, or their authorized structural work subcontractor, is to supply, install, and anchor miscellaneous metal works and appurtenances, including but not limited to the following:
 - HSS steel support for weatherproof enclosure, A-frame hoist support, and removable handrail sections around existing effluent chamber;
 - A-frame hoist support, and removable handrail sections around existing concrete transfer chamber;
- .4 The General Contractor, or their authorized electrical work subcontractor, is to supply, install, test and start-up instrumentation equipment and appurtenances, including but not limited to the following:
 - 150 mm diameter submersible magnetic flow meter, c/w cable and battery powered transmitter:
 - Battery powered data logger;

- 610 mm X 610 mm X 203 mm insulated weatherproof enclosure mounted above the upper platform at effluent chamber;
- Rigid conduit along exterior wall and partially inside chamber;
- PVC junction box at exterior wall.
- .5 At the end of the works, the General Contractor shall reinstate at their cost the access road to site and traffic path on top of lagoon berm to their original condition, by supplying, placing and compacting granular material, plus a geotextile membrane where required. General Contractor shall minimize damage to trees along access road.

1.2 QUALITY CONTROL

.1 The objective of this specification is that the contractor provides complete and functional water meter to meet the requirements of this project. An electrician certified in the Province of Quebec shall do the electrical portion of the works. Installation shall be in accordance with all applicable federal, provincial and municipal codes and by-laws, and installed by workmen skilled in that particular portion of the contract. Do complete the installation in accordance with CSA C22.1-2012.

1.3 CONFORMANCE

.1 At the end of the works, the contractor shall confirm in writing to NCC that the works have been completed as per plans and specifications.

- END OF SECTION -

PART 1 - GENERAL

1.1 GENERAL

.1 Construct this project in accordance with construction and reinstatement guidelines established by the «Ministère du développement durable, de l'environnement et des parcs du Québec » (MDDEP), and the «Cahier des Charges et Devis Généraux – Infrastructures routières – Construction et réparation – Édition 2013», hereafter referred to as the CCDG.

1.2 FIRES

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

1.3 DISPOSAL OF WASTES

- .1 Do not bury rubbish and waste materials on site.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

1.4 DRAINAGE

- .1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .2 Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .3 Control disposal or run-off of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.5 POLLUTION CONTROL

- .1 Prepare and implement an Erosion Control Plan for the duration of construction.

 Maintain temporary erosion and pollution control features installed under this Contract.
- .2 Control emissions from equipment to local authorities emission requirements.
- .3 Prevent sandblasting and other extraneous materials from contaminating air beyond application area, by providing temporary enclosures.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control at parking lot and absorption field area.

1.6 PLANT PROTECTION MEASURES

.1 Protect trees and plants on site and adjacent properties where indicated.

- .2 Wrap in burlap, trees and shrubs adjacent to construction work, storage areas and trucking lanes, and encase with protective wood framework from grade level to height of 2 m.
- .3 Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.
- .4 Minimize stripping of topsoil and vegetation.
- .5 Restrict tree removal to areas indicated or designated by Engineer. Obtain approval form Engineer prior to replace or displace trees and shrubs within contract limits.
- .6 Contractor is to replace at own costs damage to trees, by planting two trees for very tree they damaged. Contractor is to cut branches or pulled those back.

1.7 EQUIPMENT FUELLING

- .1 Construction Equipment and machinery shall be in good operating condition, free of leaks or excess oil or grease.
- .2 Designate an area within the working limits to be used exclusively for fuelling construction equipment. No Construction Equipment refuelling or servicing will be undertaken within thirty (30) meters of any ditch, watercourse or storm sewer system. Submit for review a plan for the interception and rapid clean-up of fuel spills should they occur.
- .3 The Contractor shall provide and maintain a spill containment kit on site. The spill containment kit shall be readily accessible on site in the event of a release of a deleterious substance to the environment.
- .4 Storage of fuel, waste oil and other special wastes shall not be permitted within the boundaries of the site unless approved by the Client.

1.8 EROSION AND SEDIMENT CONTROL

.1 Silt fence is to be supplied, installed, and maintained, between work areas (absorption field area) and nearby land, as shown on drawings. Silt fence is to be manufactured from a woven, silt film geotextile material as per Drawings. Materials and installation procedure are described under Part 2 and Part 3 below.

1.9 DISPOSAL OF NON CONTAMINATED OBJECTS, MATERIAL, PRODUCTS OR OTHER

- .1 Disposal of solid waste: any solid waste, as defined by the c. Q-2, r. 13 Regulation respecting solid waste, under R.S.Q., chapter Q-2 Environment Quality Act, shall be disposed of as per that regulation.
- .2 Disposal of dry materials: any dry material, as defined by the c. Q-2, r. 13 Regulation respecting solid waste, under R.S.Q., chapter Q-2 Environment Quality Act, shall be disposed of as per that regulation..

- .3 Disposal of surplus excavation material: Client has no site within Gatineau Park limits or Sainte-Cecile-de-Masham limits to dispose of surplus excavation material. Contractor shall dispose of surplus excavation materials, and cost for such disposal shall be included under the appropriate items of the form of tender.
- .4 Topsoil would be temporarily stockpiled, protected with tarp, and put back over reinstated areas by Contractor, at their costs. Surplus top soil remains the property of NCC.
- .5 Do not stockpile excavated material and topsoil:
 - .1 In areas where is would interfere with site operation or drainage;
 - .2 Above existing and future underground conduits, tanks, manholes and any other utility;
 - .3 Within less than 5 m from any paved area, such as parking area, access road and bicycle path;
 - .4 Within less than 5 m from any tree, scrub, ditch, and edge of creek.

1.10 DISPOSAL OF CONTAMINATED MATERIALS (EXCLUDING EXISTING GRAVITY SEWER AND SURROUNDING GRANULAR MATERIAL)

- .1 During excavation works would the Client or their representative suspect there is any contaminated material, Contractor must interrupt temporarily works at that site for an undefined period in order to allow an independent lab to sample and analyze soils. Contractor shall fully cooperate with client, Engineer and lab sampling technician in order to sample soils and manage contaminated soils appropriately.
- .2 Client has no site within Gatineau Park limits or Sainte-Cecile-de-Masham limits to dispose of contaminated excavation material. Contractor shall dispose of surplus excavation materials, and cost for such disposal shall be included under the appropriate items of the form of tender.
- .3 Excavated materials to be stored on an tarp, and surrounded with a fence, prior to transfer outside NCC property.
- .4 Contractor should undertake soils and groundwater reinstatement / remediation works as per the following guidelines, standards and regulations (available in French only):
 - Politique de protection des sols et de réhabilitation des terrains contaminés du ministère du Développement durable, de l'Environnement et des Parcs (MDDEP);
 - Grille de gestion des sols contaminés excavés intérimaire du MDDEP;
 - Guide et lignes directrices du MDDEP;

- .5 Contractor shall provide all labor, materials, equipment, tools, and management required to complete the works as described in plans and specifications, or as described below:
 - Preliminary works and mobilization on site;
 - Contaminated soils excavation as per Engineer's instructions (Engineer to be on site full time):
 - Manual segregation and temporary storage of waste from excavation materials;
 - Transfer of contaminated materials to a final disposal site approved by the Engineer;
 - Surveying of work areas, excavation upper and lower portion, and backfilled areas;
 - Completion of any other related works.

.6 Disposal of contaminated soils

As per Engineer's instructions, contaminated soils are to be disposed of at approved sites, depending of their level of contamination and as per rules specified by the "Ministère du Développement durable, de l'Environnement et des Parcs du Québec". Only the Client can assess, based on independent lab results, the level of soils contamination. For every truck load, submit to Client a copy of the transfer registry.

.7 Transfer to site

Transfer of contaminated materials shall be done with water tight truck bin. Truck to be covered at all time with a water tight tarp, except at time of filling, to prevent rain or snow to get into the bin, or if time to fill in the bin is less than ten (10) minutes. Contractor is responsible for damage to site, to public property and to the environment, while contaminated materials and residual materials are carried outside the NCC property. Costs associated with such damage, or any fine due to nonconformance to Ministry rules is at Contractor's costs.

.8 Precipitations

Contractor shall take all possible measures to transfer piles of contaminated material off site, and to protect them since:

- No extra payment would be granted to Contractor, following refusal of materials by the final disposal site, because soils were too wet, due to rainfall:
- Any contamination of land and watercourses at NCC site or elsewhere is the responsibility of the Contractor and any additional cost for decontamination of such land and water is to be carried out by the Contractor.

.9 Laboratory hired by Contractor

Laboratory retained by Contractor shall have appropriate expertize in that type of works. Laboratory shall be accepted by the Client and the Engineer.

.10 Report Submittal

All information collected on site, regarding disposal of contaminated soils, shall be compiled under a summary technical report, written in French, by the sampling technician. A preliminary version would be submitted to Client within three weeks after disposal of contaminated soils and residue would have been completed, i.e. corresponding to removal of last pile.

Client to review and comment draft report. Final version of report to consider those comments, and to be completed accordingly. Submit three (3) copies of final report no later than ten (10) working days after receiving Client's comments. Report to include at minimum the following:

- Sampling technician field notes, regarding contaminated soils;
- A table showing container reference number, date of sampling, volume of contaminated soils, date of lab tests, lab sample reference number, lab test results, and final disposal site location;
- Lab reports;
- Container shipment manifest;
- Final disposal of contaminated soils manifest;
- Final disposal of residual material manifest;
- Final disposal of other material manifest;

.11 Reuse contaminated soils

Type <A soils may only be reused for trench backfilling upon approval by Client. All other contaminated materials must be transferred off site, as per the following MDDEP table:

Table 2: Interim contaminated excavated soils management procedure

Level of contamination	Management Options
< A	Use without restriction.
A – B Range	 Reuse as backfilling material on contaminated sites for residential use being under a decontamination process* or on any commercial or industrial zoning site, as long as those materials would not increase the previous level of contamination** and, also, for residential land, soils shall not release detectable odors of hydrocarbon material. Reuse as daily coverage material at an approved landfill site. Reuse as final coverage material at an approved landfill site, provided another 15 cm of clean material is placed on top.

B – C Range	Optimal decontamination *** at an authorized site, and management as per end result.
	 Reuse as backfilling material on site, at any commercial or industrial zoning site, as long as those materials would not increase the previous level of contamination**.
	3. Reuse as daily coverage material at an approved landfill site.
> C	Optimal decontamination *** at an authorized site, and management as per end result.
	If the above is non-feasible, dispose of material at an approved contaminated soil final disposal site.

- * Contaminated land for residential use or under rehabilitation process are the ones to be used as residential land having a contamination higher than B category and where material for outside source would be required during rehabilitation works.
- ** Contamination depends on type and concentration of contaminants.
- *** Optimal treatment for any contaminant is defined as reaching Type B criteria, or 80% reduction from initial concentration for all contaminant except volatiles. Regarding this, volatiles are defined as the contaminants having boiling temperature below 180 °C or having Henry's Law constant higher than 6.58 x 10⁻⁷ atm-m³/g, including contaminants listed under Section III of list of criteria at Appendix 2 of the "*Politique de protection des sols et de réhabilitation des terrains contaminés*".

1.11 MANAGEMENT OF DOMESTIC SEWAGE DURING CONSTRUCTION PERIOD

- During construction period, the Campground site would still be occupied, so raw sewage would continue to be discharged to Cell no. 1 by the main sewage pumping station. Operator is to transfer Cell 1 effluent to Cell 2 twice a year, in May and in November. From May to September, Cell 1 is to receive between 100 and 200 m3/d of raw sewage. No effluent is to be transferred to Cell 2. Contractor is to coordinate all works with Client and Operator in order to maintain normal operation at lagoon.
- .2 Contractor is responsible to prevent all and any release of sewage water to the environment during the works. Contractor would have to build, maintain, monitor, repair as required, and remove temporary dykes at Cells no.1 and 2, as required. Contractor is responsible for pumping domestic sewage within the work area back to Cell no.1 or Cell no.2, depending of the location of the dyke. The only other acceptable procedure would be to pump water to a truck tank, and to dispose of it as per the rules of the MDDEP for the duration of works.
- .3 Lagoon operating mode is summarized as follows:

Table 1 – Geodetic Elevations at Sewage Treatment System

Date	Cell No.1 Probable	Cell No.2 Probable Water	Comments
	Water Level	Probable Water Level	
	(m)	(m)	
Prior to mid-May	162.4	161.3	Snow thaw
3 rd week of May	161.8	161.8	Transfer from Cell 1 to Cell 2
Summer	161.4 to 162.4	161.8 to 162.0	Normal filling with raw sewage at
			Cell 1, and with rain in both Cells
Mid-October	162.4	162.0	End of Campground site season
End of October	162.4	161.3	Fall effluent discharge, if Federal
			Regulations Effluent Criteria are
			met.
End of October	162.4	161.3	Cell 2 outlet valve remains open
			for winter

Bottom of Cell Elevation: 161.0 161.0 Top of Berm Elevation: 163.0 163.0

PART 2 - PRODUCTS

2.1 SILT BARRIER FENCE

- .1 Hay or Straw Bale: wire bound or string tied; securely anchored by at least 2 stakes or rebars driven through bale 300 mm to 450 mm into ground; chinked (filled by wedging) with hay or straw to prevent water from escaping between bales; and entrenched minimum of 100 mm into ground.
- .2 Silt Fence: assembled, ready to install unit consisting of geotextile attached to driveable posts. Geotextile: uniform in texture and appearance, having no defects, flaws, or tears that would affect its physical properties; and contain sufficient ultraviolet ray inhibitor and stabilizers to provide minimum 2-year service life from outdoor exposure.
- .3 Net Backing: industrial polypropylene mesh joined to geotextile at both top and bottom with double stitching of heavy-duty cord, with minimum width of 750 mm.
- .4 Posts: sharpened wood, approximately 50 mm square, protruding below bottom of geotextile to allow minimum 450 mm embedment; post spacing 2.4 m maximum. Securely fasten each post to geotextile and net backing using suitable staples.

PART 3 - EXECUTION

3.1 EROSION AND SEDIMENT CONTROL

.1 Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas, from stockpiles, staging areas, and other work areas. Prevent erosion and sedimentation.

- .2 Minimize amount of bare soil exposed at one time. Stabilize disturbed soils as quickly as practical. Strip vegetation, regrade, or otherwise develop to minimize erosion. Remove accumulated sediment resulting from construction activity from adjoining surfaces, drainage systems, and water courses, and repair damage caused by soil erosion and sedimentation as directed by Engineer.
- .3 Provide and maintain temporary measures which may include, silt fences, hay or straw bales, ditches, geotextiles, drains, berms, terracing, riprap, temporary drainage piping, sedimentation basins, vegetative cover, dikes, and other construction required to prevent erosion and migration of silt, mud, sediment, and other debris off site or to other areas of site where damage might result, or that might otherwise be required by Laws and Regulations. Make sediment control measures available during construction. Place silt fences and/or hay or straw bales in ditches to prevent sediments from escaping from ditch terminations.
- .4 Plan construction procedures to avoid damage to work or equipment encroachment onto water bodies or drainage ditch banks. In event of damage, promptly take action to mitigate effects. Restore affected bank or water body to existing condition.

.5 Installation:

- .1 Do not construct bale barriers and silt fence in flowing streams or in swales.
- .2 Place silt barrier fence in a manner that will intercept runoff at or close to right angles to flow. In areas where problems are severe, erect two or more silt barriers parallel to each other, until required degree of control is achieved.
- .3 Fence layout as specified on the Drawings. Fence height is 500 mm above natural ground level.
- .4 Position posts in such a manner that fence structure remains naturally taut. Posts to always be positioned downstream and shall be placed in accordance with the Drawings.
- .5 Bury excess geotextile at bottom of silt fence minimum of 300 mm in trench located upstream such that no flow can pass under fence.
- .6 Splice subsequent lengths of barrier only at support post locations. Splice by wrapping geotextile fabric completely around each of two abutting support posts, as detailed on the Drawings, such that the gap between abutting posts is completely covered by both sections of fabric.
- .7 Maintain integrity of silt fences as long as necessary to contain sediment runoff. Inspect all temporary silt fences immediately after each rainfall and at least daily during prolonged rainfall. Immediately correct any deficiencies. In addition, make daily review of location of silt fences in areas where construction activities have changed natural contours and drainage runoff to ensure that silt fences are properly located for effectiveness. Where deficiencies exist, install additional silt fences. Should silt fences become damaged or otherwise ineffective while barrier is still necessary, repair or place promptly.

- .8 Unless Engineer provides alternate instructions, remove temporary erosion and sediment control devices upon completion of Work. Spread accumulated sediments to form a suitable surface for seeding or dispose of, and shape area to permit natural drainage to satisfaction of Engineer. Materials once removed become property of Contractor.
- .6 Construct fill areas by selective placement to avoid erosive surface silts or clays.
- .7 Do not disturb existing embankments or embankment protection.
- .8 Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- .9 If soil and debris from site accumulate in low areas, abandoned sanitary sewers, roadways, gutters, ditches, or other areas where in Engineer's determination it is undesirable, remove accumulation and restore area to original condition.

- END OF SECTION -

PART 1 - GENERAL

1.1 GOVERNING CONDITIONS

.1 The General Conditions, Supplementary Condition, Standard Specification, Standard Drawings and Tender shall be read in conjunction with this Controls and Instrumentation Work Section.

1.2 WORK INCLUDED

- .1 This Section covers the instrumentation work clauses for the supply and installation of all interior piping, controls, valves, couplings, equipment, electronic equipment, testing and commissioning, together with other works as specified herein or indicated on the drawings.
- .2 Provide all labor and materials, obtain all necessary permits and pay all fees as may be required.
- .3 Contract Drawings and Specifications are intended to set the acceptable minimum standard and shall not relieve the Contractor of his responsibility to install a trouble-free system.
- .4 Unless specifically noted otherwise, specifications for pipe shall also apply to the respective fittings. Where the word piping is used, it shall mean both pipe and fittings.
- .5 Supports for pipe and equipment are not shown in detail. Adequately support all piping, ducts, and equipment as part of this Section.

1.3 CO-OPERATION

- .1 Co-operate with other trades prior to installation of work under this Section. Should the Contractor fail to do so, such works, if required, shall be removed, relocated and/or modified as directed by the Engineer, without additional cost to the Owner.
- .2 Should the Contractor fail to correspond with requests or should he misdirect other trades, such corrections and/or additional work, as directed by the Engineer shall be at the Contractor's expense.

1.4 SHOP DRAWINGS AND PRODUCT DATA

- .1 Submit five (5) hard copies of shop drawings and product data for review by Engineer, as specified in Division 1, Section 013300. Contractor may submit initial and subsequent versions of shop drawings in PDF format allowing addition of comments by the review engineer. Final version of shop drawings shall be printed par the Contractor and be available on site at time of delivery of material and equipment on site.
- .2 Prior substantial approval, provide operation and maintenance data, in three copies, for incorporation into operation manual specified in Division 1, Section

013300. All booklets, drawings, instruction sheets, etc., issued by suppliers and relative to equipment being installed under this Section and necessary or desirable for the maintenance, repair or operation of the equipment, shall be neatly assembled by the Contractor and submitted in the Operation and Maintenance Manual.

1.5 ELECTRICAL CODES AND STANDARDS

.1 Do complete installation in accordance with CSA C22.1 2012, other applicable CSA standards, Hydro-Quebec bulletin and as per Quebec Electrical Code valid at time of tender, except here specified otherwise.

1.6 CARE, OPERATION AND START UP

.1 Instruct operation personnel in the operation, care and maintenance of systems, system equipment and components. Duration: one day of training.

1.7 VOLTAGE RATINGS

- .1 Operating voltages: to CAN3 C235 83.
- .2 Controls, wiring, devices and equipment to operate satisfactorily at 60 Hz or AC current as required within normal operating limits established by above standard. Equipment to operate in extreme operating conditions established in above standard without damage to equipment.

1.8 PERMITS, FEES AND INSPECTION

- .1 Submit to Electrical Inspection Department and Supply Authority necessary number of drawings and specifications for examination and approval prior to commencement of work.
- .2 Pay associated fees.
- .3 Engineer will provide drawings and specifications required by Electrical Inspection Department and Supply Authority at no cost.
- .4 Notify Engineer of changes required by Electrical Inspection Department prior to making changes.
- .5 Furnish Certificates of Acceptance from Electrical Inspection Department on completion of work to Engineer.

1.9 MATERIALS AND EQUIPMENT

.1 Equipment and material provided under this contract as described by plans and specifications are to be CSA certified. Where there is no alternative to supplying equipment which is not CSA certified, obtain special approval from Electrical Inspection Department.

1.10 INSTRUMENTATIO

.1 Supply and install instrumentation equipment as an integrated system.

1.11 EQUIPMENT IDENTIFICATION

- .1 Identify electrical and mechanical equipment with nameplates and labels as follows:
 - .1 Lamacoid 3 mm thick plastic engraving sheet, black face, white core, mechanically attached with self-tapping screws. For emergency distribution use red face, white core.
 - .2 Nameplates:

NAMEPLATE SIZES					
Size 1	10 x 50 mm	1 line	3 mm high letters		
Size 2	12 x 70 mm	1 line	5 mm high letters		
Size 3	12 x 70 mm	2 lines	3 mm high letters		
Size 4	20 x 90 mm	1 line	8 mm high letters		
Size 5	20 x 90 mm	2 lines	5 mm high letters		
Size 6	25 x 100 mm	1 line	12 mm high letters		
Size 7	25 x 100 mm	2 lines	6 mm high letters		

- .3 Labels: Embossed plastic labels with 6 mm high letters unless specified otherwise.
- .2 Wording on nameplates and labels to be approved by Consultant prior to manufacture.
- .3 Allow for average of fifty (50) letters per nameplate and label.
- .4 Identification to be in English and in French.
- .5 Nameplates for junction boxes to indicate system and voltage characteristics.
- .6 Main enclosure: indicate equipment being controlled and voltage.
- .7 Pull boxes: indicate system and voltage.

1.12 WIRING IDENTIFICATION

- .1 Identify wiring with permanent indelible identifying markings, either numbered or coloured plastic tapes, on both ends of phase conductors of feeders and branch circuit wiring.
- .2 Maintain phase sequence and colour coding throughout.
- .3 Colour code: to CSA C22.1-2012.

1.13 CONDUIT AND CABLE IDENTIFICATION

- .1 Colour code conduits, boxes and metallic sheathed cables.
- .2 Code with plastic tape or paint at points where conduit or cable enters wall, ceiling, or floor, and at 15 m intervals.
- .3 Colours: 25 mm wide prime colour and 20 mm wide auxiliary colour.

1.14 WIRING TERMINATIONS

.1 Lugs, terminals, screws used for termination of wiring to be suitable for either copper or aluminum conductors.

1.15 MANUFACTURERS AND CSA LABELS

.1 Visible and legible after equipment is installed.

1.16 WARNING SIGNS

- .1 To meet requirements of Electrical Inspection Department and Consultant.
- .2 Decal signs, minimum size 175 x 250 mm.

1.17 MOUNTING HEIGHTS

- .1 Mounting height of equipment is from finished floor to centre line of equipment unless specified or indicated otherwise.
- .2 If mounting height of equipment is not specified or indicated, verify before proceeding with installation.
- .3 Install electrical equipment at following heights unless indicated otherwise on the drawings. Coordinate with civil and mechanical drawings.

1.18 LOAD BALANCE

- .1 Measure phase current to panelboards with normal loads operating at time of acceptance. Adjust branch circuit connections as required to obtain best balance of current between phases and record changes.
- .2 Measure phase voltages at loads and adjust transformer taps to within 2% of rated voltage of equipment.
- .3 Submit, at completion of work, report listing phase and neutral currents on panelboards, dry-core transformers, operating under normal load. State hour and date on which each load was measured, and voltage at time of test.

1.19 CONDUIT AND CABLE INSTALLATION

- .1 If plastic sleeves are used in fire rated walls or floors, remove before conduit installation.
- .2 Install cables, conduits and fittings to be embedded or plastered over, neatly and close to building structure so furring can be kept to minimum.

1.20 CO-ORDINATION OF PROTECTIVE DEVICES

.1 Ensure circuit protective devices such as overcurrent trips, relays and fuses are installed and tested to required values and settings.

1.21 QUALIFICATIONS

- .1 All electrical work shall be carried out by qualified, licensed electricians, or by apprentices as per the conditions of the Provincial Act respecting manpower vocational training and qualification.
- .2 All sewage work shall be carried out by qualified, specialized sewage system contractor and plumber, or by apprentices as per the conditions of the Provincial Act respecting manpower vocational training and qualification.
- .3 The effluent discharge chamber is a class 1 zone 2 location. All electrical wiring methods shall be in accordance with Section 18 of the Canadian Electrical Code.

PART 2 - PRODUCTS

2.1 ELECTRICAL CONDUITS AND JUNCTION BOX

- .1 Supply and install new material only. Refer to drawing for details.
- .2 PVC junction box to be anchored to concrete wall, to have weatherproof joint.
- .3 Conduits to be C22.2 No. 45.1-07 (R2012) Electrical Rigid Metal Conduit Steel, to be anchored to concrete wall.

2.2 BATTERY POWERED SUBMERSIBLE MAGNETIC FLOW METER

.1 150 mm diameter reduced port magnetic flow meter, IP68 (NEMA 6P) measuring unit c/w male & female connectors capable to support up to 10 m (30') submergence, with ANSI B 16.5 Class 150 flanges, T50 environmental class (0.1 to 50 °C operating range), requiring 0 pipe diameter upstream and 0 pipe diameter downstream, for mounting in any direction. Flanged meter with 316L stainless steel electrodes. Precision Class 1 accuracy is defined as follows:

Q2:	Up to 1.1 L/s (17.6 USGPM)	1.0%
Q(0.5%)	Up to 6.5 L/s (103 USGPM)	0.5%
Maximum Operating Condition Flow	55.7 L/s (880 USGPM)	0.5%
Instrument Maximum Flow Rate	111 L/s (1760 USGPM)	0.5%

.2 Remote transmitter to be IP67 (NEMA 6P) aluminum alloy casing, with glass window, lithium battery powered, three bidirectional solids state switches with common isolation +/- 35V DC 50 mA, as follows:

Output 1 Forward Flow only, or forward plus reverse pulses

Output 2 Reverse pulses or direction indicator

Pulse output 50 Hz maximum, 50 % nominal duty cycle

Output 3 Alarm indicates any problem with the measurement or unit power

Only Output 1 is to be wired to the Data Logger (see Item 2.4 below).

No local or remote port required.

- .3 Cable between meter and transmitter to be as per manufacturer's recommendation but at no time to be shorter than 15 meters.
- .4 150 mm diameter reduced port magmeter, remote transducer and cable to be AquaMasterTM Electronic Water Meter by ABB, as distributed by Les compteurs d'eau Lecomte Ltée, 2925 Cartier, St-Hyacinthe, Quebec, J2S 1L4, Tel: 1 800 263 3406 (ext 223), Fax: 450 773 0759, e-mail : flecomte@lecomte.ca , web: www.lecomte.ca, or approved equal.
- .5 Supply and install stainless steel grounding rings as per manufacturers recommendations.

2.3 DATA LOGGER

- .1 Data logger, c/w IP68 submersible enclosure, receiving magmeter digital signal, RS 2323 local communication @ 19200 baud/s, 2 GO internal memory for flow recording every minute, with 5 year autonomy battery, compatible with ABB AquaMaster Water Meter. Supply communication cable from meter transducer to data logger.
- .2 Data logger to be Primelog+, 1F, 2 GO memory capacity, by Primayer Solutions Aqua Technologie, as distributed by Les compteurs d'eau Lecomte Ltée, or approved equal. Would Contractor propose alternate meter and data logger, they would have to demonstrate in writing that the proposed combination is compatible and meet all the specifications.
- .3 Supply separately PrimeWorks software and remote computer cable. It is understood that the data downloading software would be installed on two laptops (one own by Client, one own by Operator). Software version shall be compatible with Windows Operating System (XP, 7 and 8).

2.4 WEATHERPROOF PANEL

.1 Weatherproof panel to be NEMA 4X stainless steel construction, with hinged

exterior door with lock hasp and gaskets, 25 mm thick fiberglass insulation covered with aluminum sheet on all interior faces including front door, 610 mm X 610 mm X 203 mm (24"X24"X8"), to hoist transmitter, data logger and surplus wiring.

- .2 Supply and install galvanized steel posts, made of 102 mm X 102 mm X 6 mm HSS tubes and mounting plates as shown on drawings, anchored to existing concrete chamber wall using stainless anchor bolts, or approved equal system.
- .3 Panel and post to be mounted as shown on drawings.

2.5 STAINLESS STEEL PIPING

- .1 Piping installed at the bottom of effluent chamber to be made of 304 Stainless Steel. Contractor to verify dimensions inside chamber, especially the location of effluent outlet pipe, prior to prepare shop drawings.
- .2 Refer to Section 055 000 for welded stainless steel piping fabrication.
- .3 Supply and install a 50 mm diameter stainless steel ball valve, with valve extension up to underside of existing chamber cover, with intermediate supports as per manufacturer's recommendations.

PART 3 - EXECUTION

3.1 BASES AND SUPPORTS

.1 Supply and install all bases, hangers and supports as required for the proper installation of equipment and piping. Use galvanized steel supports, unless specified otherwise.

3.2 FASTENERS

- .1 Use standard commercial sizes and pattern with material and finish suitable for the service unless specifically required otherwise in these specifications.
- .2 Use heavy hex heads, semi-finished unless otherwise specified. Use non-ferrous material throughout for plumbing services. Use type 304 or type 303 stainless steel for all fasteners on this project.
- .3 Bolts shall not project more than one diameter beyond nuts.

3.3 ANCHOR BOLTS AND INSERTS

.1 All equipment anchor bolts and inserts specified or required under this Section shall be supplied by the equipment. The size, number, type location, thread projection shall be determined by the equipment manufacturer and approved by the Engineer.

3.4 CUTTING AND PATCHING

- .1 Drill, cut, and patch as shown on the drawings and directed herein. Contractor is responsible for coordinating the work of locating holes, recesses, chases, etc., as well as any sleeves and inserts required for the passage of system components through building surfaces.
- .2 Corrective or additional work arising out of failure to comply with the foregoing shall be at the Contractor's expense and in a manner approved by the Engineer.

3.5 EXPANSION PIECES

.1 Install piping system to permit free movement due to temperature difference and allow the piping to be disassembled when needed. Install couplings where indicated on the drawings and as required. Install all expansion pieces and flexible connectors in accordance with the manufacturer's recommendations.

3.6 INSPECTION AND TESTS

- .1 Arrange for all necessary inspections and tests required by all authorities having jurisdiction, perform all tests and related work in accordance with the rules and regulations of the authorities having jurisdiction.
- .2 The instrumentation sub-contractor shall complete flow meter calibration, electrical equipment verification and performance tests. Results shall be submitted in three copies (in French) to NCC for reference.

3.7 CLEAN UP AND REPAIR

- .1 Leave all materials installed in new condition for final approval.
- .2 Thoroughly clean all materials installed and remove all rubbish and debris from the site.
- .3 Protect all work and materials during the construction. Replace, repair or refinish all damaged material at the Contractor's expense.

3.8 IDENTIFICATION OF EQUIPMENT

.1 Provide each item of equipment with registration plates, ULC, CSA, etc., as required. Do not apply insulation or paint over nameplates, Indicate on nameplates, equipment size, model, manufacturer's name, serial number, power requirements, etc. Fasten nameplates in accordance with code.

3.9 METRIC UNITS

.1 Notwithstanding the requirements of this Section as hereinafter specified, <u>all</u> new meters, indicators scales, etc. shall be calibrated in Metric Units. All Data and Performance curves submitted by Equipment Suppliers shall employ SI Units as well as Imperial/U.S. Units unless otherwise approved by the Engineer.

3.11 FIELD QUALITY CONTROL

- .1 Perform tests in accordance with this specification and as per electrical code. Perform tests using qualified personnel. Provide necessary instruments and equipment.
- .2 Check each cable for continuity, short circuits and grounds. Ensure resistance to ground of circuits is not less than 50 mega-ohms. Cable testing to be coordinated with equipment supplier. Do not megger test cabling with equipment connected to cabling being tested.
- .3 Provide Consultant with list of test results showing location at which each test was made, circuit tested and result of each test. Remove and replace entire length of cable if cable fails to meet any of test criteria.

- END OF SECTION-

1 PART 1 - GENERAL

1.1 SUMMARY

1. The General Conditions, Supplementary Condition, Standard Specification, Standard Drawings and Tender shall be read in conjunction with this Metal Fabrications Section.

1.2 REFERENCES

- 1. Canadian Institute of Steel Construction Handbook of Steel Construction -- Ninth Edition, Fourth Printing, September 2008, or latest edition.
- 2. CSA S408-11 Guidelines for the development of limit states design standards (2009)
- 3. CAN/CSA S16-09 Design of steel structures
- 4. CSA G40.20-04/G40.21-04 (R2009) General Requirements for Rolled or Welded Structural Quality Steel/ Structural Quality Steel.
- 5. CAN/CSA-S157-05/S157.1-05 (R2010) Strength Design in Aluminum / Commentary on CSA S157-05, Strength Design in Aluminum.
- 6. CSA W47.1-09 Certification of companies for fusion welding of steel.
- 7. CSA W47.2-11 Certification of companies for fusion welding of aluminum
- 8. CSA W55.3-08 Certification of companies for resistance welding of steel and aluminum.
- 9. CSA W59-03 (R2008) Welded Steel Construction (Metal Arc Welding).
- 10. CSA W59.2-M1991 (R2008) Welded Aluminum Construction.
- 11. ASTM A36/A36M-12 Standard Specification for Carbon Structural Steel
- 12. ASTM A325-10 Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
- 13. ASTM A563M-07 Standard Specification for Carbon and Alloy Steel Nuts (Metric)
- ASTM A780 / A780M 09 Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.
- ASTM B209M Specification for Aluminum and Aluminum Alloy Sheet and Plate.
- 16. ASTM B221M-12a Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric).
- 17. ASTM B632 / B632M 08 Standard Specification for Aluminum-Alloy Rolled Tread Plate.

- 18. ASTM B766 86(2008) Standard Specification for Electrodeposited Coatings of Cadmium
- 19. ASTM F738M-02(2008) Standard Specification for Stainless Steel Metric Bolts, Screws, and Studs.
- 20. ASTM F1136/F1136M-11 Standard Specification for Zinc/Aluminum Corrosion Protective Coatings for Fasteners.
- 21. NSI/NAAMM MBG 531-88/NAAMM Metal Bar Grating Material.

1.3 SYSTEM DESCRIPTION

1. Design Requirements

- 1. Design miscellaneous metal items in accordance with applicable standards.
- Design work of this Section, which will support other items or will be required to support structural loads of any nature, by a professional structural engineer licensed in the Province of Quebec. Affix professional seal and signature to shop drawings for such items. Engineer to certify that the structures are designed to support the design loadings specified below.
- 3. Design connections and splices using high-strength structural bolts or welds.
- 4. Design connections for moments, shears and axial loads indicated or specified.
- 5. Where no moments, shears or axial loads are indicated design in accordance with CAN/CSA S16-09 Design of steel structures, requirements for Simple Construction. Design connection for greater than half the shear capacity of the member unless indicated otherwise.
- 6. Design connection for Hollow Structural Sections to develop full strength of member in tension or compression.
- 7. Unless design loads are indicated, design splices for the full strength of the member in bending, shear and axial load.
- 8. Unless design loads are indicated, design end connections and/or splices in bracing members for the full axial strength of the member.
- Where overlapping or contacting surfaces cannot be avoided, completely seal weld these surfaces. Where there is any evidence of rusting or deterioration of finish in such areas, carry out remedial seal welding and refinishing.
- 10. Design aluminum work to CAN/CSA-S157-05/S157.1-05 (R2010) and CSA W59.2-M1991 (R2008).

1.4 SUBMITTALS

1. Submit five (5) hard copies of shop drawings and product data for review by Engineer, as specified in Division 1, Section 013300. Contractor may submit initial and subsequent versions of shop drawings in PDF format allowing addition of comments by the review engineer. Final version of shop drawings shall be printed par the Contractor and be available on site at time of delivery of material and equipment on site.

- 2. Prior substantial approval, provide operation and maintenance data, in three copies, for incorporation into operation manual specified in Division 1, Section 013300. All booklets, drawings, instruction sheets, etc., issued by suppliers and relative to equipment being installed under this Section and necessary or desirable for the maintenance, repair or operation of the equipment, shall be neatly assembled by the Contractor and submitted in the Operation and Maintenance Manual.
- 3. Submit welding procedure specification for each type of material.
- 4. Structural shop drawings shall be stamped and signed by a professional structural engineer licensed in the Province of Quebec.

1.5 QUALITY ASSURANCE

- 1. Ensure workmanship of the highest quality throughout by employing only metal workers that have demonstrated the highest skills in this type of work and qualified welders certified to weld the materials used in fabrication of the miscellaneous metals.
- 2. Welding Procedure for Steel and Stainless Steel
 - 1. Submit certificate that companies that will be welding stainless steel are CSA accepted.
 - 2. Comply with CSA W47.1-09 and CSA W59-03 (R2008)
- 3. Welding Procedure for Aluminum
 - 1. Submit certification that companies that will be welding aluminum are CSA accepted.
 - 2. Comply with CSA W47.2-11, W59-M and CSA W59.2-M1991 (R2008).

1.6 DELIVERY, STORAGE AND HANDLING

1. Provide protective coating on stainless steel and aluminum items.

1.7 DESIGN LOAD AND MATERIALS

- 1. **Guardrails to be made of aluminum tubing**, around the top of effluent chamber and the transfer chamber except at the existing access platform, to be removable, to be inserted into fabricated aluminum plate and tubing assembly bolted to existing concrete chamber exterior walls. Guardrails and anchoring plates to be designed to support the following loadings:
 - 1. 0.55 kN applied horizontally at any location along top rail;
 - 2. 1.50 kN per linear meter applied vertically along top rail.
- Fabricated A-frame c/w welded guardrail and I-beam assembly c/w stop angles at each end, to be made of structural steel to CSA G40.20-04/G40.21-04 (R2009), Grade 300W, c/w one coat of primer paint and two coats of exterior finish enamel paint, to support the following loading:
 - 1. 18 kN vertical downward impact loading, applied at the 2-ton capacity hand trolley, at any single point along the I-beam;

- 2. Structure dead load;
- 3. Seismic load, assuming 0.5 ton live load at trolley;
- 4. Guardrail lateral loading as specified above;
- 5. Stainless steel anchor bolts inserted into existing concrete wall to take all applicable loadings.
- 3. Weatherproof enclosure support to be made of HSS steel tubing, c/w one coat of primer paint and two coats of exterior finish enamel paint, to be bolted to existing concrete chamber exterior wall, to be designed to support the following loadings:
 - 1. 0.55 kN applied horizontally at top of support of structure
 - 2. 1.00 kN applied vertically at upper portion.
- 4. Three piping supports at effluent chamber to be made of welded stainless steel, anchored to concrete floor with stainless steel anchor bolts, to support the following loads:
 - 1. 1.5 kN applied vertically;
 - 2. 1.0 kN applied laterally.
- 5. Piping at magnetic flowmeter mounted at bottom of effluent chamber to be made of 304 Stainless Steel, welded at the shop, bolted on site.

2 PART 2 - PRODUCTS

2.1 MATERIALS

- Where anchors, lifting hooks, screws, bolts, nuts, washers, hangers and other
 fasteners are not specifically shown or specified, provide such items with at
 least the strength and corrosion resistance properties of the metal fabrication
 for which they are required.
- Structural Steel and Loose Lintels: CSA G40.20-04/G40.21-04 (R2009), Grade 300W.
- 3. Steel General Purpose: ASTM A36/A36M-12 Table 1 Material Specifications.
- 4. Steel anchors, studs, taps and bolts: ASTM F738M-02(2008), stailess steel.
- 5. Stainless steel pipe: 316L stainless steel pipe, IPS Pipe 11 Gauge, bevelled ends, conform to ASME B31.3-2006 Process Piping Standard. All flanged ends to be sized and drilled to ANSI B16.1 Class 125.
- 6. Aluminum to ASTM B221M-12a, A96351-T6 UNA Designation.
- 7. Isolation coating: CAN/CGSB-1.108-M89, quick drying asphalt utility enamel.

2.2 FINISHES

1. Rough Edges and Mill Scale

1. Following completion of fabrication of any item, grind rough edges straight and finish smooth. Remove mill scale and rust.

Aluminum

- Restore aluminum to original mill finish after fabrication. Buff and brighten exposed aluminum surfaces, which have been damaged during construction.
- 2. Where aluminum is intended to be in contact with either dissimilar metals, concrete, or masonry, paint the surfaces to be in such contact with aluminum colored bituminous paint.
- 3. Use anodizing quality aluminum where anodizing is required.

Structural Steel

- Clean, prepare surfaces and shop prime structural steel in accordance with CAN/CSA S16-09
- 2. Apply shop primer paint (one coat spot priming CAN/CGSB-1.40) under cover, on dry surfaces when surface and air temperatures are above 5°C. Maintain dry condition and 5°C minimum temperature until paint is thoroughly dry.
- 3. One coat lead primer CAN/CGSB-1.140
- 4. Two coats exterior enamel CAN/CGSB-1.59.
- 5. Paint manufacturer and finish color to be approved by Engineer.

4. Aluminum Shop Finishes

- 1. Aluminum finish: Where shop finishing is specified or indicated, after fabrication or forming, prepare surfaces, shop prime, and factory finish in accordance with PPG specifications for the manufacturer's Duranar two-coat fluoropolymer enamel system for aluminum. Shop finishing: Performed by an accepted applicator. Minimum dry film thickness 30 microns (1.2 mil).
- 2. After installation, touch-up shop finished surfaces damaged during construction.

2.3 ANCHORS AND FASTENERS

- 1. Anchors, Studs, Taps and Machine Bolts
 - 1. Unless otherwise specified or detailed use stainless steel anchors and fasteners.
 - 2. Guardrail anchors for side mounted railing on concrete walls: length to meet design requirements adhesive set anchors by Hilti Ltd.
 - 3. Use corrosion resistant fasteners of stainless steel for corrosion resistant items to be fastened.
- 2. Drilled anchors: Hilti stainless steel HVA, HSL, or Kwik bolts as indicated or accepted.

2.4 FABRICATION - GENERAL

- Where possible, verify dimensions on site before preparing shop drawings or proceeding with shop work. Fit and shop assemble insofar as possible various sections of the work and deliver to the project site in the largest practical sections.
- 2. The general dimensions and details of the metal fabrications are shown on the Drawings where practical. Such details and dimensions are suggested concepts for design.
- 3. Assume responsibility for the correctness of the actual detailed dimensions used in fabrication and carefully check the same, by field measurement.
- 4. Variations from suggested details are subject to acceptance in writing by the Engineer. Such acceptance does not in any way waive the above-mentioned responsibility.
- Wherever overlapping or contacting surfaces cannot be avoided, completely seal weld these surfaces. Rusting or deterioration of finish in such areas will require remedial seal welding and refinishing.
- 6. Fabricate the work true to dimensions and square. Accurately fit members with hairline joints, and join using adequate fastening.
- 7. Construct finished work free from distortion and defects detrimental to appearance and performance.
- 8. File or grind exposed welds smooth and flush. Do not leave grinding marks. Construct internal and external corners with sharp lines. Provide continuous welds unless otherwise accepted by the Engineer in writing. Brighten and buff aluminum and stainless steel welds to match appearance of adjacent surface.
 - 1. Remove weld spatter and slag. After finish grinding and smoothening welds, passivate welds with pickling paste.
 - 2. Preheat members thicker than 19 mm before welding.
- 9. Weld aluminum in accordance with CSA W47.2-11.
 - 1. Use weld rod No. 5356 for clear anodized aluminum of 6063-T5 alloy.
- Fabricate metal work complete with components required for anchoring to concrete; bolting or welding to structural steel frames; standing free; or resting in frames or sockets, in a safe and secure manner.
- 11. Countersink exposed fastenings, where such are accepted in writing, and make as inconspicuous as possible with bolts cut off flush with nuts. Construct fastenings of the same material and finish as the base material on which they occur.

2.5 MANUAL TROLLEYS

1. Supply and install two (2) manual trolleys, one at the effluent chamber and one at the transfer chamber. Each trolley shall be a trolley with a rated

capacity of 2 metric ton (2.0 t) and be mounted on the I Beam. For reference purpose, I-Beam is considered to be 12" (W310 x 39), but final beam selection is the responsibility of the Contractor's engineer responsible to produce the A-frame shop drawings. General Contractor is responsible for coordination of final hoist selection with beam selection.

- 2. Manual Trolleys to be JET SBT series, heavy duty, ball bearing trolley with rated capacity of 2,000 kg, model 120254, as manufactured by JET Equipment & Tools Ltd., 3504, rue Griffith, Ville St-Laurent, Québec H4T 1A7, Toll Free: 1-800-363-2885, Fax: 1-800-267-3310, or approved equal. Trolleys have the following characteristics:
 - Load is moved by pulling on hoist load chain in direction of travel
 - Double sealed ball bearings for long life
 - Specially hardened steel wheels meet ANSI B30.11 specifications (Certificate included)
 - Specially designed integrated drop stops/bumpers take the load in the event of wheel failure and prevent wheels from contacting other trolleys on the track
 - Adjustable to fit various sizes of flanges and beams
 - Comes equipped for use on up to 8" beam widths
 - Can be installed or removed at any point along the track
 - Use on straight or curved H, I, W and S-beams
 - heavy duty icon

3 PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

- 1. Install work of this Section using skilled craftsmen and in accordance with manufacturer's recommendations where applicable.
- 2. Install metal fabrications in the correct locations and positions, plumb, level, structurally sound, securely fastened, free from defects detrimental to finished appearance and to acceptance of the Engineer.
- 3. Perform drilling of steel, concrete or masonry to fasten the work of this Section.
- 4. For aluminum and stainless steel items, and exterior locations, use stainless steel anchors.
- 5. After installation, spot prime bolt heads and nuts, field rivets, field welds and any abrasions or damage to the shop coat of primer.
- 6. Touch-up galvanized steel where galvanizing is damaged during installation with zinc rich primer.

- 7. Apply isolation coating to surfaces between dissimilar metals, and between metal and concrete, mortar, grout or masonry.
- 8. Where items are specified to be installed by other Sections, fabricate items to the appropriate trade with necessary instructions and templates required for proper installation. Include required fastenings, such as screws, bolts, expansion shields and similar items.
- 9. Tolerances: CAN/CSA S16-09.
- 10. Deliver items to be cast into concrete with instructions for setting.

3.2 INSTALLATION - ANCHORS AND FASTENERS

- Arrange bolts with sufficient length to embed 150 mm in the concrete wall (or otherwise as demonstrated by the engineer hired by the contractor) and to project the threaded position a minimum of 50 mm above the proposed elevation of the base plate or mounting plate. Engineer hired by the Contractor is to validate bolt diameter selection at time of shop drawing preparation.
- 2. Use anchor grout for submerged and exterior conditions.
- 3. Do not offset bolts by deformation.
- 4. For submerged conditions where bolts are used, use lock nuts or nuts with lock washer.

END OF SECTION

PART 1 - GENERAL

1.1 GOVERNING CONDITIONS

.1 The General Conditions, Supplementary Condition, Standard Specification, Standard Drawings and Tender shall be read in conjunction with Sections of this Underground Work Division.

1.2 WORK INCLUDED

- .1 This Section covers the clauses for the supply and installation of all underground piping, valves, couplings, testing and commissioning, together with other works as specified herein or indicated on the drawings, plus access ramps and other surface reinstatement works.
- .2 Contractor is to supply and install all piping, valves, concrete base, granular material, and associated materials.
- .3 Provide all labour and materials, obtain all necessary permits and pay all fees as may be required.
- .4 Contract Drawings and Specifications are intended to set the acceptable minimum standard and shall not relieve the Contractor of his responsibility to install a trouble-free system.
- .5 Unless specifically noted otherwise, specifications for pipe shall also apply to the respective fittings. Where the word piping is used, it shall mean both pipe and fittings.
- .6 Supports for pipe and equipment are not shown in detail. Adequately support all piping, ducts, and equipment as part of this Division.
- .7 Remove and dispose of existing piping and valves, and all excavation material (top soil, berm, road structure) to a final disposal site approved by the municipality and MDDEP, for each type of material, outside NCC property, at Contractor's cost.

1.3 CO-OPERATION

- .1 Co-operate with other trades prior to installation of work under this Division. Should the Contractor fail to do so, such works, if required, shall be removed, relocated and/or modified as directed by the Engineer, without additional cost to the Owner.
- .2 Should the Contractor fail to correspond with requests or should he misdirect other trades, such corrections and/or additional work, as directed by the Engineer shall be at the Contractor's expense.
- .3 Coordinate works with Lagoon Operators. Lagoon shall remain in operation at all times.

1.4 SHOP DRAWINGS AND PRODUCT DATA

- .1 Submit five (5) hard copies of shop drawings and product data for review by Engineer, as specified in Division 1, Section 013300 Submittal Procedures.
- .2 Provide operation and maintenance data, in three copies, for incorporation into operation manual specified in Division 1, Section 013300 Submittal Procedures. All booklets, drawings, instruction sheets, etc., issued by suppliers and relative to equipment being installed under this Division and necessary or desirable for the maintenance, repair or operation of the equipment, shall be neatly assembled by the Contractor and submitted in the Operation and Maintenance Manual.

1.5 PROVINCIAL STANDARDS

- .1 General construction method shall conform to BNQ 1809-300/2004 (R2007), Travaux de construction Clause techniques générales Conduites d'eau potable et d'égout, latest edition, as amended hereafter.
- .2 General construction / reinstatement method at berm shall conform to the "Cahier des Charges et Devis Généraux Infrastructures routières Construction et réparation Édition 2013», hereafter referred to as «CCDG».

1.6 COFFERDAMS

- .1 General Contractor is to design, supply, place, maintain for the duration of works, and remove cofferdams in both Cells, in order to proceed with underground piping works without allowing effluent transfer from one cell to the other. Contractor's engineer, certified in Quebec, is to submit complete cofferdam methodology, including calculations, and demonstration that the proposed methodology conforms to all applicable CSST (Commission de la santé et de la sécurité du travail) laws and regulations, at least ten(10) working days prior to implementation.
- .2 Cofferdams shall be constructed with suitable materials so as to render the cofferdam watertight, non-erodible and non-polluting. Earth fill cofferdams shall be faced with plastic sheeting followed by sand bags, or imported clay, or equivalent if approved by the Engineer. The purpose of the plastic is to produce a dam that produces the least amount of infiltration. Pumping to dewater a sealed cofferdam shall not commence until the seal has set sufficiently to withstand the hydrostatic pressure.
- .3 Contractor to supply, operate, maintain and remove a temporary pumping system at cofferdams, including portable generator(s), in order to keep work area dry. Would Contractor provide clear stone pit for pump operation, then Contractor would be responsible to remove all clear stone and backfill with material similar to the one excavated. Environmental protection rules apply to portable generator refueling.

- .4 Contractor is advised that effluent water within cofferdam dry area, to be returned to the corresponding Cell, is sewage water, and represents a biological hazard to workers. Contractor Health & Safety Plan shall address all issues related to work within cofferdam, and to exposure to sewage water.
- .5 Contractor shall review the lagoon site access road condition at time of tender. Contractor is to repair at their cost the access road structure, by supplying and placing a geotextile membrane and by supplying, placing and compacting 100 mm thick layer of MG 0-20 granular material, at located damaged by the Contractor's machinery and equipment.
- .6 For each tree damaged by the Contractor's machinery and equipment, the Contractor shall replace it by two (2) trees, to be planted within NCC Gatineau Park area, as per NCC policy (refer to Division 01).

1.7 LAGOON OPERATING CONDITIONS

.1 Refer to Section 013543 – Environmental Protection, Item 1.11 for details.

PART 2 - PRODUCTS

2.1 UNDERGROUND AND OUTSIDE CHAMBER IRON PIPING

- .1 150 mm (6") and 200 mm (8") diameter ductile iron pipe, with mechanical joints, conforms to NQ 3623-085/2002 Ductile Iron Pipe for Water Pressure Piping Systems Characteristics and Test Methods. Ductile iron pipe shall be a minimum Class 52 (AWWA C-150) and manufactured to AWWA C-151 supplied with standard thickness cement lining (AWWA C-104). Ductile iron pipe shall be supplied with bonding straps for maintaining electrical continuity for cathodic protection.
- .2 Pipe bedding outside clay dyke to be as per trench reinstatement detail shown at Figure 38 of BNQ 1809-300/2004 (R2007),
- .3 Pipe to be surrounded by clay at clay dyke, full width and height of the trench (except at the top for road structure) consisting of imported clay having a permeability of 10⁻⁸ cm/s.
- .4 Road reinstatement above clay dyke backfill to be a 200 mm thick layer of MG 0-20 granular material, placed over a non-woven polyester/polypropylene geotextile membrane, Texel Georoute Geo-9, having tear strength CD of 650 N, and tear strength MD of 650 N, or approved equal.
- .5 Proceed with water leakage test as per BNQ 1809-300/2004 (R2007) Travaux de construction Clauses techniques générales Conduites d'eau potable et d'égout, but at a pressure no more than 30 PSIG.

2.2 TRANSFER VALVES BETWEEN CELL 1 AND CELL 2

- .1 Three (3) underground valves within berm to be 150 mm (6") diameter, ANSI/AWWA C509, iron body, bronze mounted double disc, PRO-GARD Epoxy Coating or approved equal, parallel seat type, non-rising stem with square nut, single wedge, resilient seat, mechanical joints with stainless steel bolts & nuts, control rod, no post indicator, cast iron extension box and valve box up to the surface. Supply and install concrete base below valve.
- .2 Two (2) valve at existing concrete transfer chamber to be 200 mm (8") diameter, ANSI/AWWA C509, Iron body, bronze mounted double disc, PRO-GARD Epoxy Coating or approved equal, parallel seat type, non-rising stem with square nut, single wedge, resilient seat, flanged joints with stainless steel bolts & nuts, control rod, valve extension up to underside of existing chamber access cover.
- .3 Manufacturer & Model: Mueller Resilient Seat Gate Valves by Mueller Canada Inc., Milton, Ontario 1-905-878-0541, or approved equal. All valves to be supplied by same manufacturer and supplier.

2.3 TRANSFER CHAMBER PIPING ASSEMBLY

.1 At existing transfer chamber, replace piping section through wall by new 200 mm (8") diameter ductile iron pipe. Core drill concrete wall. Supply and install EPDM rubber fabrication Link-Seal® Modular Seals, c/w 316 Stainless Steel bolts and nuts, Model "S-316" suitable installed in a cored hole, or approved equal.

2.4 CATHODIC PROTECTION

.1 The chemical composition for Zinc alloy anodes shall conform to the latest edition of ASTM B 418, Type II. Each zinc anode casting/extrusion to be 10.9 kg, 38 mm diameter by 1220 mm long. Each zinc anode overall package to be 24.5 kg nominal weight, 127 mm diameter by 1520 mm long. The anode casting shall be surrounded with a selected chemical packing material having an electrical resistivity of less than 45 ohm-cm when wet, a compacted density of 1.5 g/cm³, and the following composition:

Gypsum: 77% +/-2%
 Bentonite: 15% +/-1%
 Sodium Sulphate: 8% +/-1%

- Anode wire to be a 3 m length of AWG #10/7 strand copper cable having RWU-90 insulation (white for zinc anodes) shall be silver soldered to the electro-galvanized steel core of the anode casting extending 75 mm of the anode length. Ductile iron test leads shall be AWG #10/7 strand cable having RWU-90 black insulation. Apply Denso tape coating at connections as per anode manufacturer's recommendations.
- .2 Supply and install cathodic protection zinc alloy anodes at ductile iron pipe, at a density of one Z-24-48 anode at 8 m interval for 150 mm diameter ductile iron pipe, and one Z-24-48 anode at 6 m interval for 200 mm diameter ductile iron pipe. Supply and install one Z-24-48 anode at each 150 mm diameter valves and at each 200 mm diameter valves.

- .3 For below ground piping and valves, place anode 0.6 m below berm sloped surface. Connect anode to ductile iron as per anode manufacturer's recommendations. Supply and place galvanized T-post beside each anode. Document exact anode location on construction drawing set by tying it to nearby valve box and centre of access road.
- .4 For valves at transfer chamber, supply and set wiring long enough in order to leave the anode at the bottom of the chamber. Supply and attach a polyester rope to the anode, in order to lift it from the above access cover for regular inspection.

2.4 WAX TAPE

- .1 Petrolatum or petroleum wax tape coating and primer shall conform to the ANSI / AWWA C217-04 Petrolatum and Petroleum Wax Tape Coatings for the Exterior of Connections and Fittings for Steel Water Pipelines, to be DENSO tape or approved equal.
- .2 Wax tape to be applied, with minimum 25% overlap, on entire gate valve, at all mechanical joint bolts, and corrosion protection fittings.

2.5 RIP-RAP AT PIPING INLET AND OUTLET

- .1 Rip-rap to be 100 to 125 mm clear stone, hand placed over geotextile membrane.
- .2 Geotextile membrane to be non-woven polyester/polypropylene geotextile membrane, Texel Georoute Geo-9, having tear strength CD of 650 N, and tear strength MD of 650 N, or approved equal.

2.6 ACCESS RAMPS

- .1 Two (2) access ramps, one at Cell 1 and one at Cell 2, to be made of (from top to bottom):
 - .1 Precast concrete Turf Block layer, refer to description below;
 - .2 Non-woven polyester/polypropylene geotextile membrane, Texel Georoute Geo-9, having tear strength CD of 650 N, and tear strength MD of 650 N, or approved equal;
 - .3 MG 0-20 granular material layer, compacted to 98% of Modified Proctor Dry Density;
 - .4 High resistance non-woven polyester/polypropylene geotextile membrane, Texel 7634, having tear strength CD of 1050 N, and tear strength MD of 1050 N, or approved equal;
 - .5 Backfill material, compacted to 95% of Modified Proctor Dry Density.
- .2 Contractor to excavate and dispose of first 150 mm thick layer of topsoil and granular material within access ramp area prior to build ramp.
- .3 Turfstone to meet or exceeds the requirements of ASTM C 1319 for Concrete Grid Paving Units, with the following characteristics:

Nominal Size:

600 mm X 400 mm (23 5/8" x 15 3/4")

ACCESS RAMP AND UNDERGROUND PIPING WORKS

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Coverage: 0.24 m² per piece (2.6 sf/piece)

Open Area: 40%

Thickness: 100 mm (4")

Minimum Compressive Strength: 34.5 MPa (5000 PSI) Maximum Water Absorption: 160 kg/m³ (10 lb/ft³)

PART 3 - EXECUTION

3.1 PIPING WORK

- .1 Supply and install all MG 0-20 granular bases (150 mm thick) as required for the proper installation of piping and valve.
- .2 General construction method shall conform to NQ 1809-300 (R2007), Travaux de construction Clause techniques générales Conduites d'eau potable et d'égout, latest edition.
- .3 Exceptionally, portion of ductile iron piping within clay dyke to be entirely surrounded by clay, no granular material allowed. Piping to be set in order to have mechanical joint between two pipe sections at the center of the clay dyke.

3.2 FASTENERS

- .1 Use standard commercial sizes and pattern with material and finish suitable for the service unless specifically required otherwise in these specifications.
- .2 Use heavy hex heads, semi-finished unless otherwise specified. Use non-ferrous material throughout for plumbing services. Use type 304 or type 303 stainless steel for all fasteners on this project.
- .3 Bolts shall not project more than one diameter beyond nuts.

3.3 ANCHOR BOLTS AND INSERTS

.1 All equipment anchor bolts and inserts specified or required under this Division shall be supplied by the equipment. The size, number, type location, thread projection shall be determined by the equipment manufacturer and approved by the Engineer.

3.4 CUTTING AND PATCHING

- .1 Drill, cut, and patch as shown on the drawings and directed herein. Contractor is responsible for coordinating the work of locating holes, recesses, chases, etc., as well as any sleeves and inserts required for the passage of system components through building surfaces.
- .2 Corrective or additional work arising out of failure to comply with the foregoing shall be at the Contractor's expense and in a manner approved by the Engineer.

3.5 INSPECTION AND TESTS

- .1 Arrange for all necessary inspections and tests required by all authorities having jurisdiction, perform all tests and related work in accordance with the rules and regulations of the authorities having jurisdiction.
- .2 Test piping systems in sections (valve to valve) as approved by the Engineer. Repair all leaks and defects to the approval of the Engineer.

3.6 CLEAN UP AND REPAIR

- .1 Leave all materials installed in new condition for final approval.
- .2 Thoroughly clean all materials installed and remove all rubbish and debris from the site.
- .3 Protect all work and materials during the construction. Replace, repair or refinish all damaged material at the Contractor's expense.

3.7 METRIC UNITS

.1 Notwithstanding the requirements of this Division as hereinafter specified, all new meters, indicators scales, etc. shall be calibrated in Metric Units. All Data and Performance curves submitted by Equipment Suppliers shall employ SI Units as well as Imperial/U.S. Units unless otherwise approved by the Engineer.

3.8 RE-INSTATEMENT OF DAMAGE SURFACE / MATERIAL

.1 Contractor to protect fences, trees, roots, landscape areas, watercourses, natural elements, concrete chambers, benchmarks, parking areas, above and underground utilities, which have not been identified as to be removed/demolished. If trees to be preserved have been damaged, the Contractor would have to replace them according to NCC agent instructions; i.e. Contractor is to replace two trees for every tree they damaged. Branches are to be cut or pulled back. Contractor and sewage system sub-contractor shall re-instate at their original condition (including surface finishing) all surface or concrete chamber or utilities damaged by their work, to the NCC agent's satisfaction.

3.9 TOPSOIL

.1 Topsoil over pipe and conduit trenches, is to be managed as follows. Topsoil to be removed and carried at location specified under Division 3 – Section 013543 – Environmental Protection. Protect stockpiled topsoil from rain and contamination with tarp. At the end of sewage system works, topsoil to be put back, spreaded and hydroseeded. Surplus top soil, if any, remains the property of NCC.

- END OF SECTION -