

INVITATION TO TENDER AND ACCEPTANCE FORM

RET	TURN TENDI	ERS TO:		l Capital Commiss umissions@ncc-cc		NCC Tende	NR215			
	DER CLOSI		20. 2022	4.2.00 E	. B. P. L. 7					
ANI	TIME:	APRIL 2	20, 2023	at 3:00 p.m., Ea	astern Daylight T	me				
DES	CRIPTION (OF WORK:	Vict	oria Island Ren	nediation Phase	3a				
1.	BUSINESS	NAME AND A	DDRESS	OF BIDDER						
	Name:	Jame:								
	Address:									
	Telephone n	e number:								
	E-mail addr	ess:								
2.		offers to the Nati				complete the work for to be expressed in num				
	SUB-TOTAL (from page 4	_								
	OHST – 13%	б \$ <u> </u>								
	TOTAL	\$								
3.		ALIDITY PER hall not be without	_	period of 60 days	following the date	and time of tender clos	ing.			

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) Occupational Health and Safety Requirements;
 - (h) Addenda
 - (i) Any amendments issued or any allowable tender revision received before the date and time set for tender closing;
 - (j) Any amendment incorporated by mutual agreement between the NCC and the Contractor before acceptance of the tender; and
 - (k) Any amendment or variation of the contract documents that is made in accordance with the General Conditions;
 - (l) Security Requirements.
- 2. The language of the contract documents shall be the language of the Invitation to Tender & Acceptance Form submitted.

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NCC Tender Number NR215		NCC Contract Number	
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5. APPENDICES

The tender includes Appendix I and II 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 by October 31st, 2023.

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 (excluding taxes) and the Estimated Total Price (excluding taxes) must be entered for each item listed:
- (c) the Price per Unit (excluding taxes) as tender governs in calculating the Total Estimated Amount, and any errors in the extension of the Price per Unit (excluding taxes) 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: Transfer the Total Estimated Amount from the Unit Price Table to item 2 – THE OFFER of this Invitation to Tender & Acceptance Form

Item No.	Spec No.	Sub- item No.	Description	Estimated Quantity	Unit	Unit Price	Amount Tendered
Α			GENERAL COSTS				
1.0	010010 017800		MOBILIZATION AND DEMOBILIZATION	1	LS		
2.0	011100 015200 015600 312333.03 312333.00		SITE PREPARATION				
		2.1	Decommissioning monitoring wells within Remediation Limits	1	LS		

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NCC Tender Number NR215

NCC Contract Number

Item No.	Spec No.	Sub- item No.	Description	Estimated Quantity	Unit	Unit Price	Amount Tendered
		2.2	Temporary construction of access roads, ramps and pads	1	LS		
3.0	015526 013543 013529 321560		Work Plans: Development and execution of traffic control, dust and soil tracking, health and safety and environmental protection plans	1	LS		
В					REMI	DIATIO	ON COSTS
4.0	312333.00		MANAGEMENT OF EXCAVATED OVERBURDEN AND OTHER MATERIALS				
		4.1	Excavation and transportation of contaminated overburden material to an approved MECP disposal facility	33,000	T (Metric)		
		4.2	Disposal of contaminated overburden material at an approved MECP disposal facility	33,000	T (Metric)		
		4.3	Excavation, segregation, breaking, loading, transportation and off-Site disposal of miscellaneous recyclables	20	T (metric)		
		4.4	Bedrock Protection and Cleaning	1	LS		
		4.5	Excavation, separation, stockpiling and reuse of clean Overburden Material	1000	М3		
	_			Remediation C	costs, Subt	otal – B	

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NCC Tender Number NR215 NCC Contract Number

Item No.	Spec No.	Sub- item No.	Description	Estimated Quantity	Unit	Unit Price	Amount Tendered	
C			CIVIL WOR					
5.0	312333.00		SUITABLE BACKFILL (IMPORTED MATERIAL)					
		5.1	Transportation, Placement and Compaction of Select Subgrade Material and Non-Soil Aggregates	29,000	Т			
		5.2	Supply of Select Subgrade Material	26,500	Т			
		5.3	Supply of Non-Soil Aggregates	2500	Т			
		5.4	Topsoil and Hydraulic Seeding	1	LS			
		5.5	Geotextile	1	LS			
6.0	312333.03 312333.00		WATER MANAGEMENT	1	LS			
7.0	15600		FENCING					
		7.1	Install New 1.8 m Chain Link Fence	460	Linear Metre			
8.0	312333.00 017800		SURVEY	1	LS			
				Civil Work	Costs, Sub	total - C		
			SUBTOTAL AMOUNT TENDEREI	O (Sum of Su	ubtotals /	A to C)		
		Pay Ite	em Description is provided in Section 003	00 of Contract	Documen	t.		

 $M^2 =$ square metre $M^3 =$ cubic metre Μ metre = litre KG = kilogram Т = metric tonne LS = EA = each WK = week lump sum

CA = cash allowance H = hour

9. BASIS OF AWARD

A bid must pass all mandatory technical criteria, then highest best value score between Total Estimated Amount (85 points) and Algonquin participation (15 points – see Appendix II). A submission must meet all tender requirements to be declared responsive.

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NCC Tender Number NR215	NCC Contract Number

10. 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. An Adobe pdf version (or photograph in jpg or equivalent format) of the TENDER SECURITY may be transmitted to the Bid email address provided.

11. INVOICING

All invoices are to make reference to the Commission Contract Number xxxxxx (6-digit number on page 1 once a contract is executed between the Contractor and the Commission) and be forwarded by email at payables@ncc-ccn.ca in Adobe (.pdf) format.

To ensure prompt payment, please prepare your invoice in accordance with the prices quoted. Errors in invoicing can cause delay of payment.

12. SIGNATURE OF OFFER

I/We acknowledge the receipt of the following addenda a price:	and have included for the requirement of it/ther	m in my/our tendered					
(Bidder to enter number of addenda issued, if any).							
We hereby offer to supply to the NCC in accordance with the te above and on any attached sheets at the submitted price(s).	rms and conditions set out herein, the construc	tion work listed					
Name and title of person authorized to sign on behalf of Bidder (please print or type)	Signature	Date					
Your tender is accepted to supply to the NCC, in accordance wire attached hereto, the construction services listed herein and on an							
Name and title of the person authorized to sign on behalf of the NCC (please print or type)	Signature	Date					

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PROTECTED "B" when completed PROTÉGÉ « B » lorsque rempli

New supplier / Nouveau fournisseur Update / Mise	Supplier No. / Nº du fournisseur a jour						
APPENDIX I - SUPPLIER-DIRECT DEPOSIT PAYMENT AND TAX INF FOURNISSEUR-FORMULAIRE DE PAIEMENT PAR DÉPÔT DIRECT ET PART 'A' - IDENTIFICATION / PARTIE 'A' - IDENTIFICATION							
	Operating name of entity or individual (if different from Legal Name) /						
Legal name of entity or individual / Nom légal de l'entité ou du particulier	Nom commercial de l'entité ou du particulier (s'il diffère du nom légal)						
Former Public Servant in receipt of a PSSA Pension / Ancien fonctionnaire qui re							
An entity, incorporated or sole proprietorship, which was created by a Former Pupartnership made of former public servants in receipt of PSSA pension or where interest in the entity. / Une entité, constituée en société ou à propriétaire unique, pension en vertu de la LPFP, ou un partenariat formé d'anciens fonctionnaires to entités dans lesquelles ils détiennent le contrôle ou un intérêt majoritaire.	the affected individual has a controlling or major créée par un ancien fonctionnaire touchant une						
Address / Adresse							
	Telephone No. / Fax No. / N° de téléphone : N° de télécopieur :						
Postal code / Code postal							
PART 'B' – STATUS OF SUPPLIER / PARTIE 'B' – STATUT DU FOURNISS IMPORTANT: CHOOSE ONLY ONE OF THE FOLLOWING / CHOISIR SEU							
(1) Sole proprietor Propriétaire unique If sole proprietor, provide: Si propriétaire unique, indiquez :	Last Name / Nom de famille First name / Prénom Initial / Initiale						
(2) Partnership / Société							
Business No. (BN) / Nº de l'entreprise (NE) –	OR / OU SIN / NAS -						
GST/HST / TPS et TVH	QST / TVQ (Québec)						
Number / Numéro :	Number / Numéro :						
Not registered / non inscrit	Not registered / non inscrit						
Type of contract / Genre de contrat							
Contract for services only Contrat de services seulement Contrat de biens et services Type of goods and/or services offered / Genre de biens et / ou services rend	de biens seulement						
PART 'C' - FINANCIAL INSTITUTION / PARTIE 'C' - RENSEIGNEMENTS							
	envoyer un spécimen de chèque ou lettre de banque avec ce formulaire						
Branch Number / Institution No. / N° de la succursale : N° de l'institution :	Account No. / Nº de compte :						
Institution name / Nom de l'institution : Address / A							
PART 'D' - DIRECT DEPOSIT PAYMENT NOTIFICATION / PARTIE 'D' - A	VIS DE PAIEMENT PAR DÉPÔT DIRECT						
E-mail address / Adresse courriel :							
PART 'E' - EMAIL ADDRESS TO SEND CONTRACTS / PARTIE 'E' - ADR	ESSE COURRIEL POUR ENVOYER LES CONTRATS						
E-mail address / Adresse courriel :							
PART 'F' – CERTIFICATION / PARTIE 'F' – 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 les renseignements susmentionnés et j'atteste qu'ils sont exacts et constituent une description complète, claire et véridique de l'identité de ce 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 indiqué sur ce formulaire remplit la partie C, par la présente, il demande et autorise la Commission de la capitale nationale à déposer directement dans le compte bancaire indiqué à la partie C, tous les montants qui lui sont dus.							
Name of authorized person / Title / Titre Nom de la personne autorisée	Signature Date						
Telephone number of contact person / Numéro de téléphone de la personne	ressource: ()						
IMPORTANT							
Please fill in and return to the National Capital Commission with a bank letter or	Veuillez remplir ce formulaire et le retourner à la Commission de la capitale						
one of your business cheques, unsigned, and marked « VOID » (for verification purposes).	nationale avec <u>une lettre de banque ou un spécimen de chèque de votre</u> entreprise, non signé, et portant la mention « ANNULÉ » (à des fins de						
	vérification).						
Mail or email to: contracts@ncc-ccn.ca Procurement Services	Poster ou transmettre par courriel à : contracts@ncc-ccn.ca Services de l'approvisionnement						
National Capital Commission	Commission de la capitale nationale						
202-40 Elgin Street Ottawa, ON K1P 1C7 Fax: (613) 239-5007	40, rue Elgin, pièce 202 Ottawa (Ontario) K1P 1C7 Télécopieur : (613) 239-5007						

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SUPPLIER – DIRECT DEPOSIT PAYMENT AND TAX INFORMATION FORM

FOURNISSEUR – FORMULAIRE DE PAIEMENT PAR DÉPÔT DIRECT ET RENSEIGNEMENTS AUX FINS DE L'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: Sylvie Monette, Accounts Payable Supervisor (613) 239-5678 ext. 5156 or sylvie.monette@ncc-ccn.ca

Direct deposit 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 to the address identified in part D.

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 deposit payment

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

There are fewer risks of direct deposit payment being lost, stolen, or damaged as may happen with cheques.

Funds made by direct deposit 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 de l'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: Sylvie Monette, Superviseure aux comptes payable (613) 239-5678 poste 5156 ou sylvie.monette@ncc-ccn.ca

Renseignements sur le paiement par dépôt 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 par dépôt direct vous sera envoyé par courriel à l'adresse courriel identifiée à la partie D.

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 par dépôt direct

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

Avec les paiements par dépôt 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 par dépôt direct sont versés dans votre compte le jour même où nous aurions posté votre chèque.

Revised March 2019/ Révisé mars 2019

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TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

QUALIFICATION FOR GENERAL CONTRACTORS

Project: NCC – PROVISION OF ENVIRONMENTAL REMEDIATION SERVICES VICTORIA ISLAND PHASE 3a, OTTAWA

Date: February 2023

TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

SECTION 1 – GENERAL INFORMATION

1.1 Process

The purpose of this qualification process is to evaluate the capability of General Contractors for the proposed project. To qualify, a Bidder must have demonstrated a record of successful, timely completion of quality orientated environmental remediation projects of comparable scale, scope, and activities as the NCC – PROVISION OF ENVIRONMENTAL REMEDIATION SERVICES VICTORIA ISLAND PHASE 3a, OTTAWA.

Also, as part of Canada's commitment to support its First Nations population, this procurement also aims to provide specific socio-economic benefits to Indigenous People and Indigenous Firms of the Algonquin Nation. To fulfill this objective, the Bidder is strongly encouraged to build an inclusive contracting team by contacting the Algonquin Nation and/or Algonquin companies to discuss and/or secure the participation of Algonquin companies in the work. Contact information for Algonquin communities and organizations is provided with the Advance Notice to Vendors of Planned Procurement for the Environmental Remediation of Victoria Island (Phase 3a), Ottawa, Ontario which was published on CanadaBuys.ca on December 20, 2022.

In the evaluation of bids, proponents will be awarded points for involving Algonquin companies and/or individuals in the project as Prime or subcontractor(s) to deliver trades or services required for the successful completion of the project. The Bidder will be required to specify within its bid the exact dollar value of work as well of the type of work allocated to Algonquin companies (as Prime or subcontractor) in the completion of the scope of work as defined in the specifications.

Bidder submissions will be evaluated in accordance with 1.4 Evaluation Methodology.

1.2 Project Description

Excavation of Contaminated Soil

The successful Contractor will be responsible for environmental site remediation of the greenspace area west of Portage Bridge, north of Middle Street on Victoria Island. Work includes the excavation of all overburden material and concrete foundations to the top of intact bedrock surface within the remediation limits, for transportation and disposal at a Ministry of the Environment, Conservation and Parks (MECP) approved disposal facility, with some exception where overburden material will remain in place. Included in the work is the segregation of clean soil to be stockpiled for use in final backfill, and protection and cleaning of the bedrock surface.

Site reinstatement

Following acceptance of remedial conditions, the successful contractor will be responsible for site reinstatement with suitable soil backfill to specified grades, including the placement of topsoil and hydroseed.

Fencing



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To control access and facilitate the work, the successful contractor will be responsible for the removal and/or installation of new fencing at various locations on the site.

1.3 Evaluation and Selection of General Contractors to Be Qualified

The NCC will conduct the evaluation of the Qualification process in a fair manner and will treat Bidders equitably. Objective standards will be applied uniformly to Bidders. To that end, the NCC shall name a Technical Evaluation Committee. The Technical Evaluation Committee will be comprised of not less than three Environment Management Specialists currently working for the NCC in the contaminated sites domain. They shall assign a pass or fail rating to Bidders' submissions.

As highlighted in Section 1.1, the active participation of the Algonquin Nation is a very important (but not a mandatory) bidding requirement as part of this project on Victoria Island. All Bidders that pass the mandatory technical criteria will also be evaluated based on proposed Algonquin participation in the project. The Bidder with the best highest value score between lowest compliant price (maximum 85 points) and Algonquin participation (maximum 15 points) will be recommended for contact award.

The scoring methodology for the tender is as follows:

The lowest compliant price will receive 85 points. The subsequent Bidders scores will be prorated from the lowest compliant price. These scores will then be added to the points awarded for Algonquin participation to determine Bidders final scores.

Points awarded for Algonquin participation will be evaluated as follows:

- Bidders are to list the value of work (excluding taxes) assigned to, and to be performed by Algonquin individuals and/or companies (either as Prime or subcontractor) on the tender form in this annex, as well as a brief description of the work to be performed by the Algonquin company or individual(s). Note that costs for disposal of overburden material and supply of select subgrade material are ineligible costs for Algonquin participation and are therefore not included on the tender form in this Annex.
- The NCC will then sum these dollar values and evaluate the percent participation directly related to Algonquin content.
- The percent participation directly related to Algonquin content will be calculated as a percentage of the value of the contract (excluding the cost for disposal of overburden material and supply of select subgrade material) to be performed by Algonquin individuals and/or companies (as Prime or subcontractor) prorated out of 15.
- If an Algonquin-owned firm subcontracts portion(s) of the work to a non-Algonquin firm, they will only receive Algonquin participation points for the portion of work performed by themselves. Work subcontracted to and performed by a non-Algonquin owned company does not qualify as Algonquin participation.
- In the case of a Joint Venture (JV), at least 51% of the JV must be owned by an Algonquin business, and at least 30% of the total value of the work assigned to the JV must be performed by the Algonquin partner (as identified in the financial proposal).

Note: For the purposes of this tender, Algonquin participation is defined as:



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- o work performed by an Algonquin individual; and,
- o work subcontracted to, and performed by, an Algonquin-owned company.

Whereby:

- "work performed" means work physically completed by Algonquin individuals (including labourers and equipment operators) on the site to complete a portion(s) of construction as per the contract documents. Work performed includes contract administration directly related to the work being performed.
- Examples of "work performed" may include, but not be limited to, the operation of equipment on-site, completion of specific tasks on-site by labourers as part of construction such as bedrock cleaning, traffic control, etc., and contract administration such as development of work plans, record of meeting minutes, preparing invoices, etc.
- As previously stated, if an Algonquin-owned firm subcontracts portion(s) of the work to a non-Algonquin firm, they will only receive Algonquin participation points for the portion of work performed by themselves. Work subcontracted to and performed by a non-Algonquin owned company does not qualify as Algonquin participation. For example, if an Algonquin-owned firm subcontracts installation of fencing to a non-Algonquin firm, they are not able to obtain full Algonquin participation points as they are not physically completing the work. However, they can obtain Algonquin participation points for coordination and management of the fencing subcontractor.

An example of the scoring methodology is as follows:

	Bidder 1	Bidder 2	Bidder 3
Technical Evaluation	Pass	Pass	Pass
Total Bid Evaluated Price	\$5,000,000	\$6,000,000	\$7,000,000
Pricing Score	$5/5 \times 85 = 85 \text{ pts}$	$5/6 \times 85 = 70.8 \text{ pts}$	$5/7 \times 85 = 60.7 \text{ pts}$
Total Bid Price for Disposal Overburden Material (item 4.2) and Supply SSM Price (item 5.2)	\$2,000,000	\$4,000,000	\$3,000,000
Value of Work Eligible for Algonquin Participation Points (Total Bid Price – Total Bid Price for Items 4.2 and 5.2)	\$5,000,000 - \$2,000,000 = \$3,000,000	\$6,000,000 - \$4,000,000 = \$2,000,000	\$7,000,000 - \$3,000,000 = \$4,000,000
Value of Worked Performed by Algonquin individuals or companies (as Prime or subcontracted)	\$300,000	\$1,500,000	\$2,000,000
Algonquin Participation Score	300,000 / 3,000,000 x 15 = 1.5 pts	1,500,000 / 2,000,000 x 15 = 11.3 pts	2,000,000/4,000,000 x 15 = 7.5 pts
Total Combined Score	85 + 1.5 = 86.5 pts	70.8 + 11.3 = 82.1 pts	60.7 + 7.5 = 68.2 pts
Overall Rating	1 st	2 nd	3 rd



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In their bid submission, contractors must attest to the proposed Algonquin participation. Prior to contract award, the recommended firm must sign a joint attestation with the Algonquin firm(s) and/or Algonquin individuals, as appropriate, to attest the work will be performed as per their bid.

The NCC reserves the right to audit the Algonquin participation at any point during and/or after the contract to ensure the work is being performed as per their bid.

1.4 Evaluation Methodology

Following tender close, NCC Procurement will open the submission from each Bidder. Members of the Technical Evaluation Committee will not be given the Bidders financial offers as Procurement Services will sequester the financial offers until the technical evaluation is completed.

Evaluation step #1

Following bid closing, NCC procurement will review each submission to verify tender compliance and that Appendix III was completed and submitted.

- If NCC Procurement is unable to find material for tender compliance and that Appendix III was not completed or partially submitted/completed, the submission will be eliminated from further consideration;
- If NCC Procurement finds material for tender compliance and that Appendix III was fully completed and submitted, it shall forward only the technical part of the submission to the Technical Evaluation Committee for qualitative review.
- The list of documents that will be sent to the Technical Evaluation Committee will consist of strictly the following:

Mandatory submittal #1 General Contractor's Qualification Statement/Company Profile;
 Mandatory submittal #2 General Contractor's and Site Superintendent's Experience;
 Mandatory submittal #3 Client References.

Qualification Responses which fail, in the sole discretion of NCC, to meet the Mandatory Requirements will be eliminated from further consideration in the evaluation process.

Evaluation step #2

Step 2.1: The Technical Evaluation Committee will evaluate all technical submissions forwarded by NCC Procurement and assign a passing or failing grade to each one of them.

The following protocol will be used by the Technical Evaluation Committee when evaluating the Bidder's technical submissions:

o If the Technical Evaluation Committee deems that a technical submission does not meet all the technical requirements, the submission will be assigned a failing grade;



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 If the Technical Evaluation Committee deems a technical submission meets all the technical requirements, it will be assigned a passing grade.

The results from the technical evaluation submissions will be sent to NCC Procurement.

- Step 2.2: All submissions for which the Technical Evaluation Committee assigned passing grades to will be further evaluated by NCC Procurement to determine the best value score between Lowest Compliant Price (maximum 85 points) and Algonquin participation (maximum 15 points).
- Step 2.3: NCC Procurement may initiate the contract award process with the Bidder with the highest value score.



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Pass/Fail Criteria – Information submitted will be evaluated using the following pass/fail criteria:

Submittal	Rating	Criteria for Passing Grade
General Contractor's Qualification Statement / Company Profile	Pass/Fail	- Complete the General Contractor's Qualification Statement / Company Profile sections in its entirety.
General Contractor's Experience and Client References	Pass/Fail	 The one (1) project example submitted must be significant and a recent remediation project completed in the last seven (7) years and involve remediation activities comparable in scale and scope to the work of the NCC – Victoria Island Phase 3a remediation project. The one (1) project example shall have a minimum remediation value of \$2 million including taxes. The references provided must confirm that they were satisfied with the performance of the General Contractor. References will be contacted.
Site Superintendent's Experience	Pass/Fail	 Site Superintendent's Experience must have a minimum 10 years' experience in the environmental/remediation industry including 10 years' experience in overall management (i.e. responsibility for project budget, allocation of technical personnel, and adherence to project schedule) of soil and contaminated sites remediation projects, and Site Superintendent must have managed one (1) remediation project with a cost of \$2 million or greater (including taxes) within the last seven (7) years.



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SECTION 2 – REQUEST FOR QUALIFICATION RESPONSE REQUIREMENTS

2.1 Overview of Section 2

This section provides the Bidders with the information that must be provided in their *Qualification Response*.

2.2 <u>Mandatory</u> submittal #1 : General Contractor's Qualification Statement /Company Profile

To help the NCC evaluate the Bidder's ability to meet project requirements and expectations, Bidders shall provide the General Contractors' Qualification Statement/Company Profile.

2.3 <u>Mandatory</u> submittal #2 : General Contractor's and Site Superintendent's Experience

Bidders shall provide Project Examples for one (1) significant and recent remediation project completed in the last seven (7) years, for which they were the General Contractor / Site Superintendent, and which involved remediation activities comparable in scale and scope to the work to be undertaken as part of this request for qualification. One form should be filled in for each project.

Notes:

- Bidders need to complete two (2) Project Examples sheets (i.e. provide one (1) example project for the General Contractor firm and one (1) example project for the proposed Site Superintendent);
 Note: The one (1) example project for the General Contractor and Site Superintendent may be the same
- Each project must have a minimum remediation value of \$2 million (including PST/GST/HST);
- Bidders may supplement the information requested with additional sheets if required;
- The Site Superintendent must have a minimum of ten (10) years of experience in the overall management, subtrade co-ordination and scheduling of remediation projects;
- The General Contractor may propose a Site Superintendent who possesses the required experience on projects done while employed of another General Contractor(s).

2.4 <u>Mandatory</u> submittal #3 : Client References

Bidders shall provide Client Reference Forms filled out by the key client representative for the one (1) Project Example of the General Contractor. The NCC may contact these clients for verification and clarification of information within approximately one (1) week from the close of the qualification evaluation. Please ensure that the contact information is correct, current and that the persons identified are generally available. Bidders may provide a secondary client name and contact information.



experience.

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<u>Mandatory</u> submittal #1 - GENERAL CONTRACTOR'S QUALIFICATION STATEMENT / COMPANY PROFILE

This document is intended to provide information on the General Contractor's capacity, skill and

Company Address Felephone								
	» No							
Γelephon	- Nο							
	2 140.			Fax	No			
e-mail								
egal Stru	cture c	of Contractor	r					
ear Esta	blished							
				rship Ro	egistered	_ Sole Proprie	etor Oth	er .
proxim	ate anr	nual value of	f construc	tion work	in Canada	for the last f	five years	
-							•	
2021	\$							
/ c	ear Estal point Vent proxima 2022 2021 2020	ear Established coint Venture eproximate ann 2022 \$ 2021 \$ 2020 \$	gal Structure of Contractor ear Established oint Venture Corporation	gal Structure of Contractor fear Established point Venture Corporation Partne proximate annual value of construct 2022 \$ 2021 \$ 2020 \$	gal Structure of Contractor fear Established point Venture Corporation Partnership Respectively. proximate annual value of construction work 2022 \$ 2021 \$ 2020 \$	gal Structure of Contractor fear Established point Venture Corporation Partnership Registered proximate annual value of construction work in Canada 2022 \$ 2021 \$ 2020 \$	gal Structure of Contractor fear Established point Venture Corporation Partnership Registered Sole Proprie proximate annual value of construction work in Canada for the last of 2022 \$ 2021 \$ 2020 \$	gal Structure of Contractor fear Established point Venture Corporation Partnership Registered Sole Proprietor Other proximate annual value of construction work in Canada for the last five years 2022 \$ 2021 \$ 2020 \$



TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

5- Key site personnel pr Managers, Foremen)	oposed for remediation	project. (i.e. Prin	cipal-In-charge, Project
Name	Title/Position	Years of Experience	
6- Company assets (con		be used on rem	ediation project.
Name of equipment			
		<u></u>	
		_	
7- List of sub-contractors	(where applicable) *		
Fencing: Surveyor: Trucking:			

^{*} Details on the Algonquins' participation will be elaborated further within Submittal # 4.



TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

<u>Mandatory</u> submittal #2 - GENERAL CONTRACTOR'S AND SITE SUPERINTENDANT'S EXPERIENCE

- This document is intended to provide information on the capacity, skill and experience of the General Contractor and the proposed Site Superintendent.
- Forms to be filled out in their entirety.
- Bidders may supplement information requested with additional sheets if required.

Name of Site Superintendent to be used on this project:
Does the Site Superintendent have a minimum of ten (10) years of experience in the overall management, subtrade organization and scheduling of remediation projects with a value of \$2 million or more per project?
YES NO



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GENERAL CONTRACTOR - PROJECT EXAMPLE # 1

Project Name						
Original Contract Price, excluding HST (\$) Final Contract Price, excluding HST (\$)						
Reason for variance in cost						
Project Location (street address & city):						
Planned Start Date (M/Y) Planned Cor	npletion Date (M/Y)					
Actual Start Date (M/Y) Actual Completion Date (M/Y)						
Reason for variance in completion date						
Project Site Superintendent						
Project Owner						
Name and Title						
Company/Institution & Tel. No.						
Project Environmental Consultant						
Name and Title						
Firm Name & Tel. No.						
Does this project involve any of the following? Work with a governmental agency Work in an urban area Work which involved archaeological monitoring Site access requiring environmental sensitivity Work requiring active water management Work carried out in winter construction conditions	yes no					



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Project Description, specifically elaborating on any of the items pertinent to the projects part of this requ for qualification. Continue by adding separate page(s) if additional space is required. Include photogra where relevant.	
where relevant.	

Submit one form per project. All fields must be completed.



TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

SITE SUPERINTENDENT - PROJECT EXAMPLE # 1

Project Title			
Total Value, excluding HST (\$)			
Project Location (street address & city):			
Start Date (Month/Year)	Completion Date (Mon	th/Year)	
Project Site Superintendent			
Project Owner			
Name and Title			
Company/Institution & Tel. No.			
Project Environmental Consultant			
Name and Title			
Firm Name & Tel. No.			
Does this project involve any of the following? Work with a governmental agency Work in an urban area Work which involved archaeological mo Site access requiring environmental ser Work requiring active water manageme Work carried out in winter construction Project Description, specifically elaborating on any for qualification. Continue by adding separate pag where relevant.	sitivity int conditions of the items pertinent to		

TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

Submit one form per project. All fields must be completed.



TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

<u>Mandatory</u> submittal #3 - CLIENT REFERENCE FORM FOR GENERAL CONTRACTOR PROJECT EXAMPLE # 1

I hereby certify the information provid Client Name Client Organization Name	Title Telephone	Signature Date
I hereby certify the information provid	ed in this client reference form to be	e true and factual.
Project Location (street address & city):	
Project name:		
Project Details:		
Project Example submitted by the Gen	eral Contractor is accurate.	
	oject to our satisfaction and that the	e information presented in the
executed the work for the following pr	oject to our satisfaction and that the	information procented in the



TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

Submittal #4 - VALUE OF PROJECT ALLOCATED TO ALGONQUIN INDIVIDUALS AND/OR COMPANIES AS PRIME OR SUBCONTRACTOR (NOTE NOT A MANDATORY BIDDING REQUIREMENT)

To help the NCC evaluate the role Algonquin individuals and/or companies will play in meeting the project requirements and expectations, Bidders are to list the value of work (excluding taxes) assigned to, and to be performed by Algonquin individuals and/or companies (either as Prime or subcontractor) on the form below, and include a brief description of the work to be performed for each line item. Bidders shall ensure enough details are provided such that the NCC can clearly understand the tasks that will be assigned to and performed by an Algonquin individual and/or company (either as Prime or Subcontractor) and the associated value of the work. Bidders shall sum up the total value of the Algonquin's participation and include the amount within this form.

- This document is intended to provide information on the participation of Algonquin individuals and/or companies (either as Prime or sub-contractor(s)) to deliver the objectives of this project.
- Forms to be filled out in their entirety.
- Bidders may supplement information requested with additional sheets if required.

Pay Item No.	Description	Name of Algonquin Individual(s) or Algonquin-owned Company the work will be assigned to and performed by.	Indicate whether the work assigned to, and to be performed by is the Prime or Subcontractor.	\$ Value of work (excluding taxes) assigned to, and to be performed by, Algonquin individual(s) and/or Algonquin-owned companies, including equipment rental if applicable.	Brief description of work assigned to and to be performed by Algonquin individual(s) and/or Algonquin-owned company.
1.0	Mobilization & Demobilization			\$	



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2.0	Site preparation		\$
2.1	Decommissioning monitoring well within remediation limits		\$
2.2	Temporary construction of access roads, ramps, and pads		\$
3.0	Work Plans: Development and execution of traffic control, dust and soil tracking, health and safety and environmental protection plans		\$
4.1	Excavation and transportation of contaminated overburden material to an approved MECP disposal facility		\$
4.3	Excavation, segregation, breaking, loading, transportation and off-Site disposal of miscellaneous recyclables		\$
4.4	Bedrock protection and cleaning		\$
4.5	Excavation, separation, stockpiling and reuse of clean Overburden Material		



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5.1	Transportation, placement, and compaction of SSM Backfill and aggregates		\$	
5.4	Topsoil and Hydraulic Seeding		\$	
5.5	Geotextile		\$	
6.0	Water Management		\$	
7.0	Install new 1.8 m Chain Link Fence		\$	
8.0	Survey		\$	
	SUB TOTAL EXCLUDING TAXES of work assigned to, and to be performed by, Algonquin individuals and/or Algonquin-owned companies, including equipment rental if applicable		\$	

Equipment rental

Should equipment rental be required as part of this project, please list the Algonquin individual and/or Algonquin-owned companies supplying the equipment and specify the dollar amount of rental that will go to each.

TECHNICAL QUALIFICATION FOR GENERAL CONTRACTORS, AND, SOCIO-ECONOMIC BENEFITS TO INDIGENOUS PEOPLE AND INDIGENOUS FIRMS OF THE ALGONQUIN FIRST NATION

I hereby acknowledge that firm:	the information provided is true an	nd correct to the best of my k	knowledge, and that I have th	ne authority to bind the
Maria	Title			
Name	Title			
Signature	Date			
Firm's Name				



SPECIAL INSTRUCTIONS TO **BIDDERS**

- SI01 Tender Documents
- SI02 Enquiries during the Solicitation Period
- Non-Mandatory Site Visit SI03
- Revision of Tender SI04
- SI05 Tender Results
- SI06 **Negotiations**
- SI07 Tender Validity Period SI08 **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, Nathalie Rheault e-mail address - nathalie.rheault@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.
- All enquiries and other communications related to this tender sent throughout the solicitation period 3) 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 NON-MANDATORY SITE VISIT

- A NON-MANDATORY site visit will be held on April 5, 2023 at 10 am Eastern Daylight Time. The meeting place will be at 150 Middle Street, Victoria Island, Ottawa, ON
- 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.

SI04 REVISION OF TENDER

1) A tender may be revised by email in accordance with GI10 of the General Instructions to Bidders. The email is Bids-soumissions@ncc-ccn.ca.

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SPECIAL INSTRUCTIONS TO BIDDERS

SI05 TENDER RESULTS

1) Following solicitation closing, tender results may be obtained by emailing the Sr. Procurement Advisor, Allan Lapensée, e-mail address <u>allan.lapensee@ncc-ccn.ca</u>.

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.
- 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

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SPECIAL INSTRUCTIONS TO BIDDERS

- (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

1) Not applicable

SI09 PUBLIC TENDER OPENING

1) No scheduled public opening. Refer to SI05 for results.

NOTE: The complimentary documentation referenced in section 011100 item 1.8 of the specifications is available upon request at email nathalie.rheault@ncc-ccn.ca

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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 Ouébec 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 or provided by the NCC;
 - (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 initialed by the person or persons signing the tender. Initials shall be original(s). Alterations, corrections, changes or erasures that are not initialed 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

1) 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".

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 (only requested from the successful bidder).

GI04 Quebec Sales Tax

1) See GI03.

GI05 Capital Developement and Redevelopment Charges

1) 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.

GI07 Listing of Subcontractors and Suppliers

1) 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

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- 1) The Bidder shall submit tender security with the tender in the form of a bid bond 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.
- 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) deleted
- 4) deleted
- 5) deleted
- 6) deleted.
- 7) deleted.
- 8) deleted
- 9) deleted
- 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
 - (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 shall be addressed and submitted to the Bid email 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

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- (c) any request for exchange rate fluctuation protection shall not be considered.
- 3) 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

- 1) A tender submitted in accordance with these instructions may be revised by email (Bidssoumissions@ncc-ccn.ca) provided the revision is received on or before the date and time set for the closing of the solicitation. The revision 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 revision, the total aggregate sum of all revisions submitted, including the current revision, for that Item shall be shown separately.
- 2) A email 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

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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;
 - (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

1) 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.

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- 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, 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, held	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 payment	t of which sum, well and truly to be made, the Principal and
the Surety bind themselves, their heirs, executors, administrators, successo	ors and assigns, jointly and severally, firmly by these presents.
SIGNED AND SEALED thisday of	,, . WHEREAS, the Principal has
submitted a written tender to the NCC, dated the day o	of,
for:	
NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such	that if:
(a) The Principal, should his tender be accepted within the period be days after closing date of the tender:	specified by the NCC, or, if no period be specified, within sixty (60)
	no period be specified therein, within fourteen (14) days after the such further contractual documents, if any, as may be required by
furnish a Performance Bond and a Labour and Material Pay satisfactory to the NCC, or other security acceptable to the N	yment Bond, each in the amount of 50% of the Contract price and ICC; or
	amount of the Principal's tender and the amount of the Contract 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 and ϵ	effect.
PROVIDED, HOWEVER , that the Surety and the Principal shall not be liab the bond.	ole to the NCC for an amount greater than the amount specified in
PROVIDED FURTHER that the Surety shall not be subject to any suit or a served upon the Surety at its Head Office in Canada, within twelve (12) more	
IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixe with its corporate seal duly attested by the signature of its authorized signin	
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			
Description of work / Description des travaux			
Contractor's business name / Nom de l'entreprise de l'entrepreneur	Contractor's site superintendent / C	Contremaître de l'entreprene	ur
Contractor's business address / Adresse de l'entreprise de l'entrepreneur	<u> </u>		
NCC representative / Représentant de la CCN			
	/ N°. de téléphone	E-mail address / Adresse é	electronique
Contract information / Information sur le contrat			
Contract award amount / Montant du marché adjugé	Contract award date / Date de l'adj	udication du marché	
Final amount / Montant final	Actual contract completion date / D	ate réelle d'achèvement du	contrat
Number of change orders / Nombre d'ordres de changement	Final certificate date / Date du certi	ficat final	
Quality of workmanship / Qualité des travaux exécutés	Category / Catégorie	Scale / Échelle	Points / Pointage
This is the rating of the quality of the workmanship. At final completion the quality of the materials and equipment incorporated in the work must meet the requirements	Unacceptable / Inacceptable	0 – 5	
set out in the plans and specifications.	Not satisfactory / Non-satisfaisant	6 – 10	
Il s'agit de l'évaluation de la qualité des travaux exécutés. À l'achèvement des	Satisfactory / Satisfaisant	11 – 16	
travaux, la qualité des matériaux et de l'équipement doit satisfaire les exigences établies dans les plans et devis.	Superior / Supérieur	17 - 20	
Time / Délai d'exécution			
This is the rating of the timeliness of completion considering the actual completion date compared with the original (or amended) contract completion date and allowing	Unacceptable / Inacceptable	0 – 5	
for conditions beyond the control of the contractor.	Late / En retard	6 – 10	
Il s'agit de l'évaluation du délai d'exécution des travaux en prenant en considération la date actuelle d'achèvement des travaux par rapport à la date originale (ou	On time / À temps	11 – 16	
modifiée) et en tenant compte des conditions indépendantes de la volonté de l'entrepreneur.	Ahead of schedule / En avance sur le calendrier	17 - 20	
Project management / Gestion de projet			
This is the rating of how the project, as described in the drawings and specifications,	Unacceptable / Inacceptable	0 – 5	
was managed including co-ordination, quality control, effective schedule development and implementation.	Not satisfactory / Non-satisfaisant	6 – 10	
Voici l'évaluation de la façon dont le projet décrit dans les documents contractuels a	Satisfactory / Satisfaisant	11 – 16	
été géré, y compris la coordination, le contrôle de la qualité, l'élaboration d'un calendrier efficace et la mise en œuvre.	Superior / Supérieur	17 - 20	
	Criteria not applicable / Crité	ère non-applicable	N/A / S/O
Contract management / Gestion de contrat			
	Unacceptable / Inacceptable	0 – 5	
This is the rating of how the contract was administered in accordance with the provisions expressed in the "front end" portion of the documents.	Not satisfactory / Non-satisfaisant	6 – 10	
Voici l'évaluation de la façon dont le contrat a été administré conformément aux	Satisfactory / Satisfaisant	11 – 16	
dispositions comprises dans la partie « prioritaire » des documents.	Superior / Satisfaisant	17 - 20	
	Criteria not applicable / Crite	ère 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 / Inacceptable	0 – 5	
otherwise applicable) were managed and administered.	Not satisfactory / Non-satisfaisant	6 – 10	
Voici l'évaluation de l'efficacité avec laquelle les dispositions relatives à la santé et à la sécurité au travail (dans le contrat, dans les règlements provinciaux ou dans tout	Satisfactory / Satisfaisant	11 – 16	
autre document) ont été gérées et administrées.	Superior / Satisfaisant	17 - 20	
	Total poi	nts / Pointage total	/100
Comments / Commentaires			
Name / Nom Title / Titre	Signature		Date

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 : Yes Nο - to meet the schedule / de respecter l'échéancier des travaux Oui Non Yes Nο - to clean up deficiencies in a reasonable time / de corriger les vices dans un délai raisonnable Oui Non Have you recommended assessments and damages for late completion under the contract? Yes Nο Avez-vous recommandé des dédommagements pour retard d'exécution aux termes du marché? Oui 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 of the work
- 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 claim
- 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 the NCC
- 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
- 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

GC1 GENERAL PROVISIONS

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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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Canadä C

GC1 GENERAL PROVISIONS

"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.
- 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 GENERAL PROVISIONS



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

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

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

- 1) 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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Canada GC1 GENERAL PROVISIONS

GC1.8 LAWS, PERMITS AND TAXES

- 1) 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.
- 2) Unless stipulated otherwise in the Contract, the Contractor shall obtain and maintain all permits, certificates, licences, registrations and authorizations required for the lawful performance of the Work.
- 3) Prior to the commencement of the Work at the site, the Contractor shall tender to a municipal authority an amount equal to all fees and charges that would be lawfully payable to that municipal authority in respect of building permits as if the Work were being performed for an owner other than 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.
- 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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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

- 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

1) 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

1) The Contractor represents and covenants that no bribe, gift, benefit, nor other inducement has been nor shall be paid, given, promised or offered directly or indirectly to any official or employee of 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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- GC2.1 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

- 1) 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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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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- 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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- 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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GC2.8 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 EXECUTION AND CONTROL OF THE WORK

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

1) 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

- 1) 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 EXECUTION AND CONTROL OF THE WORK

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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GC3 EXECUTION AND CONTROL OF THE WORK

- (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

- 1) 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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GC3 EXECUTION AND CONTROL OF THE WORK

- (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

1) 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

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GC3.10 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF THE NCC

- 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
 - (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.

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GC3 EXECUTION AND CONTROL OF THE WORK

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
 - (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

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GC3 EXECUTION AND CONTROL OF THE WORK

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

1) 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

GC3.1	INTERPRETATION
GC5.2	AMOUNT PAYABLE
GC5.3	INCREASED OR DEC

- 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.
- 3) An amount is overdue when it remains unpaid on the first day following the day upon which it is due and payable.
- 4) The "date of payment" means the date of the negotiable instrument of an amount due and payable by the 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

- 1) The Contract Amount shall not be increased nor decreased by reason of any increase or decrease in the cost of the Work that is brought about by an increase or decrease in the cost of labour, Plant, Material or any wage adjustment 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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GC5 TERMS OF PAYMENT

- (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:
 - (i) 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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GC5 TERMS OF PAYMENT

- 2) 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.
- 6) The Contractor shall, at the request of any claimant, submit to binding arbitration those questions that need to be answered to establish the entitlement of the claimant to payment. The arbitration shall have as parties to it any Subcontractor or Supplier to whom the claimant supplied Material, performed work or rented equipment should such Subcontractor or Supplier wish to be adjoined, and 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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GC5 TERMS OF PAYMENT

- (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

- 1) 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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GC5 TERMS OF PAYMENT

- (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

- 1) 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.
- 2) 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 DELAYS AND CHANGES IN THE WORK

- GC6.1 CHANGES IN THE WORK
- GC6.2 CHANGES IN SUBSURFACE CONDITIONS
- GC6.3 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC 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

- 1) 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

- 1) If a Lump Sum Arrangement applies to the Contract or a part thereof, the price of any change shall be the aggregate estimated cost of labour, Plant and Material that is required for the change as agreed upon in writing by the Contractor and Canada plus 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

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

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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.
- 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

1) 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

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.
- 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.
- 3) During a period of suspension, the Contractor shall not remove any part of the Work, Plant or Material from its site without the consent of 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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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:

https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494

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 conditions hereinafter contained, held	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 payment of	f which sum, well and truly to be made, the Principal and the
Surety bind themselves, their heirs, executors, administrators, successors $ \\$	and assigns, jointly and severally, firmly by these presents.
SIGNED AND SEALED this day of	, WHEREAS, the Principal has
entered into a Contract with the NCC, dated the day	of , ,
for:	
undertake the completion of the work, assume the financial reavailable to the NCC under the Contract, (d) be liable for and pay all the excess costs of completion of the Corton not be entitled to any Contract moneys earned by the Principal relating to such earned Contract moneys held by the NCC, and provided, however, and without restricting the generality of the formula in the second such as the contract moneys held by the NCC.	ault under the Contract, the Surety shall efault of the Principal, cts the Surety to undertake the completion of the work, complete the entered into for the completion of the work, and to the approval of the NCC, after reasonable notice to the Surety, does not direct the Surety to esponsibility for the cost of completion in excess of the moneys atract, and the unit properties of the surety under this Bond shall remain unchanged pregoing, upon the completion of the Contract to the satisfaction of acks related thereto held by the NCC may be paid to the Surety by
3. No suit or action shall be instituted by the NCC herein against the Surel	
from the date on which final payment under the Contract is payable.	, parametria di con processio di con inconfirmation di con (2)
IN TESTIMONY WHEREOF , the Principal has hereto set its hand and affin with its corporate seal duly attested by the signature of its authorized significant.	
SIGNED, SEALED AND DELIVERED in the presence of:	Note: Affix Corporate seal if applicable.
Principal	
Witness	



LABOUR AND MATERIAL PAYMENT BOND

			Bond Number	
			Amount	\$
KNOW ALL MEN BY THESE	PRESENTS, that			as Principal,
hereinafter called the Principa	al, and		8	as Surety, hereinafter
called the Surety, are, subjec	t to the conditions hereinafter	contained, held and firmly bo	und 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	, well and truly to be made, the Principal a	nd the Surety
bind themselves, their heirs, e	executors, administrators, suc	cessors and assigns, jointly a	and severally, firmly by these presents.	
SIGNED AND SEALED this	day of		. WHEREAS, the Principal h	as entered into a Contract
with the NCC, dated the	day of	,	, for:	
		which contract is by refe	rence made a part hereof, and is hereinaft	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 INSURANCE



GC10.1	INSURAN	CE CONTRAC	TS	
GC10.2	INSURANCE PROCEEDS			
GC10.3	INSURANCE TERMS			
	GC10.3.1	General		
		GC10.3.1.1	Proof of Insurance	
		GC10.3.1.2	Payment of Deductible	
	GC10.3.2	Commercial (General 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

- 1) 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

1) 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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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 Contract no. / Nº de contrat Description and location of work / Description et endroit des travaux **INSURER / ASSUREUR** Name / Nom No., Street / No, rue Address / Adresse City / Ville Province Postal code / Code postal **BROKER / COURTIER** Name / Nom No., Street / No, rue Address / Adresse City / Ville Province Postal code / Code postal **INSURED / ASSURÉ** Name of contractor / Nom de l'entrepreneur No., Street / No, rue Address / Adresse City / Ville Postal code / Code postal Province ADDITIONAL INSURED / ASSURÉ ADDITIONNEL The National Capital Commission / La Commission de la capitale nationale This insurer certifies that the following policies of insurance are at present in force covering all operations of the Insured, 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** Number Inception Date **Expiry Date** Limit of Liability Type Genre Numéro Date d'effet Date d'expiration Limites de garantie Commercial General Liability Responsabilité civile des entreprises Builder's Risk "All Risks" Assurance des chantiers « tous risques » Installation Floater "All Risks" Risques d'installation « tous risques » Other (list) / Autre (énumérer) Each of these policies includes the coverages and provisions as specified Chacune des présentes polices renferment des garanties et dispositions in Insurance Terms and each policy has been endorsed to cover the spécifiées aux Conditions d'assurance, et chaque police a été amendée National Capital Commission as an Additional Insured. The Insurer pour couvrir la Commission de la capitale nationale en tant qu'assuré agrees to notify the National Capital Commission in writing thirty (30) additionnel. L'assureur convient de donner un préavis de trente (30) jours days prior to any material change in, or cancellation of any policy or à la Commission de la capitale nationale en cas de changement visant la coverage. 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



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 **Site Access**.

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 arises

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 <u>as well as any recurring subcontractors</u> (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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GENERAL

Payment at Contract prices shown on the *Form of Tender* shall constitute full compensation for the mobilization, supervision, Work force, equipment, tools, materials, consumables, transportation, disposal and all other activities required to complete the associated Works.

Unless indicated otherwise, payment at Contract prices includes open cut and trench excavation, and exploration pits, when such activities are required, the removal of shrubs, undergrowth, debris, etc., digging by machine or hand, pumping and shoring as required, supporting existing services and structures, rerouting of ditches, culverts, sewers and drains, transportation, placement and compaction of backfill materials, etc.

For items measured and paid in metric tonne, the Contractor must provide the Contract Administrator with bills of lading, trip tickets; weigh bills, etc. on a daily basis for each type of material transported. Also, a copy of daily reports regarding the control of tare and materials, including the origin of the materials, name and identification of haulage contractor, tare of carrier and weight of transported materials shall be provided to the Contract Administrator.

Finally, payment at Contract prices includes health and safety requirements, protection of existing services and structures, temporary access roads and road signs, dust control, Site grading and clean up, as well as any other required activity that does not have a specific item for payment in the *Form of Tender*.

The Soil Remediation Project at Victoria Island will be referred to as the Work Site or Work Area, which includes the Remediation Limit or Area as shown on the Drawings.

A GENERAL COSTS

ITEM No.1 MOBILIZATION AND DEMOBILIZATION

This item consists of mobilizing all supervision, labour, equipment, tools, materials, consumables, transportation and other services in the Work areas to undertake and carry out the Work as outlined in the Contract Documents including the clean-up of the Work area and to demobilize from the Work Area. Labour associated with the administration of this contract shall be included within this item.

A Work Site office owned by the NCC will be provided to the Contract Administrator and NCC personnel however, the Contractor is responsible for the provision of all temporary site facilities needed for their use and to complete the Contract, including but not limited to bathroom facilities for use by all site personnel.

The following demobilization and project close out items are included in the lump sum price for this item:

- Submission of the Final Site Survey Certificate (FSSC) as required in Section 017800 Closeout Submittals;
- Site cleanup and disposal of waste at Ontario Ministry of the Environment Conservation and Parks (MECP) approved disposal facilities;
- Excavation, loading, hauling and off-Site disposal to an approved MECP disposal facility of all granular materials of roads, pads, decontamination pad and bottom of drainage sumps, etc. that have been contaminated by the Contractor's operations; and,
- Demobilization of all personnel, equipment, tools, materials and services.

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Measurement

There will be no measurement for payment of Item 1. Sixty percent (60%) of the lump sum payment shall be paid upon completion of the mobilization and the remaining forty (40%) of the lump sum shall be paid upon completion of project closeout and demobilization Work.

The price entered for this item is to cover the Contractors cost of mobilization at the beginning of the construction period and demobilization at the close of construction, including all administration costs to complete the Work. The price entered for this Work shall be consistent with the costs involved but shall not, in any event, exceed five (5%) of the total Tender Price.

ITEM NO. 2 <u>SITE PREPARATION</u>

Sub-item no. 2.1 <u>Monitoring Well Abandonment</u>

Included in this lump sum item are all labour, materials, equipment and consumables required to abandon the one (1) monitoring well within the Remediation Limits by a licensed well contactor.

Measurement

There will be no measurement for payment of sub-item 2.1. One hundred percent (100%) of the lump sum will be paid upon completion of the well abandonment.

Sub-item no. 2.2 Temporary Construction of Access Roads, Ramps and Pads

The lump sum price for sub-item 2.2 includes the stripping, supply and haulage of materials, grading, compaction, construction, operation, maintenance and removal of temporary access roads within the Work Site, ramps and pads as required in the Work areas to achieve excavation of all areas of the Work Area. The Contractor shall grade the Site to satisfy project requirements and shall use suitable fill material as outlined in the Contract Documents for the construction of temporary access roads, ramps or pads as directed by the Contract Administrator.

Measurement

There will be no measurement for payment of sub-item 2.2. Progressive payments shall be made on a monthly basis, for the installation, operation, maintenance and removal of the temporary access roads, ramps and pads, in proportion to the duration of project Work, to a maximum of one hundred percent (100%).

Sub-item no. 2.3 Turtle Barrier

The lump sum price for sub-item 2.3 includes the labour, equipment and materials to install the required turtle barrier, as outlined in the contract documents. This item may be removed form the contract in the event delays require installation by the NCC prior to contract award.

Measurement

There will be no measurement for payment of sub-item 2.3. Payment will be once installed and accepted by the Contract Administrator. Maintenance of the fence will be captured under Item 3.

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ITEM NO. 3 WORK PLANS

The Work under this item consists of the preparation of and execution of Traffic Control Plan, Health and Safety Plan, Dust and Soil Tacking Control Plan, Environmental Management Plan, Excavation Plan, Site Layout Plan and Sediment and Erosion Control Plan, required under this Contract. Included in this item will be the preparation of the plans for review and acceptance by the Contract Administrator, as well as all equipment, labour and materials required to execute and comply with the plans, excluding the installation of the turtle barrier captured in Item 2.3. Also included within this item are the costs associated with maintenance, mitigation and corrective measures related to non-compliance with the activities contained within these plans.

Measurement

There will be no measurement for payment of this item. Twenty-five percent (25%) of the lump sum will be paid upon satisfactory submission of the Traffic Control Plan, Health and Safety Plan, Dust and Soil Control Plan, Environmental Management Plan, Excavation Plan, Site Layout Plan and Erosion and Sediment Control Plan to the Contract Administrator and installation of traffic/pedestrian and environmental control measures. Seventy-five percent (75%) will be prorated into equal payments made on a monthly basis for the duration of the project Work, to a maximum of one hundred percent (100%). Final payment for this item shall not be made until all traffic and environmental control measures have been removed.

B REMEDIATION COSTS

ITEM NO. 4 MANAGEMENT OF EXCAVATED OVERBURDEN AND OTHER MATERIALS

This item consists of supplying all supervision, labour, equipment, tools, materials, consumables, transportation and other services necessary to excavate, segregate (bermed clean soil, waste and recyclables greater than 400 mm), load and transport, under the supervision of the Contract Administrator, within the approximate excavation limits shown in the Drawings, and in accordance with Sections 013513 – Special Procedures for Contaminated Sites, 013543 – Environmental Protection, 312333.02 – Surface Water and Groundwater Management, 312333.00 – Excavation of Overburden and other Materials and 321560 – Dust and Soil Tracking Control. During the excavation Work, the Contract Administrator shall regulate the sorting of Overburden Material based on the available analytical results and from visual observations.

Item 4 is divided into five sub-items. The unit price for each of these sub-items includes but is not limited to the following:

- Excavation, segregation, loading, transportation and off-Site disposal of Overburden Material according to the nature of material type. Clean material will be segregated for reuse;
- Breaking boulders, rock pieces and miscellaneous debris including but not limited to buried concrete and foundation elements to a size manageable for excavation and for transportation to an appropriate recycling or MECP approved facility, as appropriate;
- Segregating and setting miscellaneous recyclable materials and (if any) registerable hazardous
 waste and/or material deemed unsuitable by the Contract Administrator for disposal at an
 approved off-Site disposal facility;
- Cleaning and protecting the bedrock surface at the bottom of the excavation as specified and to the satisfaction of the Contract Administrator;

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- Excavation perimeter sloping;
- Downtime due to archaeological and geoheritage investigations and findings;
- Downtime due to weather or water infiltration into the excavation Site;
- Downtime due to laboratory analytical testing;
- Preparation of transportation manifests, trip tickets, etc.;
- Contractor to arrange for leachate test results required for landfilling purposes, as required by the Contractors selected waste disposal facility;
- Supplying all necessary personnel and equipment for measuring quantities; and,
- Protection and/or abandonment of services and infrastructure impacted by the remediation.

Sub-Item no. 4.1 Excavation and transportation of Overburden Material

This sub-item consists of supplying all supervision, labour, equipment, tools, materials, and other services necessary for the excavation and transportation of the Overburden Material to an approved MECP disposal facility, excluding tipping fees, and includes any breaking required of rock, concrete infrastructure and foundation elements required for excavation and transportation, as directed by the Contract Administrator and in accordance with Contract Documents. Includes the effort to protect, remove or replace services and infrastructure identified in the Contract Documents.

Measurement

Measurement shall be made by metric tonnes, actually hauled and disposed of at MECP approved facilities, as weighed off-site.

Sub-Item no. 4.2 Disposal of Overburden Material

This sub-item consists of supplying Disposal costs for the Overburden Material at an approved MECP disposal facility. Contractor responsible for the collection and analysis of any tests required by their selected waste disposal site.

Measurement

Measurement shall be made by metric tonnes disposed and weighed off-Site at an MECP approved facility.

Sub-Item no. 4.3 <u>Excavation, segregation, breaking, loading, transportation and off</u>Site disposal of miscellaneous recyclable materials

This sub-item consists of supplying all supervision, labour, equipment, tools, materials, transportation and other services necessary for segregation, loading, transportation, off-Site weighing and disposal of miscellaneous recyclable materials (e.g., cast iron, railway tracks, existing fencing to be removed etc.) at MECP approved recycling facilities. The Contractor shall be responsible for the breaking up or cutting up of material to a size that is acceptable to the recycling facilities.

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Included in this sub-item are recyclables greater than 400 mm in size.

Measurement

Haulage and off-Site disposal of miscellaneous recyclable materials will be measured in metric tonnes actually hauled and disposed of at MECP approved facilities, as weighed off-Site.

Sub-Item no. 4.4 <u>Bedrock Protection and Cleaning</u>

This sub-item consists of supplying all supervision, labour, equipment, tools, materials, and other services necessary to achieve validation of the undamaged bedrock surface across the Site and to complete the excavation in a manner so as not to damage the bedrock surface. This includes methods beyond standard excavation methods such as manual excavation, power brush, compressed air, or equivalent.

Measurement

There will be no measurement for payment of this item. One hundred percent (100%) of the lump sum will be paid upon satisfactory completion of the bedrock cleaning.

Sub-Item no. 4.5 <u>Excavation, separation, stockpiling and reuse of clean Overburden</u> <u>Material</u>

This sub-item consists of supplying all supervision, labour, equipment, tools, materials, transportation, and other services necessary for excavation and separation of clean soil berm in the northeast area of the site, stockpiling and reuse (final placement including compaction) as backfill in the west of the site. Includes manual removal of miscellaneous non soil debris that may be present in the clean fill, as well as the costs for backfilling the soil on-Site.

Measurement

Payment will be measured in cubic metres measured by survey of the existing surface and final excavation surface following the removal off the clean soil berm.

C CIVIL WORK COSTS

ITEM NO. 5 SUITABLE BACKFILL (IMPORTED MATERIAL)

This item consists of supplying all supervision, labour, equipment, tools, materials, transportation, handling, placement, compaction and other services to undertake and carry out the Work, in accordance with Contract Documents and as shown on Drawings. Item 5 is separated into five Sub-Items.

The unit process for the following sub-item includes the supply, placement, grading and compaction of material to the required slopes and grades.

Sub-Item no. 5.1 <u>Transportation, Placement and Compaction of Select Subgrade</u>

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Material and Non-Soil Aggregates

Transportation, placement and compaction of Select Subgrade Material and Granular B Type 2 engineered fill in sub-Item 5.1 to achieve design grades within the remediation limit, as outlined in the Contract Documents.

Measurement

Measurement will be in metric tonnes of Select Subgrade Material and non-soil aggregates, as weighed off-site, for transportation, placement and compaction. Material costs are captured under sub-Items 5.2 and 5.3 for Select Subgrade Material and non-soil aggregates, respectively...

Sub-Item no. 5.2 Supply of Select Subgrade Material

Supply of Select Subgrade Material sourced from a licensed aggregate pit or quarry.

Measurement

Measurement will be in metric tonnes, as weighed off-site. Measurement of sub-Item 5.2 is exclusively for the cost of Select Subgrade Material. Transportation, placement and compaction are captured under sub-Item 5.1.

Sub-Item no. 5.3 Non-Soil Aggregates

Supply of Granular B Type 2 engineered fill where required to meet geotechnical requirements.

Measurement

Measurement will be in metric tonnes, as weighed off-site. Measurement of sub-Item 5.3 is exclusively for the cost of non-soil aggregates. Transportation, placement and compaction are captured under sub-Item 5.1.

Sub-Item no. 5.4 Topsoil and Hydraulic Seeding

Supply, placement, and compaction of 150 mm of topsoil in all remediation areas following backfilling and which are not exposed bedrock, includes the labour and materials for the placement of seed mix via hydraulic seeding, including care and maintenance until the vegetation has taken hold to the satisfaction of the Contract Administrator.

Measurement

There will be no measurement for payment of this item. Seventy-five percent (75%) of the lump sum will be paid upon satisfactory placement of topsoil and seed. The remaining twenty-five percent (25%) to be paid upon acceptance of the vegetation.

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Sub-Item no. 5.5 Geotextile

Supply and install geotextile fabric or equivalent to separate the fill in Sub-item 5.2 and 5.3 and existing contaminated soil/fill at the eastern remediation limit or where residual contamination may be left in place.

Measurement

Measurement of payment will be for square metres of geotextile placed.

ITEM NO. 6 WATER MANAGEMENT

This item consists of supplying all supervision, labour, equipment, tools, materials and other services required to manage and remove surface water within the excavation and divert surface water entering the excavation areas, including precipitation and minor groundwater seepage necessary to execute the excavation Work as outlined in the Contract Documents and on the Drawings.

The lump sum price for this item includes the supply operation and maintenance of all pumps, earthworks and materials required to meet the obligations of Section 312333.03 – Surface Water and Groundwater Management and 013513 – Special Procedures for Contaminated Sites.

Measurement

There will be no measurement for payment of item 6. Payments will be made on a monthly basis, for the operation and maintenance of the surface water and groundwater controls and equipment, in proportion to the duration of project Work, to a maximum of one hundred percent (100%).

ITEM NO. 7 INSTALLATION OF NEW FENCING

This lump item consists of supplying all supervision, labour, equipment, tools, materials and other services required to install a 1.8 m black vinyl coated chain link fence following remediation extending from the Hydro Ottawa yard along the near vertical slope of the northern remediation limit, up to the former shoreline rehabilitation area. Also included in this item is the installation of a new fence in a separate location on Victoria Island to the south and east of the Work Area. This fence will extend adjacent to the Bronson Channel wall from Booth Street, along the top of slope of the Timberslide ravine to Timberslide bridge, from Timberslide Bridge to the concrete lookout structure near the Portage Bridge, and north and south from the front entrance access gate, as shown on the Contract Drawings. The fence in this section will have two 3 metre swing gates. The final alignment to be confirmed by the Contract Administrator.

Measurement

Measurement will be per linear metre of fence installed, inclusive of the two gates.

ITEM NO. 8 SURVEYING

This lump item consists of supplying all supervision, labour, equipment, tools, materials and other services required to complete the surveying services outlined in the contract documents. Including the survey of the final remediation surface before backfilling, final surface following clean soil removal in the northeast of the site and a survey of the final site conditions.

Measurement

There will be no measurement for payment of item 8. One hundred percent (100 %) of this item will be payable upon receipt of the final survey of the Work Site as outlined in the contract

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documents.

END OF SECTION

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PART 1 GENERAL

1.1 General

- .1 All conditions of the Contract apply to this and all other sections.
- .2 This Section applies to all sections incorporated in the Tender Documents.
- .3 In interpreting the Specifications, in the event of discrepancies or conflicts between Section 01001 General Requirements and other Sections, Section 01001 General Requirements governs.

1.2 Project Coordination

- .1 Cooperate with the Contract Administrator and other contractors, as well as all those having authority to access the Victoria Island, most specifically Energy Ottawa/Hydro Ottawa and others having an interest in the project.
- .2 Bring any conflict associated with the Project to the attention of the Contract Administrator for review and resolution. The Contract Administrator's decision shall be final and binding within the terms of the Contract.
- .3 Coordinate use of the Site and common facilities during the Work through procedures established by the Contract Administrator for intra-project communications, submittals, reports and records, recommendations, etc.
- .4 Attend administrative and problem-solving Site meetings, as required by the Contract Administrator.
- .5 The Contract Administrator arranges and manages project progress meetings, records and issues minutes identifying significant proceedings and action items.

1.3 Drawings and Specifications

- .1 Carry out all Work in accordance with the Specifications and Contract Drawings.
- .2 Subsurface Investigations previously carried out at the Site are attached in the Complementary Documentation. An itemised list of Complementary Documentation is provided in Section 011100 – Summary of Work
- .3 Additional Drawings showing details as to the Work to be carried out may be provided from time to time, as found necessary, to define the project requirements. The Contractor shall guide his/her Work on the dimensions provided on the detailed Drawings. Where such dimensions are not available, the Contractor shall review field measurements with the Contract Administrator prior to proceeding with the portion of the Work affected. In every case, detailed Drawings shall take precedence over general Drawings.
- .4 The Contractor shall be responsible for reproducing each Contract Drawing, as well as a copy of all revisions and Specifications, which may be reproduced to suit the project requirements. The Contractor shall keep at least one copy of the Drawings and Specifications in the Field Office at the Site.

1.4 Schedule

.1 Submit the proposed construction schedule to the Contract Administrator within 10 working days after the Contract award date.

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The schedule is to be presented in bar chart format and shall include milestone dates and all major activities or tasks identified in the Contract Documents and will specifically include all major price items as separate activities.

The schedule shall be sufficiently detailed to allow for weekly progress reviews and updates.

- .2 The Contractor shall include in the proposed construction schedule the critical dates provided elsewhere in the Tender Documents.
- .3 Submit with each weekly progress update, an update of schedule showing changes in strategy, if any, and progress as a percentage completed for each activity, on a regular basis, as determined by the Contract Administrator. Progress Reports will be submitted in a format satisfactory to the Contract Administrator in order to show the status of the Work in detail and to compare actual progress with the Contract schedule.

1.5 Submittals

- .1 Provide submittals to the Contract Administrator as required and listed in the various sections of the Specifications. All submittals are to identify the applicable Specification section and paragraph for which the submittal is intended. Submittals from subcontractors are to be reviewed for compliance to the Specifications by the Contractor prior to transmittal to the Contract Administrator. All supporting documentation is to be provided when requested. Deficiencies in the submittals are to be addressed promptly. Work affected by a submittal shall not proceed until review and approval (when required) are completed. The Contract Administrator shall be given a minimum of 7 calendar days to review submittals.
- .2 Provide the Contract Administrator with copies of all permits, approvals, notifications and licenses related to and obtained for the Work, within 7 calendar days of their receipt.

1.6 Field Engineering

- .1 When specified, provide the services of professional practitioners to undertake field-engineering requirements.
- .2 All Work shall be done according to industry standards, following the most current guidelines and practices.
- .3 The Contractor shall establish all lines and grades on all parts of the works to the satisfaction of and as directed by the Contract Administrator. The Contractor shall survey, under the direction of the Contract Administrator, the limits of excavation; the Contractor laydown area layout and all other Site requirements as detailed in the Specifications and on the Drawings. Surveying Work shall be carried out by qualified personnel using equipment in conformity with industry standards.
- .4 Submit final Site survey certificate in accordance with North American Datum of 1983 (NAD 83) and Modified Transverse Mercator (MTM) projection (3°, zone 9) using a survey grid density of at least 5 metres plus topographically significant features.

1.7 Subsurface Conditions

.1 Information on subsurface conditions, including soil characteristics and groundwater conditions, is available to the Contractor through the Complementary Documentation itemised in Section 011100 – *Summary of Work*. If subsurface conditions differ significantly from those indicated, promptly notify the Contract Administrator. Should the

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Contract Administrator confirm that conditions are significantly different and that the differences impact on the Work, instructions will be issued as to changes in the Work.

.2 The National Capital Commission (NCC) makes no guarantee, express or implied, about the characteristics of the Overburden Material to be removed from Victoria Island. No additional compensation will be made for the overburden differing from the Contractor's expectations.

1.8 References And Codes

- .1 Perform the Work in accordance with the latest revised and amended versions of all federal, provincial and municipal laws, acts, regulations, by-laws, ordinances, standards and guidelines, as they may apply to the Work and in compliance with the Specifications as appropriate. Should there be any discrepancy or conflict between the documents (laws, acts, regulations, by-law, ordinances, standard or guidelines), the most stringent shall apply.
- .2 Wherever in this Contract there is a list of statutes, regulations, by-laws, ordinances, standards, guidelines or other references under the heading "References and Codes" or any other heading, such list should be considered to be non-exhaustive and is included for information and illustration purposes only. It shall be the responsibility of the Contractor to make appropriate inquiries with respect to the applicable requirements.
- .3 Without limiting the generality of paragraphs 1.8.1 and 1.8.2 above, the Project must be performed in a manner that meets or exceeds the requirements of the following list, including but not limited to federal, provincial and municipal laws, regulations, by-laws, ordinances, standards and guidelines:
- .1 Contract Documents.
- .2 Specified standards, codes and reference documents.
- .3 Municipal Noise By-Laws.
- .4 Sewer Use By-Law of the City of Ottawa.
- .5 Ontario Environmental Protection Act.
- .6 Ontario Water Resources Act.
- .7 Guideline for Use at Contaminated Sites in Ontario, MECP.
- .8 Ontario Provincial Standard Specifications (OPSS).
- .9 Occupational Health and Safety Act R.S.O.
- .10 Ontario Regulation 347- Waste Management.
- .11 Ontario Regulation 153/04– Records of Site Condition.
- .12 Ontario Regulation 406/19- On-Site and Excess Soil Management.
- .13 Gasoline Handling Act.
- .14 Canadian Environmental Protection Act.
- .15 Transportation of Dangerous Goods Act.
- .16 Canadian Environmental Quality Guidelines, CCME.

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- .17 Fisheries Act.
- .18 Federal Brownfields Legislation.
- .19 Migratory Birds Regulations.
- .20 City of Ottawa Traffic and Parking By-Laws.
- .21 Historic Sites and Monuments Act.
- .22 National Capital Act.

1.9 Compliance With Applicable Laws

- .1 By submitting a tender, the Contractor certifies that he/she 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 by the Contractor and enter into any ensuing contract for the performance of the Work.
- .2 For the purposes of validating the certification in clause 1.9.1, a Contractor 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 limits set out in said request.
- .3 Failure to comply with the requirements of clause 1.9.1 shall result in disqualification of the tender.

1.10 Hours of Work

- .1 The Contractor shall comply with all pertinent legislation, regulations or by-laws regarding working hours. No Work shall be permitted on Saturdays, Sundays and statutory holidays without the approval of the Contract Administrator.
- .2 Prior to starting the Work the Contractor shall submit to the Contract Administrator in writing the proposed hours of Work. The Contract Administrator shall be advised in writing with 48 hours advance notice of any changes to the hours of Work.
- .3 The Contractor is to provide for the Contract Administrator's approval a proposed Work plan for Saturdays, Sundays and statutory holidays 48 hours prior to the Work (Thursday) detailing the extent of Work and proposed resource assignment.
- .4 The Contractor shall Work between the hours of 7:00 am to 6:00 pm. No Work shall be permitted outside of these hours without the approval of the Contract Administrator.

1.11 Occupational Health and Safety Act

- .1 This Contract is considered to be a project under the Ontario Occupational Health and Safety Act.
- .2 The Contractor shall be registered with the Workplace Safety and Insurance Board (WSIB) and provide a copy of said registration or other suitable documentation to the Contract Administrator prior to undertaking any Work on the Site.

1.12 Site Safety

.1 The Contractor shall provide a copy of the Project Health and Safety Manual to the Contract Administrator prior to undertaking any Work on the Site. The Project Health

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and Safety Manual shall include the additional health and safety requirements outlined in Section 013529– Site Specific Health and Safety.

.2 The Contractor shall ensure that the Work performed, the equipment supplied and all services provided under his contract, either by the Contractor or under subcontracts, comply with all federal and provincial regulatory requirements, as well as the Project Health and Safety Manual.

1.13 Quality of Workmanship Equipment, Materials and Subcontractors

- .1 All Work shall be carried out by tradespersons trained and experienced in the tasks assigned. All equipment, vehicles, tools, etc., are to be in good working order, well maintained and suitable for the Work to be done. All materials and consumables shall be new and in compliance with the Specifications. Subcontracted Work shall be awarded to firms with appropriate expertise, tradespersons, equipment and financial soundness to successfully fulfil their project commitments.
- .2 The Contract Administrator reserves the right to investigate the suitability of any subcontractor proposed by the Contractor and reject such subcontractor if it is determined that they are not capable of successfully undertaking the task assigned.

1.14 Quality Assurance and Quality Control

- .1 Ensure that the Work is performed and completed in compliance with references, codes and specifications by implementing quality management techniques on the Site.
- .2 Provide access to and co-operate with the Contract Administrator during Work inspections.
- .3 Provide timely notice to the Contract Administrator requesting inspections when the Work is subject to inspections, testing or approvals by the Contract Administrator and regulatory agencies.
- .4 The Contractor is fully responsible for uncovering or redoing Work that has not been inspected or tested as specified.

1.15 Temporary Facilities

- .1 Sanitary facilities shall be provided by the Contractor.
- .2 Provide, install and maintain sufficient and suitable facilities on-Site for all administrative requirements, staff lunch rooms, etc. as required. These facilities may be located outside the Work area but shall be located on paved and/or gravel surfaces on the east half of Victoria Island. All facilities and their location to be pre-approved by the Contract Administrator.
- .3 Provide, install and maintain a small tools storage area on-site, as required.
- .4 Keep facilities clean and free from clutter and litter, so as to not present a hazard to the adjacent properties and not provide grounds for complaints. Installations are to meet all municipal by-laws.
- .5 The proposed location and configuration of Site facilities must be submitted and approved by the Contract Administrator prior to installation.
- .6 Make all necessary applications, obtain required permits and approvals, and pay all fees and charges for such additional facilities and their use.

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- .7 Parking of non-construction related and personal vehicles on-site will generally not be permitted, with the exception of the vehicles of the Contractor's supervisory personnel and the Contract Administrator. These authorised vehicles are not to disrupt the flow of Work. The proposed location of parking areas for approved vehicles must be preapproved by the Contractor Administrator prior to parking on-site.
- .8 Only signs approved by the Contract Administrator shall be erected or posted on the Site.

1.16 Construction Services

.1 If additional public utility services are required, approval shall be obtained from the appropriate agencies for use of and tie-in to existing services, including power, sewer, telephone and water, as may be required. The Contractor shall also be responsible for the installation, maintenance and shutdown of services/facilities upon completion of the Work.

1.17 Work Access

- .1 The Contractor shall access his/her assigned Work area in such a way as to avoid damage to property and inconvenience to the adjacent properties' owners or occupants. Haulage vehicles shall follow the predetermined trucking routes approved by the Contract Administrator; see Section 015526 Special Procedures: Traffic Control.
- .2 Site access is not to interfere with the current operations on Victoria Island or Amelia Island or disrupt Site access.
- .3 Access to the Work area shall be restricted to authorized personnel only. Throughout the course of the Work the Contractor shall maintain a system of Site security and controlled access to his assigned area. This system will:
- .1 Maintain a list of persons authorized to enter the Work area;
- .2 Minimize the occurrence of unwanted or unintentional entry into the Work area; and,
- .3 Supervise, control and document the access and egress of authorized persons to and from each Work area.
 - .4 The boundaries of the controlled access areas will be based on the construction Site limits and defined Contractor lay down areas.
 - .5 To minimize the danger of accidentally spreading contaminated material from the excavation area, the Work areas shall be equipped with appropriate decontamination installations at their exit.
 - .6 All equipment leaving the Work area will be monitored by the Contract Administrator to ensure that it is free of contamination as outlined in Section 321560 - Dust and Soil Tracking Control.
 - .7 The Contractor may be required to share project access roads and gates with other contractors and project personnel. The Contractor shall co-operate with others with regards to usage of such access and assist the Contract Administrator with co-ordination as may be required.

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.8 The bridge at the site entrance located to the southwest of 161 Middle Street has a maximum load capacity of 30 metric tonnes. The Contractor shall respect this load restriction.

1.18 Protection of Private/Adjacent Property

- .1 The Contractor shall not encroach upon properties adjacent to the Work area and shall take such precautions and provide such protection as necessary to prevent any damage to private and/or adjacent property during the Work.
- .2 The Contractor is entirely responsible for all damage to private and/or adjacent property, equipment, etc., arising from the Work and caused by negligence or any act by himself/herself or any person engaged on the Work including subcontractors, service companies and employees thereof.

1.19 Site Security

- .1 The Contractor shall be solely responsible for the security of his/her assigned Work area. The Work area under the Contractor's responsibility includes all the area within the Work Site as per the drawings including temporary access routes and/or staging areas within/outside the Site, as appropriate and approved, both during and after Work hours. The Contract Administrator will not assume responsibility or liability for any loss or damage of materials, equipment, tools, consumables, temporary installations or personal items suffered by the Contractor, subcontractors, suppliers and/or any employees thereof. The Contractor shall provide reasonable access in areas under the Contractor's responsibility to all authorized firms, personnel and equipment.
- .2 The Contractor and subcontractor's personnel shall be restricted to the Work Site, and are not to access private property outside of the designated Work area, except for where his/her Work merges with another Contractor's Work. In this case, the Contractor shall advise the Contract Administrator of the schedule of the merging Work and shall obtain approval from the Contract Administrator before proceeding with this Work.

1.20 Fire Prevention

.1 Fire prevention instructions are to be included as outlined in Section 013529 Site Specific Health and Safety.

1.21 Site Supervision

.1 Provide and post on-Site the name and phone number of an authorized representative of the Contractor who can be contacted on a 24-hour basis, in case of an emergency.

1.22 Service Clearances and Notification

- .1 Drawings are for reference only, and any services identified on such Drawings may not be accurate or complete.
- .2 Prior to undertaking the Work, the Contractor shall notify all utility and service companies, the NCC and municipalities to verify the locations of existing services including sewers, water mains, gas mains and all other underground and overhead installations, and shall obtain, when possible, certificates or written confirmation that they have visited the Site and have identified the locations of their respective services. The Contractor shall comply with all existing regulations and reasonable requests from the affected service companies pertaining to protective measures, inspections,

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temporary support, dismantling, reinstatement and safety. The Contractor shall advise road authorities and obtain authorization prior to routing construction traffic onto roadways and/or restricting or changing in any way normal traffic patterns. Copies of all applications, certificates, licenses or other authorization forms are to be provided to the

1.23 Protection of Services, Utilities, Structures and Vegetation

.1 The Contractor shall take due care during the course of the Work to avoid damage to existing structures, equipment and utilities to be maintained or those outside the work area. The Contractor is entirely responsible for all damage caused, intentionally or otherwise, by himself/herself, his/her employees, his/her subcontractors or any other person engaged by the Contractor to undertake Work under this Contract.

Contract Administrator, as well as displayed in an appropriate location on the Site.

- .2 The Contractor shall sustain in place and protect from any damage any and all services to be maintained during the Contract in a manner approved by the Contract Administrator and the respective service company or authority, as outlined in Section 011100 – Summary of Work, Clause 1.7.
- .3 The Contractor shall protect from damage all vegetation including trees outside the Remediation Limits as outlined in Section 013543 – Environmental Protection, Clause 3.4, or as noted on the drawings
- .4 Any damages to vegetation outside the work area or to the vegetation to be protected, as noted on the drawings, shall be fixed, or equivalent replacement provided, to the satisfaction of the Contract Administrator and paid for by the Contractor.

1.24 Existing Property Boundary Markers

.1 The Contractor shall maintain or reinstate existing boundary property markers (survey bars), as applicable.

1.25 Approvals, Permits, Licences and Standards

- .1 The NCC is responsible for obtaining all authorizations as may be required under the Canadian Environmental Assessment Act and Fisheries Act.
- .2 Other than .1 above, the Contractor shall secure, provide, pay for and maintain all permits, licences and approvals that may be required to undertake the Work by federal, provincial, municipal and/or any other authority having jurisdiction.

1.26 Construction Maintenance

.1 The Contractor shall maintain in good working order all temporary facilities, construction fencing and gates, temporary access ways, supports, etc., other than the services provided by the Contract Administrator, for the duration of the Work. Deficiencies identified by the Contract Administrator shall be immediately remedied to the satisfaction of the Contract Administrator.

1.27 Public Roads

.1 The Contractor shall execute the Work in such a manner that the use of adjacent public roads by vehicles engaged in the Work will not inconvenience or endanger public, cyclists, pedestrians and vehicular traffic, nor hinder the use of such facilities.

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- .2 The Contractor shall provide all necessary flag persons, warning lights, signs and barricades to direct and protect vehicular and pedestrian traffic from vehicles assigned to the Work, entering or leaving the Site, in accordance with regulatory requirements and municipal standards. Road blockages due to the Work conducted shall be undertaken in accordance to regulatory requirements and municipal standards, including prior notification, application and payment of permits, signage and detour posting.
- .3 Haulage routes shall be restricted to the ones identified on the Urban and Rural Truck Routes Maps of the City of Ottawa. The Contractor shall follow predetermined trucking routes, or as approved by the Contract Administrator; see Section 015526 – *Traffic* Control.
- .4 The Contractor shall ensure that there is no deposit and build-up of soil or other debris on road surfaces due to his Work. Cleanup, if required, shall include the use of strict dust control measures and street sweeping. The Contractor shall proceed immediately with the road cleanups when requested by the Contract Administrator or by municipal authorities.
- .5 The Contractor is responsible for dust control, as specified in Section 321560 *Dust and Soil Tracking Control*.

1.28 Housekeeping

.1 Maintain all occupied Site areas in a neat and orderly fashion, free from accumulation of debris for the duration of the project. Waste materials, rubbish and debris shall not be allowed to accumulate. Under no circumstances shall soil be tracked beyond the confines of the Work area. There shall be no debris left or discarded in adjacent areas by the Contractor and/or his personnel, including but not limited to: roadways, parking areas, common or public areas and public property. Construction supplies, tools and equipment are to be organized and stored so as to maintain a safe and visually acceptable Work Site.

The Contractor is to have on-Site only materials and equipment necessary to perform the Work.

1.29 Environmental Controls

- .1 Only qualified Remediation Contractors are authorized to manage, supervise and undertake Remediation Work described herein including, but not limited to: excavation, loading, hauling, segregation, stockpiling and off-Site disposal of overburden material and water; water management; dust and soil tracking control and construction personnel health risk management associated with the Remediation Work.
- .2 Environmental monitoring and compliance of all activities on the Work Sites shall be governed by Sections 013543 Environmental Protection, 013513 Special Procedures for Contaminated Sites, 312333.03 Surface Water and Groundwater Management, 312333.00 Excavation of Overburden and Other Materials, and 321560 Dust and Soil Tracking Control. The provisions detailed in these sections apply to all personnel assigned to the Work or present on the Site.
- .3 The Contractor shall conduct all activities in an environmentally responsible manner, in compliance with all references and codes and meet current industry standards in such a manner as to reasonably minimize impact upon the environment.

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- .4 The Contractor shall be responsible for cooperating with the Contract Administrator and other project personnel to ensure that all Site activities comply with the provisions of the Specifications.
- .5 The Contractor shall also cooperate with the Contract Administrator's staff in obtaining bulk samples and field testing for contaminants, as required to execute the Work.
- .6 Oil, grease, gasoline, diesel and other potential hazardous materials shall be stored by the Contractor in a manner acceptable to the Contract Administrator and in compliance with the Ontario Environmental Protection Act and the Canadian Environmental Protection Act.
- .7 All liquid industrial wastes, including waste oil and fuel, shall be registered with the Ontario Ministry of the Environment by the Contractor, as necessary, under Ontario Regulation 347 and transported by a licensed waste carrier to a waste disposal site certified to accept such wastes. The Contractor shall provide the Contract Administrator with weigh bills from licensed disposal facilities on a daily basis along with the report on quantities of Work executed.
- .8 The Contractor shall provide the Contract Administrator, for review, a written procedure, including location map and spill prevention and response, for on-Site equipment refuelling and maintenance.

1.30 Garbage and Refuse

.1 The Contractor shall be responsible for the disposal of all garbage and refuse from within the Work area. The Contractor shall ensure that his/her Work force, including subcontractors and service personnel, will be responsible for any cleanup of debris caused by his/her personnel.

1.31 Dust Control

.1 The Contractor shall implement all necessary control measures to minimize dust generated by any and all activities, as indicated in Section 321560 – *Dust and Soil Tracking Control*.

1.32 Soil Tracking Control

- .1 The Contractor shall take all necessary precautions to prevent the tracking of soil waste onto municipal/provincial/federal roadways and private properties. All of the equipment from the excavation area is to be managed to prevent the transport of contaminated soils. The Contractor shall immediately clean all debris and dust deposits resulting from the Work, to the satisfaction of the Contract Administrator, using strict dust control measures, as detailed in paragraphs 1.27 and 1.31 above. Dry sweeping of roadways, sidewalks, curbs, etc., as well as flushing into municipal sewer will not be tolerated.
- .2 The Contractor shall comply with Section 321560 *Dust and Soil Tracking Control*.

1.33 Surface Water Control

.1 The Contractor shall take all necessary precautions to prevent non-filtered water from entering the Ottawa River, the storm and sanitary sewer systems or discharge inside or outside the Work area along surface routes, in compliance with the City of Ottawa Sewer Use By-Law. The Contractor shall seal all manhole covers and construct sludge traps

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around all storm water catch basins. The Contractor shall also inspect and/or clean out all sludge traps on a scheduled basis to ensure their satisfactory performance.

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.2 The Contractor shall comply with Sections 013513 – Special Procedure for Contaminated Sites and 313333.03 – Surface Water and Groundwater Management.

1.34 Adverse Weather Conditions

.1 Site operations, including excavation and preparation Work, shall be suspended at any time when, in the opinion of the Contract Administrator, satisfactory material control cannot be maintained on account of rain, wind or other unsatisfactory weather conditions.

1.35 Emergency Spill

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- .1 All spills should be dealt with in the following manner:
- .1 In accordance with the Ontario Environmental Protection Act, the Canadian Environmental Protection Act, and the NCC's spill prevention and response policies;
- .2 The responsible party shall clean up the spill immediately using all resources required to bring the Sites back to pre-spill conditions;
- .3 The Contractor shall submit to the Contract Administrator for his/her approval a Spill or Emergency Control Plan within 7 days of the Contract award date. No Work shall proceed until the Contract Administrator has provided written approval to the Contractor;
- .4 The Contractor shall have cleanup materials on Site to deal with all types of predicted spills;
- .5 In the event of a spill, the Contractor shall immediately notify the Contract Administrator, the NCC Emergency Hotline (613-239-5353) and the key stakeholders as required by the Ontario Environmental Protection Act and the Canadian Environmental Protection Act including, but not limited to, Environment and Climate Change Canada's National Environmental Emergencies Centre (1-866-283-2333) and the Ontario Spills Action Centre (1-800-268-6060).
- .6 In addition to Clause 1.35.1, preparation for and response to emergency spills shall be governed by the Sections 313333.03 Surface Water and Groundwater Management and 312333.00 Excavation of Overburden and Other Materials. The provisions detailed in these sections apply to all personnel assigned to the Work or present on the Site.
 - .2 The Contractor shall have a written procedure incorporating the provisions of Sections 312333.03 Surface Water and Groundwater Management and 312333.00 Excavation of Overburden and Other Material for responding to an emergency spill within the Work area, the fuelling pad, on adjacent property, on public roadways and in public areas. The procedure shall comply with existing regulatory requirements and Specifications and shall address the need for immediate control and containment of the spilled product, as well as cleanup of all affected areas and monitoring for remnant contaminants. The procedure shall provide specific details for personnel training and protection, controlling entry into sewer systems, cleanup and verification (by the Contract Administrator) of decontamination of affected areas, reporting and documentation.

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.3 The Contractor shall have suitable materials (e.g., sawdust, wood chips, absorbents, booms, etc.) for the cleanup of fuel spills. Any spillage of oil, grease, gasoline, diesel or other hazardous material shall be controlled by the Contractor, as required under the *Canadian Environmental Protection Act*, the *Ontario Environmental Protection Act* and reported immediately to the Contract Administrator.

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1.36 Archaeological Considerations

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- .1 Two areas of archeological interest have been identified on the Contract Drawings. Archaeological staff will be on-site on a full-time basis to monitor excavation activities in areas of archaeological interest. It is expected that all archaeological recording and documentation, if required, will be completed within two hours of instruction to stop Work.
- .2 If archaeological resources are uncovered during excavation work outside these areas of interest the archeological staff will have the authority to halt work temporarily at that location, in order to assess the heritage value of the discovery and to collect artefacts and to document archaeological features. The Contract Administrator will contact the NCC's archaeologist for advice regarding mitigation measures to be put in place. Mitigation measures will conform to archaeological 'best practice' as currently followed in federal jurisdiction and will be authorized by the NCC archaeologist as part of its custodial responsibilities.
- .3 In the event of the discovery of human remains, the procedures outlined in the Protocol for the Co-management of Archaeological Resources (2017) between the NCC, the Kitigan Zibi Anishinabeg and the Algonquins of Pikwakanagan First Nation will be applied. In brief:
 - All work within a minimum radius of 5 metres around the remains will be halted immediately and the NCC archaeologist will be notified forthwith. Work will not be resumed at that location until measures for the protection and management of the remains have been put in place.
 - The NCC archaeologist will contact the 2 Anishinabe Algonquin communities, the RCMP and the appropriate municipal and provincial authorities.
 - If the remains are determined to be Indigenous in origin and archaeological in character, then their disposition will be determined by the Kitigan Zibi Anishinabeg and Algonquins of Pikwakanagan.
 - Non-indigenous human remains determined not to be part of a crime scene will be documented and removed using "best practice" in archaeology.
- .4 The Contractor will not be allowed to claim any standby time caused by such archaeological investigations, if the equipment can be reasonably relocated to another Work area within two hours of the instruction to stop Work. Should the Contractor be requested by the Contact Administrator to assist in the investigation, such Work shall be executed and compensated, in accordance with the hourly excavation rate, as directed and documented by the Contract Administrator.
- .5 It should be noted that the excavation work will take place entirely on federal land and that the *Ontario Heritage Act* does not apply to federal jurisdiction. The Contractor shall therefore not file a Project Information Form (PIF) with the Ministry of Heritage, Tourism, Sport and Cultural Industries for the archaeological work.

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.6 The NCC will provide training to the Contractor prior to commencing excavation with respect to the archeological potential of the Site and the identification of artefacts and features during the Work. The Contractor shall make their staff available for a two-hour training course.

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1.37 Title to Property Found at Sites

.1 The title to all artefacts, relics, natural objects or other items of archaeological or historical interest and any other material and property discovered, developed or obtained in the excavation or other operations by the Contractor or subcontractor, or any of their employees, is hereby expressly reserved by the NCC, and neither the Contractor nor subcontractor, nor any of their employees shall have any right, title or interest in or to any part thereof; neither shall they, nor any of them, assert or make any claims thereto. The Contractor shall report immediately any such find to the Contract Administrator.

1.38 Geoheritage

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- An area of geological interest (ripple marks on the bedrock surface) has been identified in the south portion of the Remediation Area, on the exposed bedrock along Middle Street. This area is a provincially listed Areas of Natural and Scientific Interest (ANSI). The Contractor shall protect the bedrock surface from damage in this area and shall not use this area for the storage or movement of equipment and/or materials including soil. The remaining bedrock surface is also of geological interest and shall not be backfilled until the bedrock surface has been documented by the geologist. Additionally, the bedrock surface of the entire site shall be protected from damage as best as practical and no ripping or scraping of the rock surface is permitted.
- .2 The Contractor will not be allowed to claim any standby time caused by such geological inspections.

1.39 Confidentiality

.1 The Contractor and all subcontractors shall maintain confidentiality of the information provided both during tendering and during the performance of the Work at all times, except for the information specifically required to obtain permits and approvals, for submitting notices to appropriate agencies and for purposes of securing subcontractor services.

The Contractor shall not enter into any discussions relating to the Work with any persons or agencies without explicit written consent from the Contract Administrator. The obligation to ensure that the information remains confidential shall survive termination of the Contract.

1.40 Confidentiality

- .1 The Contractor and all subcontractors shall maintain confidentiality of the information provided both during tendering and during the performance of the Work at all times, except for the information specifically required to obtain permits and approvals, for submitting notices to appropriate agencies and for purposes of securing subcontractor services.
- .2 The Contractor shall not enter into any discussions relating to the Work with any persons or agencies without explicit written consent from the Contract Administrator. The

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obligation to ensure that the information remains confidential shall survive termination of the Contract.

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1.41 Project Closeout

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- .1 When the Work is substantially performed, the Contractor shall remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 The Contractor shall collect reviewed submittals, assemble documents executed by subcontractors, suppliers and manufacturers, and submit this material to the Contract Administrator.
- .3 The Contractor shall carefully inspect the Work to ensure it is complete, that major and minor construction deficiencies and defects are corrected, and that the Sites are clean and in a suitable condition. Notify the Contract Administrator in writing of satisfactory completion of the Work and request an inspection. Cooperate with the Contract Administrator during the inspection and correct deficiencies.

PART 2 PRODUCTS

2.1 Equipment

- .1 The Contractor shall supply, operate and maintain equipment, tools and supplies suitable for the Work required to be undertaken, clean, free of defects and in compliance with regulatory and safety requirements. The Contractor shall provide:
- .1 All fuel and lubricants required to operate the equipment;
- .2 All maintenance and repairs necessary to keep equipment and tools in good condition and working order.
 - .2 No bulk storage of fuel, oil or other lubrication products will be permitted on the project Sites, unless explicitly approved in writing by the Contract Administrator. Equipment fuelling and oil change operations shall be undertaken in an area specified by the Contract Administrator and only after suitable means of spill containment have been implemented.
 - .3 The Contractor shall undertake regular preventive maintenance on major equipment off-hours to avoid delays in the Work. Should a breakdown of major equipment occur, the Contractor shall immediately arrange for repair or replacement of the defective unit. Under no circumstances will delays associated with equipment breakdown be allowed to exceed one day (24 hours). All costs associated with repairs or replacement shall be at the expense of the Contractor, including project delays.
 - .4 Should the Contractor fail to repair or replace the defective equipment within the specified period of time, the Contract Administrator will take all necessary steps to replace the equipment and the total cost of the replacement, including all associated expenses incurred by the Contract Administrator, shall be the responsibility of the Contractor.

PART 3 EXECUTION

NOT USED

Site Remediation Project (Phase 3a)

Summary of Work

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Part 1 Summary General

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 Related Sections

- .1 Section 013300 Shop Drawings and Samples
- .2 Section 013513 Special Procedures for Contaminated Sites
- .3 Section 015526 Traffic Control
- .4 Section 013543 Environmental Protection
- .5 Section 017800 Closeout Submittals
- .6 Section 312333.03 Surface Water and Groundwater Management
- .7 Section 312333.00 Excavation of Overburden and Other Materials
- .8 Section 312333.01 Filling and Backfilling
- .9 Section 321560 Dust and Soil Tracking Control
- .10 Section 013529 Site Specific Health & Safety
- .11 Section 015200 Construction Facilities
- .12 Section 015600 Temporary Barriers and Enclosures
- .13 Section 310516 Aggregates
- .14 Section 329121 Topsoil and Finished Grading
- .15 Section 329216 Hydraulic Seeding

1.3 Work Covered by Contract Documents

- .1 Work on this Contract includes the Environmental Site Remediation of parts of the northwestern side of Victoria Island currently occupied by a park, including an additional area outside the remedial area further to the west on Victoria Island for the installation of fencing, as per the Drawings. Work includes:
 - .1 The excavation of all Overburden Material and buried concrete foundations to the top of intact bedrock surface within the remediation limits, for transportation and disposal at an MECP approved disposal facility with some exception where overburden material will remain in place. Included in the Work is the protection and cleaning of the bedrock surface.
 - .2 Segregation of a section of clean soil to be stockpiled for use in the final backfill.

(Phase 3a)

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.3 Strip and recycle the asphalt paths located within the Remediation Area.

Summary of Work

- .4 Demolition and removal of inactive structures and utilities.
- .5 Protection of existing and active utilities and structures.
- .6 Reinstate Site with suitable soil backfill to specified grades, including placement of topsoil and hydroseed.
- .7 Installation of a new fence as outlined below. Contractor shall layout the proposed fence alignment for approval by the Contract Administrator prior to the installation. Fences shall be installed as per OPSD 972.130:
 - .1 From the entrance gate to the corner of the building at 161 Middle Street and to the south of the entrance gate to connect to the fence that runs along the Bronson Channel wall.
 - .2 Adjacent to the Bronson Channel wall from Booth Street, extending along the top of the slope to limit access into the Timberslide Ravine to Timberslide Bridge. This section of fence shall include one 3 m single swing gate.
 - .3 From the Timberslide Bridge to the concrete lookout structure, west of Portage Bridge. This Section of fence shall include one 3 m single swing gate.
 - .4 From the northeast corner of the Energy Ottawa Yard, following the general alignment of the current existing fence, to the eastern edge of near vertical rock slope, west end of the former shoreline remediation.

1.4 Contract Method

.1 Construction Work under single and unit price contract.

1.5 Work by Others

- .1 Work which is specifically excluded from this Contract:
 - .1 The Contract Administrator will provide all environmental, archeological and geoheritage monitoring.

1.6 Site Description

- .1 The Work Site includes: the majority of the northwestern portion of Victoria Island, between the Energy Ottawa yard fence line to the west, the Portage Bridge fence line to the east, the limit of the previous shoreline remediation to the north and the Middle Street north curb line to the south. The work includes the installation of a new fence outside the remediation area to the south and west, as detailed on the Drawings (hereinafter referred to as the "Site").
- .2 The northern remediation limit is based on former remedial work and will be finalized in the field by the Contract Administrator.
- .3 The area west of the previous shoreline remediation will be to the top of the near vertical rock slope. No in water work will be required.
- .4 The Site works include some utilities that require protection including the utilities crossing the work area and other inactive utilities and site features shall be removed.

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1.7 Background and Site Conditions

- .1 The Overburden Material found on the Site is predominantly poorly sorted heterogeneous fill materials exceeding the CCME guidelines and MECP site condition standards, in which soils (including silt, sand, gravel, cobbles and boulders) are mixed with debris (wood, slag, glass, bricks, cinders, coal, concrete, rock, and metal).
- .2 Overburden Materials in the raised berm along a portion of the eastern site limit contain clean sand and gravel soil to be separated for on-site reuse.
- .3 Current testing indicates the Overburden Materials are not classified as hazardous waste but rather as solid non-hazardous waste.
- .4 The Overburden Materials within the remedial limits are known to contain former building slabs and foundation elements that need to be broken and removed. Some of the concrete slabs were found to contain tar waterproofing which will prevent recycling and reuse and where present are to be broken and removed with the contaminated soil as waste.
- .5 The Work area which requires excavation of Overburden Material to bedrock surface is above the groundwater level.
- depths at various locations across the Site are provided on the Contract Drawings.

 Generally, bedrock surface is between 0.5 and 3.0 metres from surface with a few areas where bedrock is at surface (along Middle Street) or deeper due to raised topography (clean soil berm in east part of site). Bedrock is expected to be uneven, fractured and contain some areas of depressions, ledges, fractures and high points outside the 0.5-3 metre range. The Contractor will be responsible for adjusting excavation methods to account for the variable bedrock surface while maintaining the protection of the bedrock surface from damage and will not be compensated for variability outside the presented range unless found over an area more than 25% of the Work Area.
- .7 The Contractor will be responsible for the service clearance and layout of the utilities. Buried services that exist within the Remediation Limits and require protection include:
 - .1 The buried 250 mm watermain extending from the valve in Middle Street, across the site under Portage Bridge servicing the east side of the island. This watermain supplies the fire systems on the east side of the island and the Contractor will be responsible for installing and maintaining a bypass supply in the event the watermain is damaged during the remedial work.
 - .2 The sanitary sewer and pump chamber located within a bedrock trench north of Middle Street and in Middle Street connecting into the pump chamber at the southern Portage Bridge abutment, including the sanitary forcemain from the pump chamber to the Portage Bridge.
 - .3 Three manhole structures within the Remediation Limits, including two sewer manholes and one valve chamber. Abandoned irrigation lines are located in the Work area which are to be removed. The valve back to the supply main shall be protected.
 - .4 Buried hydro from the Portage Bridge abutment running north along the Portage Bridge until crossing under the fenceline.

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- .5 Electrical line to the hydro box at the Portage Bridge fenceline. Cut the wire at the property line. Do not pull the wire.
- .8 Above ground infrastructure is present within the Work Area that requires protection or relocation, including:
 - .1 Two hydro poles with active overhead utilities shall be supported and protected to permit the remediation, as shown in the Contract Drawings. Excavation around the two hydro poles shall include the removal of 0.3 m of soil within 1.5 m of the guy wires and poles followed by the placement of geotextile over residual soil prior to backfilling. Soil within the 1.5 m radius shall be excavated by hand.
 - .2 Relocate concrete curbs and bricks stored in the southwest corner of the site to the rear of 150 Middle Street, or as directed by the Contract Administrator.
 - .3 Set aside the landscaping boulders along Middle Street for reuse.
- .9 Above ground infrastructure is present within the Work Area that requires removal, including:
 - .1 The wooden gazebo
 - .2 Water fountain at the southwest corner of the Site near Middle Street.
 - .3 The electrical box near Middle Street and the asphalt pathway.
 - .4 The catch basin and storm sewer in park connecting to Middle Street.
 - .5 The four large concrete footings behind the fence at the northwest Site boundary.
 - .6 The two concrete utility access manholes.
 - .7 Two wooden utility poles.
 - .8 Asphalt pathways.
 - .9 Five foot fence along the northwest and west limits up to the Energy Ottawa Yard.
 - .10 The hydro box at the Portage Bridge fenceline.
- archaeologist. Should archaeological resources be uncovered, the project archaeologist will outline the necessary mitigation measures for the Contractor to abide by. Mitigation measures will conform to archaeological 'best practice' as currently followed in federal jurisdiction and will be authorized by the NCC archaeologist as part of its custodial responsibilities. The NCC archaeologist may also request the permission of the Contract Administrator for unanticipated monitoring and site inspection. Additional information is provided in Section 010010 -General Requirements.
- An area of geological interest (ripple marks on the bedrock surface) has been identified in the south portion of the Remediation Area, consisting of the exposed bedrock along Middle Street. This area is a provincially listed Areas of Natural and Scientific Interest (ANSI). The Contractor shall protect the ANSI bedrock surface with barricades or fencing to prevent it from damage and shall not use this area for the storage or movement of equipment and/or materials, including soil. The remaining bedrock surface outside the ANSI area is also of geological interest and shall not be backfilled until the bedrock surface has been documented by the geologist. Additionally, the bedrock surface of the

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entire site shall be protected from damage as best as practical and no ripping or scraping of the rock surface is permitted.

1.8 Complimentary Documentation

- .1 The Contractor will be provided with an electronic version of the following complementary documentation:
 - .1 Supplemental Phase II Environmental Site Assessment, Eastern Portion of Victoria Island, Ottawa, Ontario, DST, March 2004.
 - .2 Surface Soil Characterization (West Portion), Victoria Island, Ottawa, DCS, November 2012.
 - .3 Phase II Environmental Site Assessment, East Part of Victoria Island, Ottawa, Ontario, Golder Associates Ltd., May 2020.
 - .4 Geophysical Survey at 150 Middle Street, Victoria Island, Ottawa, Ontario, WSP Golder, November 2022.
 - .5 Test Pit Technical Memorandum, WSP Canada Inc., February 2023.

1.9 Work Methodology

.1 The approach to the remediation of the Site is the removal of Overburden Material, including all concrete, foundation elements and other waste materials within the Overburden Material down to bedrock via standard excavation methods, modified as required to protect the bedrock surface. The clean soil berm in the north east part of the site will be segregated and stockpiled for reuse, all other Overburden Material will be disposed of site as non-hazardous waste.

1.10 Scope of Work

.1 The Contractor shall provide all supervision, labour, equipment, tools, materials, consumables, transportation and other services as are necessary for undertaking and completing all the Work required, as detailed and specified in the Contract Documents, Drawings and summarised herein.

1.11 Work Sequence and Schedule

- .1 Completion of all Work by October 31, 2023.
- .2 The following restrictions are to be taken into account in the sequence of Work:
 - .1 The City of Ottawa Seasonal Half Load Restrictions.
 - .2 Road restrictions along Chaudière (Union) Bridge which will restrict all vehicles between February 13 to March 31, 2023. The sidewalk will remain accessible.
 - .3 Road restrictions along Chaudière (Union) Bridge which will restrict south bound traffic from Quebec to only OC Transpo buses. Northbound travel will be maintained at all times, however, trucks in excess of 33 tons will be detoured to the Macdonald-Cartier Bridge during the construction period. Pedestrians will still have access and cyclists will have to dismount and use the sidewalk or merge into motorist lane through the construction zone. These restrictions occur between March 7, 2022 and September 4, 2023. Note that the restrictions along Chaudière Bridge may extend beyond September 2023.

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- .3 The following general Work sequence is considered:
 - .1 Contract award.
 - .2 Mobilization on Site.
 - .3 Site preparation/temporary installations set-up.
 - .4 Construct or improve temporary access/haulage roads.
 - .5 Remove surface features.
 - .6 Excavate and stockpile clean soil from the berm for reuse.
 - .7 Excavate remaining Overburden Materials and transport to MECP approved disposal facility.

Summary of Work

- .8 Protect and clean bedrock surface of residual soil to the standard of acceptance and/or verify remediation with chemical testing.
- .9 Backfill to specified grades.
- .10 Install fencing from the northeast corner of the Energy Ottawa yard along the near vertical rock slope up to the previous shoreline remediation area.
- .11 Installation of a new fence adjacent to the Bronson Channel wall and Timberslide Ravine to limit access into the Timberslide Ravine, including a section from Timberslide Bridge to the concrete lookout structure west of Portage Bridge and from the entrance gate north and south to restrict access to the site and/or the ravine.
- .12 Topsoil placement and seeding.
- .13 Final clean-up of Site.
- .14 Submit Final Site Survey certificate and,
- .15 Demobilization and project closeout.

1.12 Contractor Use of Premises

- .1 The Contractor has unrestricted use of the Site, within the parameters set forth in the Contract General Conditions, Specifications and Drawings, until completion of Work. The Work area is shown on the Drawings.
- .2 The Contractor must maintain access to the generating station on Amelia Island for Energy Ottawa and Hydro Ottawa. Permit unrestricted use of Middle Street. Coordinate wok on Timberslide Street with Energy Ottawa to minimize disruption to their operations.

1.13 Submittals

- .1 Prior to the commencement of any of this Work, the Contractor shall submit the following documents, for the Contract Administrator's information and approval:
 - .1 Project Safety Analysis;
 - .2 Site-Specific Health and Safety Plan;
 - .3 Names and phone numbers of site supervisory Health and Safety Officer;

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- .4 Contractor's Safety Manual;
- .5 Schedule for safety meetings;
- .6 Contingency and Emergency Spill Response Plan;
- .7 Sediment and Erosion Plan;
- .8 Dust and Soil Tracking Control Plan;
- .9 Excavation Plan;
- .10 Water Management Plan;
- .11 Site Layout Plan;
- .12 Sample analysis results for imported materials (Select subgrade material or approved equivalent), required prior to importation;
- .13 Traffic Control Plan; and
- .14 Environmental Management Plan.
- .2 Submittals for Progress Meetings which are to be carried out weekly: make submittals at least 24 hours prior to scheduled progress meetings, as follows:
 - .1 Daily copies of transport manifests, waybills and disposal receipts for Overburden and waste materials removed from Work area;
 - .2 Daily water pumping and discharge volumes and rates, if sewer discharge, if required;
 - .3 Weekly copies of Site entry and Work area logbooks with information on worker and visitor access; and,
 - .4 Any other information required by the Contract Administrator or relevant to the agenda of the upcoming progress meeting.

1.14 Documents Required

- .1 Maintain at Site, one copy of each of the following:
 - .1 Contract Drawings;
 - .2 Specifications;
 - .3 Addenda;
 - .4 Reviewed submittals;
 - .5 Change orders;
 - .6 Field test reports;
 - .7 Copy of approved schedule;
 - .8 Health and Safety Plan and other safety related documents; and,
 - .9 Other documents as specified.

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Part 2 PRODUCTS

NOT USED

Part 3 EXECUTION

NOT USED

END OF SECTION

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Part 1 GENERAL

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 Outline of Work

- .1 Provide all supervision, labour, equipment, tools, materials, transportation and other services necessary for undertaking and completing the Work detailed and specified herein and in the Contract Documents, including but not limited to:
 - .1 This section specifies general requirements and procedures for the Contractor's submittals of shop Drawings, product descriptions, samples and mock-ups to the Contract Administrator, for review. Additional specific requirements for submittals are specified in individual Sections.
 - .2 The Contractor cannot proceed with Works until relevant submittals are reviewed and approved by the Contract Administrator.
 - .3 All submitted documents, such as shop Drawings, product data, samples and mock-ups, are in system international (SI) Metric units.
 - .4 If submitted items or information cannot be produced in SI units, the Contractor shall supply, with submittals, conversions of their actual units into SI units.

1.3 Shop Drawings

- .1 Shop Drawings could either be original Drawings or modified Contract Drawings. The shop Drawings are submitted by the Contractor but could have been produced by subcontractor, supplier or distributor. Shop Drawings are produced to illustrate details of portions of Works, special construction, layout, installation and assembly as prescribed in related Sections.
- .2 All submittals must be identified with the Owner Contract number and by the Contract Document number from which they originate.
- .3 Sheet size: same sizes as Contract Drawings.

1.4 Product Data

- .1 Product data could be manufacturer's catalogue sheets, brochures, literature, performance charts and diagrams, used to illustrate performances of products, specific to this Contract.
- .2 All submittals must be identified with the Owner Contract number and by the Contract Document number from which it originates.
- .3 Product data must be presented on sheets having a size of 215 x 280 mm.
- .4 All information applicable to Contact must be clearly identified and unrelated data shall be deleted.

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- .5 If a submitted product is not covered by specified Standards in Contract Documents, the Contractor must complement the information contained in the product data to facilitate the approval by the Contract Administrator.
- .6 The Contractor must indicate field dimensions and clearances in comparison with product dimensions.

1.5 Samples

- .1 Samples: examples of materials, equipment, quality, finishes.
- .2 Submit samples of prescribed dimensions and quantity required.
- .3 Where colour, pattern or texture are criteria, submit full range of samples.
- .4 Reviewed and accepted samples will become quality standard for present Work against which supplied and installed product will be verified on the Site.

1.6 Mock-Ups

- .1 Mock-ups: field-erected example of Work completed with specified materials and workmanship.
- .2 Erect mock-ups at locations acceptable to Contract Administrator.
- .3 Construct mock-ups that show finished Works, using same techniques that will be used and by same tradesmen that will perform the Work.
- .4 Reviewed and accepted mock-ups will become standards of workmanship and material against which installed Work will be verified.

1.7 Verification of Submitted Documents

- .1 Check shop Drawings, product data and samples before submitting them to the Contract Administrator.
- .2 Check:
 - .1 Dimensions taken on Site;
 - .2 Execution criteria; and,
 - .3 Catalogue numbers and other related data.
- .3 Coordinate documents or required sample submissions with requirements of Work and Contract Documents.
- .4 Documents or individual sample submittals will not be reviewed until all related information is available.
- .5 The Contractor is not released from his responsibility regarding errors and omissions contained in the submitted documents, even if the Contract Administrator has reviewed this documentation.
- .6 The Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by the Contract Administrator's review of submittals, unless the Contract Administrator gives written acceptance of specific deviations.

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- .7 Notify the Contract Administrator, in writing at time of submission, identifying deviations from requirements of Contract Documents, stating reasons for deviations.
- .8 Distribute copies of submittals only after receiving the Contract Administrator's approval.

1.8 Document Submission Requirements

- .1 Submit at least 14 days before the date where the reviewed documents are required.
- .2 Accompany submittals with transmittal letter, in duplicate, containing:
 - .1 Date;
 - .2 Contract title and number;
 - .3 Contractor's name and address;
 - .4 Identification and quantity of each shop drawing, product data and sample submitted; and,
 - .5 Other pertinent data.
- .3 Submissions of documents and samples shall include the following information:
 - .1 Original presentation date and revision dates;
 - .2 Contract title and number;
 - .3 Name and address of:

Contractor

Subcontractor

Supplier

Manufacturer

Distributors (if required)

- .4 Product or material identification;
- .5 Its layout in relation to adjacent Works;
- .6 Field dimensions taken in place, clearly identified as such;
- .7 The Specifications Section number;
- .8 The applicable Standards and their numbers (for example, CSA or CGSB);
- .9 The Contractor's stamp, signed by the Contractor's authorized representatives certifying approval of submittals, verification of field measurements and compliance with Contract Documents;
- .10 Stamp and signature of an Ontario Professional Engineer, if requested;
- .11 Details of appropriate portions of Work as applicable:
 - Fabrication;
 - Layout, showing dimensions, including identified field dimensions, tolerances and clearances; and,
 - Setting or erection details.

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.12 Contractor shall submit with Work schedule a list of all shop Drawings and samples to be submitted to Contract Administrator.

1.9 Alternatives

.1 All submittals for alternative materials and mixes in the Contract Documents shall be transmitted as indicated in the General Instructions for Tendering, item 9 – Applications for Approval Certificates.

1.10 Shop Drawings Review

- .1 The review of shop Drawings by the Contract Administrator is for the sole purpose of ascertaining conformance with the general concept. This review shall not mean that the Contract Administrator approves the detailed design inherent in the shop Drawings, responsibility for which shall remain with the Contractor, and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawing or of responsibility for meeting all requirements of the construction and Contract Documents. Without restricting the generality of the foregoing, the Contractor is responsible for dimensions to be confirmed and correlated at the Site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for coordination of the Work of all sub-trades.
- .2 Contract Administrator reserves 14 days to review or refuse documents.
- .3 Drawings shall include minimum 100 mm x 100 mm space for Engineer's seal.
- .4 Stamp and signature of Ontario Professional Engineer, if required.

Part 2 PRODUCTS

NOT USED

Part 3 EXECUTION

NOT USED

END OF SECTION

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PART 1 GENERAL

1.1 General

- .1 All conditions of the Contract and Section 010010 *General Requirements* apply to this Section.
- .2 The Contractor shall execute the Work in a manner that meets or exceeds the requirements set out in Clause 1.8 of Section 010010 *General Requirements*.

1.2 Related Work

- .1 Section 011100 Summary of Work
- .2 Section 013529 Site Specific Health and Safety
- .3 Section 013543 Environmental Protection
- .4 Section 312333.03 Surface Water and Groundwater Management
- .5 Section 312333.00 Excavation of Overburden and Other Materials
- .6 Section 312333.01 Filling and Backfilling
- .7 Section 321560 Dust and Soil Tracking Control

1.3 Reference Standards

- .1 Ontario Provincial Standard Specifications and Drawings (OPSS 805), OPSD-219.110
- .2 City of Ottawa Sewer Use By-Law 2003-514
- .3 Ontario Regulation 64/16 (Amendment to Ontario Regulation 387/04 Water Taking)

1.4 Outline of Work

- .1 Provide all supervision, labour, equipment, tools, materials, consumables, transportation and other services necessary for undertaking and completing the Work detailed and specified herein and on the Drawings, including but not limited to:
 - .1 Appropriate submittals, water management facility, equipment and personnel decontamination, dust and particulate control, pollution control, water control, dewatering, erosion and sediment control, progress cleaning, final decontamination, materials/waste removal and disposal.

1.5 Sequencing and Scheduling

- .1 Work shall be sequenced so that vehicles do not travel over areas of the Site that have been remediated.
- .2 Excavation Work shall not commence until all mitigation measures in PART 3 of this Section are in place.
- .3 Excavation of material shall be carried out as per Section 312333.00 Excavation of Overburden and Other Material.

1.6 Submittals

.1 Site Layout: Within fourteen days of date of *Notice to Proceed* and prior to the mobilization to Site, submit Site layout Drawings showing existing conditions and facilities, construction facilities and temporary controls to be provided by the Contractor, as listed in Section 010010 – *General Requirements*.

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Special Procedures for Contaminated Sites

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.2 Submit an Erosion and Sedimentation Control Plan, as per Clause 2.2 of this Section and an Emergency Spill Plan, as per Section 010010 – *General Requirements* Clause 1.35, to the Contract Administrator for review and approval prior to beginning construction.

PART 2 PRODUCTS

2.1 Materials

- .1 Provide, operate and maintain pumps, hoses, turbidity curtains, etc, sufficient to control surface water flow around the excavation area and to control sediment release to the Ottawa River and storm sewers in active excavation areas.
- .2 Suitable Soil Fill: to Section 312333.01 *Filling and Backfilling*.

2.2 Erosion and Sediment Control and Turtle Fencing

- .1 Provide and maintain temporary measures, which may include but are not limited to: silt fence barriers, straw bales, flow checks, rock flow check dams, ditches, geotextiles, drains, berms, terracing, riprap, temporary drainage piping, sedimentation basins, vegetative cover, dikes and any other construction required to prevent erosion and migration of silt, mud, sediment, and other debris off-Site or to other areas of the Site where damage might result, or that might otherwise be required by Laws and Regulations, specifically the Ottawa River. Ensure that sediment control measures are available during construction. Installation of the erosion and sedimentation control measures should be in accordance with Ontario Provincial Standard Specifications (OPSS 805, OPSD-219.110).
- Ottawa River into the work area, installed prior to May 1. The fencing shall meet the requirements outlined by the Ontario Ministry of Natural Resources for reptile and amphibian exclusion fencing for short duration work (OMNR Species at Risk Branch, Reptile and Amphibian Exclusion Fencing, Version 1.1, July 2013, as updated). The fencing shall be constructed of light duty geotextile affixed to the ground by stakes, spaced 2-3 metres apart. The geotextile shall be 60 cm in height with at least 10 cm buried in the underlying soil. The Contractor is responsible for the installation and maintenance of the turtle fence throughout the contract. The turtle fence is permitted to act as a silt fence as required under clause 2.2.1. Installations shall be along the north, west and south boundaries of the Site and be tied into existing fencing and bridge structure. Where placed on bare rock, the fence shall be weighted down with a continuous line of sandbags or equivalent.

PART 3 EXECUTION

3.1 Vehicular Access and Parking

- .1 Maintenance and Use:
 - .1 Prevent contamination of access roads, including Middle Street and areas outside the Work Site. Immediately collect debris or material on access roads and affected areas outside the Work Site which are suspected to be contaminated, as determined by the Contract Administrator; transport and dispose of it at an appropriate off-Site MECP approved facility. Clean access roads at least once per day.
 - .2 The Contract Administrator may collect soil samples for chemical analysis from the travelling surfaces of constructed and existing access routes prior to, during and upon completion of Work. The Contractor shall excavate and dispose of clean

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soil contaminated by the Contractor's activities at no additional cost to the NCC and/or Contract Administrator.

3.2 Dust and Particulate Control

- .1 Execute Work so as to minimize raising dust from operations.
- .2 Implement and maintain dust and particulate control measures, as deemed necessary by the Contract Administrator during construction and in accordance with provincial and municipal regulations and with Section 321560 *Dust and Soil Tracking Control*.
- .3 Provide positive means to prevent airborne dust from dispersing into atmosphere. The use of water or calcium chloride solution for dust and particulate control may be used following approval by the Contract Administrator.
- .4 As a minimum precaution, use appropriate covers on trucks hauling fine or dusty materials. Use watertight vehicles to haul wet materials.
- .5 Prevent dust from spreading to adjacent properties, including the adjacent Portage Bridge.
- .6 The Contract Administrator may stop Work at any time when the Contractor's control of dust and particulates is inadequate for wind conditions on-Site. There will be no compensation for resulting Work stoppages.
- .7 If the Contractor's control of dust and particulate in the atmosphere is not sufficient, stop Work. The Contractor must discuss procedures proposed to resolve problems. Make all necessary changes to operations prior to resuming any excavation, handling, processing or any other Work that may cause release of dust or particulates.

3.3 Pollution Control

- .1 Provide methods, means and facilities to prevent contamination of soil, water and atmosphere from discharge of noxious toxic substances and pollutants produced by construction operations.
- .2 Be prepared to intercept, clean up and dispose of spills or releases that may occur, whether on land or water. Maintain materials and equipment required for cleanup of spills or releases readily accessible on-Site.
- .3 Spills should also be managed in accordance with the applicable regulatory requirements listed in Section 010010- *General Requirements*, Clause 1.8 (References and Codes) and Clause 1.35 (Emergency Spills), as well as in compliance with NCC spill prevention and response policies.
- .4 Promptly report spills and releases potentially causing damage to the environment to:
 - .1 Authority having jurisdiction or interest in spill or release, including any conservation authority, water supply authorities, drainage authority, road authority and fire department;
 - .2 Owner of pollutant, if known;
 - .3 Person having control over pollutant, if known; and,
 - .4 The Contract Administrator.
- .5 Take immediate action to contain and mitigate effects from spill or release on environment and people, using available resources.
- .6 Prevent demolition debris and soil from entering surface water of the Ottawa River.

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3.4 **Equipment Decontamination**

- .1 Decontaminate equipment after working in potentially contaminated Work areas, as well as prior to subsequent Work or travel in clean areas and prior to leaving the Site.
- As a minimum precaution, perform following steps during equipment decontamination: mechanically remove packed dirt, grit and debris by scraping and brushing, without using water. If not effective in removing contaminated material from equipment, establish a washing station using high-pressure, low-volume, water. Any wash water is to be contained within the remediation limits and directed to retention tanks or equivalent for testing prior to off-Site discharge or disposal. Perform assessment, as directed by the Contract Administrator, to determine effectiveness of decontamination.
- .3 Each piece of equipment may be inspected by the Contract Administrator after decontamination and prior to removal from Sites and/or travel in clean areas. The Contract Administrator will have the right to require that additional decontamination be completed, if deemed necessary.
- .4 Transfer mud collected in the decontamination area for disposal with the Overburden Materials to an MECP licensed disposal facility.

3.5 Water Control

- .1 Protect Site from puddling or running water.
- .2 Provide sediment and erosion control as necessary to protect Site from soil erosion.
- .3 For areas where water may collect in the excavation and which may be mixed with contaminated soils it shall be tested to show compliance with the CCME SWQG and PWQO criteria. If compliance cannot be achieved after filtration, the Contractor shall discharge to an on-land feature such as a soak away pit or sanitary sewer, subject to receipt of the applicable permits and approvals to be obtained and paid for by the Contractor. Water entering the excavation shall not be directly discharged to the Ottawa River or onsite storm sewers unless shown to be complaint with CCME SWQG and PWQO prior to discharge. The proposed location of an on-land feature such as a soak away pit must be preapproved by the Contact Administrator.
- .4 Monitor and maintain surface drainage to minimize surface water inflow to the Work Site.
- .5 Provide, operate and maintain necessary equipment appropriately sized to keep excavations, staging areas and other Work areas free from water.
- .6 Have on hand sufficient pumping equipment, machinery and tankage in good working condition for ordinary emergencies, including power outage, and competent workers for operation of pumping equipment.

3.6 Water Management Facilities

- .1 Dewatering pumps to be of sufficient size and capacity to efficiently handle the water volumes entering excavations.
- .2 The Contractor shall provide and maintain an alternate point of discharge and or treatment, as required, for water accumulation in the excavation which does not meet PWQO and/or the water quality in the receiving waterbody. This may include on-land discharge under a discharge plan prepared as part of an EASR application or discharge to the sanitary sewer under a Sewer Use Agreement with the City of Ottawa. The Contractor shall be responsible for cost and effort to obtain and comply with the required EASR or Sewer Discharge Agreement.

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- .3 All discharge locations are to be approved by the Contract Administrator.
- .4 Samples of the discharge water shall be tested in a laboratory approved by the Contract Administrator. Results are to be approved by the Contract Administrator prior to discharge. Testing parameters and frequency to be in accordance with the requirements stipulated in the applicable permit. Where no permit applies, discharge testing shall include total metals, polycyclic aromatic hydrocarbons, petroleum hydrocarbons, total suspended solids and turbidity.
- .5 If considered, on-land discharge shall comply with Federal Interim Groundwater Quality Guidelines in addition to the conditions outlined in the EASR required for such discharge. Sewer discharge shall comply with the respective sewer use bylaw discharge limits.
- .6 The Contractor is responsible for obtaining all permits and agreements for discharge.

3.7 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 in compliance with the Erosion and Sediment Control Plan prepared by the Contractor and reviewed by the Contract Administrator.
- .2 The Erosion and Sediment Control Plan will conform to Ontario Provincial Standard Specification 805.
- .3 Minimize amount of bare soil exposed at one time. Stabilize disturbed soils as quickly as practical. Strip vegetation, regrade or otherwise develop in such a way as to minimize erosion. Remove accumulated mud resulting from activity from adjoining surface and from drainage systems within the Work area, and repair damage caused by soil erosion and sedimentation, as directed by the Contract Administrator.
- .4 Periodically inspect landscapes and earthworks to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- .5 The Contract Administrator shall inspect and monitor the erosion and sediment measures on a regular basis and direct the Contractor to take corrective actions as may be necessary.
- .6 If soil and debris from Site accumulate in low areas, sewers, roadways, gutters, ditches or any other areas where the Contract Administrator determines it is undesirable, the Contractor shall remove accumulation and restore area to its original condition.
- .7 Maintain and repair all environmental protection measures (straw bales, end runs, undercutting beneath bales, silt fence barriers, rock flow check dams, etc.).
- .8 Unless indicated or directed by the Contract Administrator, remove temporary erosion and sediment control devices upon completion of Work. Mud accumulated in drainage ditches and in low points of the excavation shall be removed, hauled and disposed of at an approved MECP disposal facility.

3.8 Progress Cleaning

- .1 Maintain cleanliness of Work areas and surrounding Site to comply with federal, provincial, and local fire and safety laws, ordinances, codes, and regulations.
- .2 Coordinate cleaning operations with disposal operations to prevent accumulation of dust, dirt, debris, rubbish, and waste materials.

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3.9 Final Decontamination

.1 Perform final decontamination of temporary installations, equipment, and materials that may have come in contact with potentially contaminated materials prior to removal from Site.

Special Procedures for Contaminated Sites

.2 Perform decontamination to remove potentially contaminated materials as specified to the satisfaction of the Contract Administrator. The Contract Administrator will direct the Contractor to perform additional decontamination if required.

3.10 Removal and Disposal

- .1 Remove surplus materials and temporary facilities from Site.
- .2 Dispose of all non-contaminated waste materials, litter, debris, and rubbish off-Site.
- .3 Do not burn or bury rubbish and waste materials on-Site.
- .4 Do not dispose of volatile or hazardous wastes such as mineral spirits, oil, or paint thinner as well as any other waste or wastewater in storm or sanitary drains, streams or waterways.
- .5 Dispose of following materials at appropriate off-Site facility identified by the Contractor and approved by the Contract Administrator: debris including excess construction material, non-contaminated litter and rubbish; disposable Personal Protection Equipment worn during cleaning; wastewater removed from wastewater storage tank, wastewater generated from final decontamination operations.
- .6 Dispose of materials in accordance with Section 312333.00- *Excavation of Overburden and Other Materials*, as directed by the Contract Administrator.

3.11 Qualification of Contractors

.1 Only qualified Remediation Contractors are authorized to manage, supervise and undertake Remediation Work described herein including: excavation, loading, hauling, segregation, stockpiling and off-Site disposal of soil, rock and rubble; water management; dust and soil tracking control; and construction personnel health risk management associated with the Remediation Work.

END OF SECTION

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Part 1 General

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 Related Work

- .1 Section 013513 Special Procedures for Contaminated Sites
- .2 Section 013543 Environmental Protection
- .3 Section 312333.00 Excavation of Overburden and Other Materials
- .4 Section 312333.01 Filling and Backfilling
- .5 Section 321560 Dust and Soil Tracking Control

1.3 Reference Standards

- .1 Canada Labour Code (CLC)
 - .1 Canada Occupational Health and Safety Regulations (SOR/86-304).
- .2 American Conference of Governmental Industrial Hygienists (ACGIH) *Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs)*, as amended.
- .3 Ontario Ministry of Labour (MOL)
 - .1 Ontario Occupational Health and Safety Act, R.S.O. 1990, as amended (OHSA).
 - .2 Ontario Regulation 213/91: *Construction Projects*, as amended (O. Reg. 213/91).
 - Ontario Regulation 490/09: *Designated Substances*, as amended (O. Reg. 490/09).
 - .4 Ontario Regulation 860/90: Workplace Hazardous Materials Information System (WHMIS) Regulation, as amended (O. Reg. 860/90).
- .4 Transport Canada (TC)
 - .1 Transportation of Dangerous Goods Act, 1992, as amended (TDGA) and associated Regulations.
- .5 Ontario Ministry of the Environment, Conservation and Parks (MECP)
 - .1 Environmental Protection Act, R.S.O. 1990, Chapter E.19, as amended (EPA).
 - .2 Ontario Regulation 347/90: *General Waste Management*, as amended (O. Reg. 347/90).
- .6 Canadian Standards Association
 - .1 CAN/CSA-Z94.4-18 Selection, Use, and Care of Respirators.

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- . _ .
- .7 U.S. Department of Health and Human Services (DHHS)/Centers for Disease Control and Prevention (CDC)/National Institute for Occupational Safety and Health (NIOSH).
 - .1 NIOSH Manual of Analytical Methods (NMAM), 5th ed., DHHS (December 2017).

1.4 Submittals

- .1 Submit documentation in accordance with Section 013300 *Shop Drawings and Samples*.
- .2 Contractor to prepare and submit Site-specific Health and Safety Plan within 7 days after date of Notice to Proceed for review by the Contract Administrator; the Health and Safety Plan must have final status prior to commencement of Work. Health and Safety Plan must be prepared by a qualified and experienced Occupational Health and Safety Professional and include:
 - .1 Results of Site-specific health and safety hazard assessments.
 - .2 Results of health and safety risk or hazard analysis for all Site tasks and operations.
- .3 Submit copies of Contractor's authorized representative's Site health and safety inspection reports to the Contract Administrator weekly.
- .4 Submit copies of reports or directions issued by any health and safety inspection agency to the Contract Administrator within 24 hours of their receipt.
- .5 Submit copies of incident and accident reports to the Contract Administrator.
- .6 Submit Workplace Hazardous Materials Information System (WHMIS) Safety Data Sheets (SDSs) to the Contract Administrator for any controlled products or hazardous materials brought onto the Site.
- .7 The Contract Administrator will review Contractor's Site-specific Health and Safety Plan and provide comments to Contractor within 5 working days after receipt of plan. Revise plan as appropriate and resubmit plan to Contract Administrator within 5 working days after receipt of comments from the Contract Administrator. The Contract Administrator's review of Contractor's final Health and Safety Plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .8 Develop a personal protective equipment (PPE) program to address at a minimum the following topics:
 - .1 PPE selection based upon Site health and safety hazards.
 - .2 PPE use and limitations of equipment.
 - .3 Work duration, PPE maintenance and storage.
 - .4 PPE decontamination and disposal.
 - .5 PPE inspection procedures prior to, during, and after use.

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- .6 Evaluation of effectiveness of PPE program, and limitations during temperature extremes, and other appropriate medical considerations.
- .7 Site control measures employed at Site including Site map, Site Work Areas, use of 'buddy system', Site communications including Site security, alerting means for emergencies, standard operating procedures or safe work practices, and identification of nearest medical assistance.
- .8 Decontamination procedures for both personnel, visitors and equipment.
- .9 Emergency response requirements addressing: pre-emergency planning, personnel roles, lines of authority and communication, emergency recognition and prevention, safe distances and places of refuge, Site security and control, evacuation routes and procedures, decontamination procedures not covered under decontamination section, emergency medical treatment and first aid, emergency alerting and response procedures, critique of response and follow-up, PPE and emergency equipment, Site topography, layout, prevailing weather conditions, and procedures for reporting incidents to local, provincial, or federal agencies.
- .10 Procedures dealing with heat and/or cold stress.
- .11 Spill containment program if containerized waste material is generated, excavated, stored, or managed on Site.
- .9 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for Site personnel prior to commencement of Work, and submit additional certifications for any new Site personnel to the Contract Administrator.
- On-Site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

1.5 General Requirements

- .1 Develop a written Site-specific Health and Safety Plan based on hazard assessment prior to beginning Site Work and continue to implement, maintain, and enforce plan until final demobilization from Site. Site-specific Health and Safety Plan must address requirements of the project specifications.
- .2 The Contract Administrator may respond in writing where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.
- .3 Comply with applicable federal and provincial acts and regulations having jurisdiction and those listed under 1.3 Reference Standards of this Section.
- .4 When unforeseen or peculiar health and safety related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with federal and provincial acts and regulations having jurisdiction and advise the Contract Administrator verbally and in writing.
- .5 Employ and assign to Work, competent and authorized representative as Health and Safety Office. Health and Safety Office must:
 - .1 Have Site-related working experience.

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- .2 Have working knowledge of occupational safety and health regulations.
- .3 Be responsible for completing Contractor's health and safety training and ensuring that personnel that do not successfully complete required training are not permitted to enter the Site to perform Work.
- .4 Be responsible for implementing, enforcing daily and monitoring for compliance of the Work with the Site-specific Contractor's Health and Safety Plan.
- .5 Be on-Site during execution of Work.
- .6 Ensure applicable items, articles, notices and orders are posted in a conspicuous location on-Site in accordance with federal and provincial acts and regulations having jurisdiction, and in consultation with the Contract Administrator.
- .7 Blasting or other use of explosives is not permitted without prior written permission from the Contract Administrator.
- .8 Give precedence to health and safety of public and Site personnel and protection of environment over cost and schedule considerations for Work.
- .9 No smoking or consumption of alcohol or any drug which could impair sight, balance or judgment is permitted on the project.

1.6 Correction of Non-Compliance

- .1 Immediately address health and safety non-compliance issues identified by the authority having jurisdiction or by the Contract Administrator.
- .2 Provide the Contract Administrator with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 The Contract Administrator may stop Work if non-compliance of health and safety regulations and Site-specific Health and Safety Plan is not corrected at no additional cost for the resulting delays to become compliant.

1.7 Personnel Health, Safety, and Hygiene

- .1 Develop personnel hygiene and personnel decontamination procedures. Provide at a minimum as follows:
 - .1 Suitable containers for storage and disposal of used disposable PPE.
 - .2 Worker decontamination facility will consist of a washing facility with warm and cold water, soap, clean disposable towels, vacuum equipped with a HEPA filter and disposal receptacles. Workers shall use the facility to decontaminate following the Work and prior to exiting the Work Areas.
 - .3 Potable water and suitable sanitation facility.
- .2 Develop procedures to address the potential impact of COVID-19 at the Work Site and ensure that all public health recommendations and provincial directives with respect to COVID-19 are followed.

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- .3 Develop PPE usage procedures and ensure that procedures are strictly followed by Site personnel; including the following as minimum:
 - .1 Ensure prescription eyeglasses worn are CSA-approved safety glasses and do not permit contact lenses to be used on-Site within Work Areas.
 - .2 Ensure footwear are CSA-approved steel-toed safety boots or are covered by rubber overshoes when entering or working in potentially contaminated Work Areas.
 - .3 Ensure disposable or reusable protective clothing do not readily retain or permit skin contamination is worn when in potentially contaminated Work Areas.
 - .4 Ensure protective clothing (e.g., disposable impermeable gloves and masks) covers hands and prevents ingestion of particulate during and following Work activities. The protection must be durable enough to withstand Work activities.
- .4 Develop fire prevention measures and procedures.
- .5 Decontamination requirements for Workers and Visitors when exiting the Work Areas:
 - .1 Remove gross contamination from protective clothing before leaving the Work Areas and entering the decontamination facility.
 - .2 Dispose of or decontaminate protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing protective clothing. Place disposable contaminated work suit and other disposable protective clothing in waste receptacles.
 - .3 Using soap and warm water, wash hands and face.
 - .4 Ensure any reusable PPE is decontaminated before reissuing.
 - .5 Eating, drinking, smoking and chewing gum are not permitted in the Work Areas or decontamination areas.
- .6 Emergency and First Aid Equipment:
 - .1 Install and maintain emergency and first aid equipment in appropriate location on-Site including first aid kit to accommodate number of Site personnel; portable emergency eye wash; two 9 kg ABC type dry chemical fire extinguishers.
 - .2 Self-contained breathing apparatus units as required by the Site-specific Health and Safety Plan; blankets and towels; stretcher; and 1 hand-held emergency siren.
 - .3 At minimum, provide one (1) certified first aid technician on-Site when Work activities are in progress. A copy of the first aid technician certification shall be provided with the Site-specific Health and Safety Plan.

.7 Site Communications:

- .1 Post emergency numbers in a conspicuous location.
- .2 Ensure personnel use "buddy" system and develop hand signal system where appropriate for Site Work activities.

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- .3 Supply selected personnel with 2-way radios or other appropriate on-Site communication devices.
- .4 Health and Safety Meetings: conduct mandatory daily health and safety meetings for personnel, and additionally as required by special or Work-related conditions and the Site-specific Health and Safety Plan; include refresher training for existing equipment and protocols, review ongoing health and safety issues and protocols, and examine new Site conditions as encountered. Hold additional health and safety meetings on an as needed basis.

.8 Dust Control:

- .1 The Contractor shall undertake dust control measures to prevent dust nuisances from any phase of the Work.
- .2 Permitted dust control measures include the application of water. Alternate methods are not permitted without approval by the Contract Administrator.
- .3 Comply with Section 321560 Dust and Soil Tracking Control
- .9 Custodian: employ and assign to Work a Custodian to report directly to Health and Safety Officer and who is responsible for keeping safety equipment and facilities clean, properly equipped, and maintained. Custodian may perform other duties for Contractor, but Custodian's first priority is maintenance of PPE and personnel decontamination area.

.10 Visitor Protection:

- .1 Provide protective clothing and approved respirators to authorized visitors entering Work Areas.
- .2 Instruct authorized visitors in use of protective clothing, respirators and procedures.
- .3 Instruct authorized visitors in proper procedures to be followed when entering into and exiting from Work Areas.

1.8 Unforeseen Conditions

.1 Should unforeseen or peculiar health and safety related factors, hazards, or conditions become evident during performance of Work, stop Work and immediately advise the Contract Administrator verbally and in writing.

Part 2 Products

.1 Utilize appropriate devices required by the Site-specific Health and Safety Plan.

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Part 3 Execution

3.1 General Execution

- .1 The Contractor shall assume full responsibility to ensure that during construction their employees, sub-contractors and their employees follow the Site-specific Health and Safety Plan.
- .2 The Contractor shall hold mandatory daily health and safety meetings on-Site. The contractor shall notify the Contract Administrator of the time and place of all meetings and allow the Contract Administrator to participate. Meetings should reiterate health and safety measures to be taken and discuss any violations committed and preventive measures to avoid future violations.
- .3 The Contractor shall require all personnel on-Site to wear the appropriate PPE as outlined within this Section.
- .4 Personnel shall be alert to the potential for encountering subsurface hazards. Potential hazards include (but are not limited to):
 - .1 Contaminated soils, specifically containing heavy metals, polycyclic aromatic hydrocarbons and petroleum hydrocarbons.

3.2 Excavation Safety

.1 Any time excavations and trenching exceed 1.2 metres in depth, shoring, bracing or sloping of the side walls is required prior to entry. If sloping is the method used, side walls of the trench shall be sloped in accordance with O. Reg. 213/91 made under the OHSA.

3.3 Electrical Safety

.1 The Contractor shall follow lockout/tagout procedures according to provincial and municipal requirements.

3.4 Violations

- .1 Should any health and safety violations be called to the Contractor's attention by anyone, the Contractor shall immediately correct the violations.
- .2 If the Contractor violates any health and safety rule or regulation or does not comply with the requirements of the Site-specific Health and Safety Plan, the Contract Administrator may issue an order to stop all Work until the violations/non-compliance items are remedied. The Contractor shall not be entitled to any extension of the time or any claim for damage or to any compensation for either the directive or the Work suspension order. A decision by the Contract Administrator not to order discontinuance of any or all of the Contractor's operations shall not relieve the Contractor of responsibility for health and safety.

Site Remediation Project (Phase 3a)

Phase 3a) Environmental Protection

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GENERAL

1.1 General

PART 1

- .1 All conditions of the Contract and Section 010010 General Requirements apply to this Section.
- .2 This Section applies to all construction Work involved on the Sites.
- .3 Where there is a conflict between this Section and the other Sections of the Specifications, the most stringent shall apply in all cases.

1.2 Related Work

.1 This Section applies to all sections included in the Specifications.

1.3 Outline of Work

- .1 Provide all supervision, labour, equipment, tools, materials, consumables, transportation and other services necessary for undertaking and completing the Work detailed and specified herein and on the Drawings, including but not limited to:
 - .1 Conduct the Work in a manner to prevent detrimental impacts on the Environment (air, water, soil and biota).

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 Fires

- .1 Fires and burning of rubbish on-Site are not allowed.
- .2 Provide supervision, attendance and fire protection measures as directed.

3.2 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 on-Site or into waterways, waterbodies, storm or sanitary sewers.

3.3 Drainage

.1 Drainage to be controlled within the Work area according to Section 312333.03 – Surface Water and Groundwater Management and Section 013513 – Special Procedures for Contaminated Sites to prevent uncontrolled release of Site surface water or groundwater to waterbodies, sewers or other potential receivers.

3.4 Site Clearing and Plant Protection

.1 Protect trees and plants as required outside the Work area as indicated on the Drawings and on adjacent properties. All tree stumps within the Remediation Limit needs to be removed. All trees and shrubs will be removed by the NCC prior to mobilizing to the Site however minor vegetation removal may be required.

Victoria Island Site Remediation Project (Phase 3a)

Environmental Protection

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- .2 No trees shall be removed or disturbed outside the Remediation Limits in any way without the explicit written direction from the Contract Administrator.
- .3 All plant material within the remediation area is considered as potentially having invasive species and thus shall be excavated with the soil as contaminated material.

3.5 Flora, Fauna and Aquatic Habitat Protection

- .1 All the water collected within the Work area must be managed according to Section 312333.03 Surface Water and Groundwater Management and Section 01350 Special Procedures for Contaminated Sites in order to preserve existing aquatic habitats.
- 2. Prior to initiating excavation and before May 1, the Contractor shall install turtle fencing to prevent access to the Work area from the Ottawa River, along the north, south and west sides. The fence may be combined with the erosion control measures, as outlined in Section 0131513 Special Procedures for Contaminated Sites. The fencing shall meet the requirements outlined by the Ontario Ministry of Natural Resources for reptile and amphibian exclusion fencing for short duration work. The fencing shall be constructed of light duty geotextile affixed to the ground by stakes, spaced 2-3 metres apart. The geotextile shall be 60 cm in height with at least 10 cm buried in the underlying soil. The Contractor is responsible for the installation and maintenance of the turtle fence thought the contract. Where placed on bare rock, the fence shall be weighted down with a continuous line of sandbags or equivalent. Where contract award is delayed beyond April 1, the NCC will undertake this task and the item for installation of turtle fencing will be removed from the contract.
- .3 All Work activities with the potential to disturb or destroy migratory birds, such as vegetation clearing and fill placement in vegetated areas, will not take place in migratory bird nesting habitat during breeding season, which is defined to be from April 8 to August 28 for most species utilizing these habitats in this region of Ontario.
- .4 If Work affecting breeding bird habitats must be completed during the identified breeding season for migratory birds, the services of a qualified avian biologist will be obtained by the Contract Administrator to conduct a nest survey prior to commencement of the Work to identify and locate nests of species covered by the *Migratory Birds Convention Act*, 1994. Surveys must be coordinated no earlier than 48 hours before the start of clearing of all vegetation, including short grass.
- .5 To avoid harm to snakes (hibernacula), excavation activities should be avoided during the hibernation period (October to April/May). To avoid direct harm to individuals, the Contractor shall be made aware of the potential presence of snakes. If snakes are observed, they should be allowed to leave the site on their own or can be coaxed to leave the Site. If a nest is found or if any other issues are found, the Contractor should avoid the area and contact the NCC and the Contract Administrator for further guidance.

3.6 Work Adjacent and Within Waterways

- .1 Do not operate construction equipment in waterways or waterbodies, except as outlined in the Contract Documents.
- .2 Do not use waterway beds for borrow material.
- .3 Do not dump excavated fill, Overburden Materials, waste material, demolition debris in waterways or waterbodies.

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- .4 Heavy machinery and vehicle maintenance and fuelling should be performed on a designated area, at least 30 m away from waterways or waterbodies. Low permeability geomembrane and stacked straw bales, flow checks or an alternate containment system should be installed around the maintenance location so that no liquids enter into any water features or the natural environment.
- .5 No in-water work is required or permitted.
- .6 The Contractor shall install a silt fence or equivalent at the limits of excavation on the north, west and south sides. This fence may be combined with the required turtle fencing. Sediment control measures shall be implemented to prevent sediment laden runoff from the excavation areas via overland flow to the Ottawa River or the storm sewers in Middle Street.

3.7 Pollution Control

- .1 Maintain temporary erosion and pollution control features installed as per this Contract.
- .2 Control emissions from equipment and plant to local authorities' emission requirements. Make sure that the exhaust system of all machinery is in good condition.
- .3 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads. Dispose of wastes materials off-Site on a weekly basis, or as required.
- .4 Turn off the engines of haulage trucks waiting to be loaded or unloaded if waiting time is uncertain or prolonged.

3.8 Environmental Control

.1 The Contractor is responsible for ensuring all environmental controls described in Sections 013513 – Special Procedures for Contaminated Sites, 312333.03 – Surface Water and Groundwater Management, 312333.00 – Excavation of Overburden and Other Materials and 321560 – Dust and Soil Tracking Control are properly implemented.

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Part 1 GENERAL

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 Related Sections

.1 Section 015600 – Temporary Barriers and Enclosures

1.3 Reference Standards

- .1 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB 1.189-2000, Exterior Alkyd Primer for Wood.
- .2 CGSB 1.59-97, Alkyd Exterior Gloss Enamel. Canadian Standards Association (CSA International).
 - .1 CAN3-A23.1-/A23.2-09, Concrete Materials and Methods for Concrete Construction/Method of Test for Concrete.
 - .2 CSA0121-09, Douglas Fir Plywood.
 - .3 CAN/CSA-Z321-[96], Signs and Symbols for the Occupational Environment

1.4 Installation and Removal

- .1 Prepare Site Plan indicating proposed location and dimensions of areas to be used by Contractor, location of Contractor facilities to be used at Victoria Island and avenues of access/ egress.
- .2 Indicate use of supplemental or other staging areas.
- .3 Provide construction facilities in order to execute Work expeditiously.
- .4 Remove from Site all such facilities after use.

1.5 Site Storage and Loading

- .1 Confine Work and operations of employees to the Work Area. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with weight or force that will endanger the Work.

1.6 Construction Parking

- .1 Parking will be permitted on-Site provided it does not disrupt performance of Work or interfere with any other work on Victoria Island. Further details provided in Section 010010 General Requirements sub-section 1.15.
- .2 Provide and maintain adequate access to project Site.

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1.7 Security

(Phase 3a)

.1 Provide and pay for responsible security personnel to guard Site and contents of Site after working hours and during holidays at the discretion of the Contractor.

Construction Facilities

.2 Contractor shall ensure the main entrance gate to the island is secured at the end of each workday and when not on site.

1.8 Offices

- .1 The Contractor will provide their own Site Office facilities deemed necessary to complete their work and will not have access to the site buildings on Victoria Island.
- .2 Provide private washroom facilities adjacent to office complete with flush or chemical type toilet, lavatory and mirror and maintain supply of paper towels and toilet tissue.
- .3 Provide a clearly marked and fully stocked first-aid case in a readily available location.
- .4 Contractor and subcontractors may provide their own offices as necessary. Direct location of these offices as per the Site Plan in clause 1.4.1.

1.9 Equipment, Tool and Materials Storage

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

1.10 Sanitary Facilities

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

1.11 Construction Signage

- .1 Erect, within three (3) weeks of signing Contract, a bilingual project sign in a location designated by the Contract Administrator if provided by the NCC.
- .2 No other signs or advertisements, other than warning signs, are permitted on-Site.
- .3 Additional project signboards may be supplied, installed, maintained and removed by the NCC.
- .4 Signs and notices for safety or instruction to be in French and English language, or commonly understood graphic symbols.
- .5 Maintain approved signs and notices in good condition for duration of project and dispose of off-Site on completion of project or earlier if directed by the Contract Administrator.

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Site Remediation Project (Phase 3a)	Construction Facilities	Page 3 of 3
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Part 2 PRODUCTS

NOT USED

Part 3 EXECUTION

NOT USED

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Part 1 GENERAL

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 Related Sections

.1 Section 312333.00 – Excavation of Overburden and Other Materials

1.3 Definitions

- .1 Traffic Control Device(s) (TCD): A generic term used to describe any person, sign, signal, marking or device placed upon, over or adjacent to a roadway by or at the direction of a public authority or official having jurisdiction (such as the City of Ottawa) or their designate, for the purpose of regulating, warning, guiding or informing a vehicle operator or pedestrian of an existing condition or hazard.
- .2 Traffic Control Plan (TCP): A detailed plan for the control of traffic, including vehicular and pedestrian movements, required to allow the Contractor to fulfill all conditions of the Contract, taking into account the organized, systematic safe conduct of the project. This includes, as applicable, detours, staging sequences, work, public and emergency vehicle access and egress, public access and separation from hazardous areas, temporary barriers, removal of old pavement markings, and the selection of appropriate typical layouts and devices necessary for traffic control.
- .3 Traffic Control Persons (TCP's): A person duly trained and authorized to direct traffic at a work zone through the use of the Traffic Control Sign (STOP/SLOW Paddle).
- .4 Traffic Protection Plan (TPP): A plan required by the Occupational Health and Safety Act and its regulations for the protection of workers in a work zone. The plan must contain a written description of the traffic hazards to which workers may be exposed and measures used to protect them.
- .5 Traffic Management Plan (TMP): TMP means a standard outlining the particulars of proposed Work on any road within the City and is submitted by or on behalf of the Contractor to the City of Ottawa for approval. The traffic management plan shall contain the information respecting how the applicant intends to comply with City of Ottawa bylaws including but not limited to the following:
 - .1 start and completion times of Work;
 - .2 specific location of Work;
 - .3 requirement to Work during peak hours, if any;
 - .4 lane use requirements;
 - .5 requirements for road closure;
 - .6 public notification undertaken:
 - .7 parking meters affected by Work;
 - .8 requirement for temporary no stopping signs;

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- .9 identification of any bus route(s) and bus stops affected by Work activity; and,
- .10 traffic routing and detour requirements where required.

1.4 Measurement

.1 As outlined in Section 00300 – Pay Item Descriptions.

1.5 Reference Standards

- .1 Ontario Traffic Manuals (OTM), most recent:
 - .1 Book 1 Introduction of the Ontario Traffic Manuals
 - .2 Book 5 Regulatory Signs
 - .3 Book 6 Warning Signs
 - .4 Book 7 Temporary Conditions
 - .5 Book 11 Markings and Delineations
 - .6 Book 12 Traffic Signs

1.6 Protection of Public Traffic

- .1 Comply with requirements of Acts, Regulations and By-Laws in force for regulation of traffic or use of roadways upon or over which it is necessary to carry out Work or haul materials or equipment.
- .2 When working on travelled way:
 - .1 Place equipment in position to present minimum of interference and hazard to traveling public.
 - .2 Keep equipment units as close together as working conditions permit and preferably on same side of travelled way.
 - .3 Do not leave equipment on travelled way overnight.
 - .4 Do not close any lanes of road without approval of the Contract Administrator. Before re-routing traffic erect suitable signs and devices in accordance with instructions contained in the OTM, Book 7.
 - .5 Keep travelled way graded, free of pot holes and of sufficient width for required number of lanes of traffic.
 - .6 Provide minimum 7 m wide temporary roadway for traffic in two-way sections through Work and on detours.
 - .7 Provide minimum 3.5 m wide temporary roadway for traffic in one-way sections through Work and on detours.

1.7 Submittals

- .1 Preconstruction Submittals.
 - .1 Submit Traffic Control Plan within 7 working days after Contract award showing all required traffic control and protection systems to be installed, operated, maintained and removed by the Contractor.

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.2 Contractor to submit a detailed Traffic Management Plan within 7 Days after Contract award. The Contractor shall be responsible for submitting the plan to the City of Ottawa for their review and approval.

1.8 Informational and Warning Devices

- .1 Provide, install and maintain signs, flashing warning lights and other devices required to indicate construction activities or other temporary and unusual conditions resulting from project Work.
- .2 Supply and erect signs, delineators, barricades and miscellaneous warning devices as specified in the OTM. All signs to be bilingual.
- .3 Place signs and other devices in locations recommended in the OTM.
- .4 Meet with Contract Administrator prior to commencement of Work to prepare list of signs and other devices required for project. If situation on-Site changes, revise list to approval of Contract Administrator.
- .5 Continually maintain traffic control devices in use by:
 - .1 Checking signs daily for legibility, damage, suitability and location. Clean, repair or replace signs to ensure clarity and reflectance.
 - .2 Removing or covering signs which do not apply to conditions existing from day to day.

1.9 Control of Public Traffic

- .1 Provide flag persons, trained in accordance with, and properly equipped as specified in the OTM in the following situations:
 - .1 When public traffic is required to pass working vehicles or equipment which blocks all or part of travelled roadway.
 - .2 Where traffic volumes are heavy, approach speeds are high and traffic signal system is not in use. Flag persons shall be provided (one at each access point to the Site) during peak periods.
 - .3 When workmen or equipment are employed on travelled way over brow of hills, around sharp curves or at other locations where oncoming traffic would not otherwise have adequate warning.
 - .4 Where temporary protection is required while other traffic control devices are being erected or taken down.
 - .5 For emergency protection when other traffic control devices are not readily available.
 - In situations where complete protection for workmen, working equipment and public traffic is not provided by other traffic control devices.
 - .7 Delays to public traffic due to Contractor's operations: maximum 5 minutes.

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1.10 Site Access by Others

.1 Do not disrupt or block traffic across Timberslide Bridge and on Middle Street to allow vehicle, pedestrian and equipment access onto Amelia Island and to the Energy Ottawa yard north of Middle Street, and to the area on the East side of Victoria Island.

1.11 Operational Requirements

- .1 If any hauling operations are undertaken during the seasonal load restriction period, the City of Ottawa seasonal road restrictions must be followed.
- .2 Hauling operations should be organized to minimize circulation on public roads during peak hours to the extent possible. This implies that during peak hours, efforts will be made to operate less than the average number of trucks each direction per hour, with volumes in the off peak hours making up the difference.
- .3 The Contractor shall ensure there is no deposit and build up of soil and other debris on road surface due to the Work. The Contractor shall cleanup public roads by means of water trucks as per standard construction practice.
- .4 The Contractor will be required to use tarpaulin, retractable or otherwise, on every truck leaving the Site to minimize the possibility of debris exiting the truck during transport.
- .5 The bridge at the site entrance located to the southwest of 161 Middle Street (Middle Street Bridge) has a maximum load capacity of 30 metric tonnes. The Contractor shall respect this load restriction.
- .6 North bound traffic across the Union Bridge (Chaudière Bridge), northwest of the Work Areas will be maintained, however, trucks in excess of 33 tonnes will be detoured to the Macdonald-Cartier Bridge. Southbound traffic from Gatineau across the Union Bridge (Chaudière Bridge) to the site is not permitted.

Part 2 PRODUCTS

NOT USED

Part 3 EXECUTION

NOT USED

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Part 1 GENERAL

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this section.

1.2 Related Sections

- .1 Section 312333.00 Excavation of Overburden and Other Materials
- .2 Section 312333.01 Filling and Backfilling

1.3 Reference Standards

- .1 Canadian General Standards Board (CGSB)
- .2 Canadian Standards Association (CSA International)

1.4 Installation And Removal

- .1 Provide temporary controls in order to execute Work expeditiously.
- .2 Remove from Site all such barriers and enclosures after use.

1.5 Barricades

.1 Provide secure barricades above excavations exceeding 1:1 slope and more than 1.2 metres in height such as vertical bedrock slopes following overburden removal.

1.6 Access to Site

- .1 Provide and maintain access roads, sidewalk crossings, ramps and construction runways as may be required for access to Work.
- A new 1.8 m chainlink fence installed in accordance with OPSD 972.130 with footings installed as per OPSD 972.132 shall be installed:
 - .1 From Booth Street, eastward adjacent to the channel wall and continue along the top of slope of the Timberslide Ravine to the Timberslide Bridge
 - .2 From the Timberslide Bridge following the top of slope east to the concrete lookout structure at the eastern limit of work.
 - .3 From the northeast corner of the Energy Ottawa yard along the near vertical rock slope to the western edge of the former shoreline remediation.
 - .4 From the entrance gate north to the corner of the building at 161 Middle Street and from the entrance gate to the south to connect the fence that runs along the Bronson Channel wall.
 - .5 The fence shall be installed in a manner that causes the least amount of damage to the newly seeded grass. The Contractor is responsible for repairing all damage caused to the grass.

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.3 The alignment of the fence shall be staked out for approval by the Contract Administrator before installation. The fence shall include two 3 m single swing gates, as per OPSF 972.102 to access the two areas east and west of Timberslide Street in locations to be agreed to with the Contract Administrator. Fence and gate bracing shall be on the north side of the fence in the Remediation Area, on the west side of the fence on the extension that runs north of the access gate and on the east side of the fence on the extension that runs south of the access gate. All chain link shall be black vinyl coated with black painted components. Fencing east of the Timberslide Bridge and in the remediation area will require socketing into bedrock which is expected to be within 0.6 metres or less from surface.

1.7 Public Traffic Flow

.1 Provide and maintain competent signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform Work and protect public.

1.8 Fire Routes

.1 Maintain access to property including overhead clearances for use by emergency response vehicles.

1.9 Protection For Off-Site And Public Property

- .1 Protect surrounding private and public property from damage during performance of Work.
- .2 Be responsible for damage incurred.

1.10 Waste Management And Disposal

.1 Separate waste materials, and recycling in accordance with Section 312333.00 – Excavation of Overburden and Other Materials and Clause 1.30 of Section 010010 – General Requirements.

Part 2 PRODUCTS

NOT USED

Part 3 EXECUTION

NOT USED

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Part 1 General

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this section.

1.2 Related Sections

.1 Section 011100 – Summary of Work

1.3 Documents and Samples for Closeout Submittals

- .1 Maintain at Site for Contract Administrator a record copy of:
 - .1 Contract Drawings;
 - .2 Specifications;
 - .3 Addenda;
 - .4 Change orders and other modifications to the contract;
 - .5 Reviewed shop Drawings, product data and samples;
 - .6 Field tests records;
 - .7 Inspection certificates; and,
 - .8 Manufacturer's certificates.
- .2 Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage.
- .3 Maintain record documents in clean, dry and legible condition. Do not use record documents for construction purposes.
- .4 Keep record documents and samples available for inspection by Contract Administrator.

1.4 Recording Actual Site Conditions

- .1 Contract Administrator will provide Contractor with electronic record copies for project file. The Contractor is responsible for printing the Contract Documents.
- .2 Store Drawings and carefully record any change to the Contract Documents, field changes or change orders by the Contract Administrator.
- .3 Record all change with red ink pen.
- .4 Record the following information:
 - .1 Measured depths of elements of foundations in relation to finish geodetic grades.
 - .2 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface features.

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- .3 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
- .4 Surveyed elevation of the base of the clean fill removal for payment/volume calculations
- .5 Field changes of dimension and detail.
- .6 Changes made by change orders.
- .7 Record information concurrently with construction progress. Do not obscure work until required information has been recorded.
- At completion of Work and before final inspection, transfer all changes on the second record copy and transmit the two record copies to the Contract Administrator.
- .9 Contract Drawings and shop Drawings: legibly mark each item to record actual construction.

1.5 Final Site Survey

- Submit Final Site Survey Certificate (FSSC) that includes a paper drawing sealed and signed by a professional member of the Association of Ontario Land Surveyors (AOLS), an electronic copy of the drawing in AUTOCAD 2009 or newer format in which each type of element (i.e.: fire hydrant, side walk, etc.) are placed on different layers as requested by the Contract Administrator, an electronic list of all surveyed points in tabular ASCII format, with their number, their identification code and their X,Y and Z coordinates. Point's identification codes will be provided by the Contract Administrator at the beginning of the Work. The FSSC covers all the areas designated for the Contractor's Work or that are for its exclusive use within the boundaries of Limit of Work as shown on Drawings and as described in Contracts Documents. The FSSC will include, but is not limited to:
 - .1 Top and bottom of excavation slope (measurement points at 5 m intervals);
 - .2 Location of any groundwater infiltration point;
 - .3 Location of all underground/aboveground facilities that are either protected or decommissioned;
 - .4 Bedrock surface prior to backfilling (according to a 5 m grid).
 - .5 Final grade of Site (according to a 15m grid and at each change in topography (i.e., bedrock ledges, mounds, pile, trenches, low points, foundations, etc.)) before and after any backfilling;
 - .6 Existing benchmarks;
 - .7 All pertinent information selected by the Contract Administrator.

1.6 Final Reporting of Information

- .1 Submit an End of Construction report which includes, but is not limited to:
 - .1 Weigh bills from licensed waste disposal sites for all material sent off-Site.

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- .2 Soil quality sampling results for imported material including as quality control testing results such as duplicate samples.
- .3 If applicable, discharge flow and volume measurements with a copy of the final report to the MECP and/or City of Ottawa as required by potential EASR, PTTW or City Sewer Discharge Agreement.
- .4 A summary of work and site activities.
- .5 Documents required under Clause 1.4.4 and 1.5 of this Section.

Part 2 PRODUCTS

NOT USED

Part 3 EXECUTION

NOT USED

Section 310516

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Aggregates: General

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Part 1 General

1.1 GENERAL

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 RELATED SECTIONS

- .1 Section 011100 Summary of Work
- .2 Section 013513 Special Procedures for Contaminated Sites
- .3 Section 312333.01 Excavation of Overburden and other Materials

1.3 OUTLINE OF WORK

.1 This specification covers the material requirements for aggregates for use as granular subgrade, subbase, base course, shouldering and bedding and backfill to sewers, water mains, culverts and other structures. The Contractor must verify on Drawings and in the Contract Documents which of the following aggregate types are needed for the present Contract.

1.4 REFERENCE STANDARDS

- .1 Ontario Provincial Specifications:
- .2 Ontario Provincial Standard Specifications, OPSS 1001 (Nov. 2013), Aggregates General.
- Ontario Provincial Standard Specifications, OPSS.MUNI 1004 (Nov. 2013), Aggregates

 Miscellaneous.
- .4 Ontario Provincial Standard Specifications, OPSS 314 (Nov. 2013), Untreated Granular, Subbase, Base, Surface Shoulder, and Stockpiling.

1.5 SOURCE APPROVAL

- .1 Inform Contract Administrator of proposed source of aggregates and provide access for sampling required to ensure conformance of each aggregate with physical and production requirements at least two weeks prior to commencing production. Allow continual access and sampling by Contract Administrator during production.
- .2 Install sampling facilities at discharge end of production conveyor to allow Contract Administrator to obtain representative samples of items being produced. Stop conveyor belt when requested by Contract Administrator to permit full cross section sampling.
- .3 If, in the opinion of the Contract Administrator, materials from proposed source do not meet, or cannot reasonably be processed to meet specified requirements, locate an alternative source or demonstrate that material from source in question can be processed to meet specified requirements.
- .4 Advise Contract Administrator two weeks in advance of proposed change of material source.

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- .5 Acceptance of material at source does not preclude future rejection if it fails to conform to specified requirements, lacks uniformity, or if its field performance is found to be unsatisfactory.
- .6 Pay cost of sampling and testing of aggregates that fail to meet specified requirements.
- .7 All aggregates must be from a licensed aggregate pit or quarry.
- .8 All imported materials must comply with Ontario Regulation 153/04 Table 1 Background Site Condition Standards.

1.6 **DEFINITIONS**

- .1 Crushed material: means the pieces of aggregate having at least one well-defined face resulting from fracture.
- .2 Quarried Rock: means the material which has been or is being removed from an open excavation made in solid mass of rock, which, prior to removal, was integral with the parent mass.
- .3 Reclaimed Asphalt Pavement (RAP): means the bituminous pavement which is either removed by process such as milling, full depth pick up or pulverized in place.
- .4 Reclaimed Portland Cement Concrete: means the crushed Portland cement concrete removed from sidewalks, driveways, structures, curb and gutter, and pavement, and which is free of embedded materials that are not normal constituents of the concrete mix.
- .5 Quality Control: means a system or a series of activities performed by the Contractor to ensure that materials supplied for the work meet the specified requirements.
- .6 Quality Assurance: means a system or series of activities carried out by the Contract Administrator to ensure that materials received from the Contractor meet the specified requirements.

Part 2 Products

2.1 MATERIALS

- .1 Granular A and M: Granular A and M shall be produced by crushing material free of earth, humus, clay coatings, and clay lumps or fragments of any size or shape, and produced from crushed bedrock or gravel, cobbles, boulders, sand and fines produced from naturally formed deposits.
- .2 Granular O shall be produced from crushed bedrock or crushed boulders retained on the 50 mm sieve.
- .3 Granular B: Granular B aggregates shall be composed of clean, hard, durable particles free of earth, humus, clay coating and clay lumps or fragments of any size or shape.
- .4 Granular B (Type I) shall consist of a blend of natural aggregates from deposits of gravel or sand, talus rock or quarried rock. Natural aggregates for Granular B (type I) do not require crushing.
- .5 Granular B (Type II) shall be obtained from quarried rock.

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- .6 Select Sub-grade Material (SSM) shall be non-plastic material and granular or sandy type soil.
- .7 Granular A, B (Type I and II), M, O and Select Sub-grade Material shall meet the requirements of Table 1 and Table 2.

Table 1
Physical Property Requirements

Laboratory Test			Granular	Grani	Granular B		Select
	Test Number	0	A	Type I	Type II	r M	Subgrade Material
Coarse Aggregate Petrographic Requirement	LS-609	(Note 2)	(Note 1) (Note 2)	(Note 1) (Note 2)	(Note 2)	(Note 1) (Note 2)	(Note 2)
Freeze-Thaw Loss, % Maximum	LS-614	15	-	-	-	-	-
Fine Aggregate Petrographic Requirement	LS-616 LS-709	(Note 3)					
Micro-Deval Abrasion Coarse Aggregate Loss, % Maximum	LS-618	21	25	30 (Note 4)	30	25	30 (Note 4)
Micro-Deval Abrasion Fine Aggregate Loss, % Maximum	LS-619	25	30	35	35	30	-
Plasticity Index	LS-704	0	0	0	0	0	0

- Note 1: Granular A, B (Type I) and M shall not contain crushed glass and/or ceramic material;
- Note 2: Granular O, A, B (Type I) and M shall not contain wood, clay brick and/or gypsum and/or gypsum wall board or plaster. Granular B (Type II) and SSM shall not contain wood (Note: Petrographic classification of rock type need not be reported);
- Note 3: For materials north of the French/Mattawa Rivers only: for materials with > 6.0% passing the 75 μ m sieve, the amount of mica retained on the 75 μ m (passing 150 μ m sieve) shall not exceed 10% of the material in that sieve fraction unless testing (LS-709) determines permeability values > 1.0 x 10⁻⁴ cm/s and/or field experience show satisfactory performance (prior data demonstrating compliance with this requirement will be acceptable provided such testing has been done within the past five years and field performance has been satisfactory); and,
- Note 4: The coarse aggregate micro-Deval abrasion loss test requirement will be waived if the material has more than 80% passing the 4.75 mm sieve.

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Table 2
Production Requirements

Production R	<u>equiremen</u>	ts					
Laboratory Test	MTO Test	Granular O	Granular A			Granula r M	Select Subgrade
	Number			Type I (Note 2)	Type II		Material
Sieve Analysis	LS-602			Type I	Type II		
percent passing	(sieve size)			(Note 2)			
	150 mm	-	-	100	100	-	100
	37.5 mm	100	-	-	-	-	-
	26.5 mm	95.0 – 100	100	50.0 – 100	50.0- 100	-	50.0-100
	19.0 mm	80.0-95.0	85.0-100 87.0-100*	-	-	100	-
	13.2 mm	60.0-80.0	65.0-90.0 75.0-95.0*	-	-	75.0-95.0	-
	9.5 mm	50.0-70.0	50.0-73.0 60.0-83.0*	-	-	55.0-80.0	-
	4.75 mm	20.0-45.0	35.0-55.0 40.0-60.0*	20.0-100	20.0- 55.0	35.0-55.0	20.0-100
	1.18 mm	0-15.0	15.0-40.0	10.0-100	10.0- 40.0	15.0-40.0	10.0-100
	300μm	-	5.0-22.0	2.0-65.0	5.0- 22.0	5.0-22.0	5.0-95.0
	150µm	-	-	-	-	-	2.0-65.0
	75μm	0-5.0	2.0-8.0 2.0-10.0**	0-8.0 0-10**	0-10	2.0-8.0 2.0- 10.0**	0-25.0
Percent Crushed minimum	LS-607	100	60	0	100	60	-
Particles with 2 or more crushed faces, minimum, percent	LS-617	85	-	-	-	-	-
Amount of Asphalt Coated Particles in	OPSS 314		See OPSS -314	See OPSS	See OPSS	See OPSS	See OPSS

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Laboratory Test	MTO Test	Granular O	Granular A	Granular B (Note 1)		Granula r M	Select Subgrade
	Number			Type I (Note 2)	Type II		Material
Coarse							
Aggregate,							
percent							
maximum							

Where the aggregate is obtained from an iron blast furnace slag source.

- Note 1: Where Granular B is used for granular backfill for pipe sub-drains, 100 percent of the material shall pass the 37.5 mm sieve.
- Where RAP is blended with Granular B (Type I), 100 percent of the RAP shall pass the 75 mm Note 2: sieve. Conditions in Note 1 supersede this requirement.
 - .8 Clear stone: 19.0 mm clear stone shall meet the quality and percentage crushed requirements for Granular "A" and shall meet the following gradation requirements:

Gradation Requirements

MTO Sieve Designation	Percentage Passing
26.5 mm	100
19.0 mm	90 - 100
9.5 mm	0 - 55
4.75 mm	0 - 10

.9 Rip Rap: Rip Rap stone shall be clean, hard, broken rock, cobles or boulders which does not deteriorate when exposed to air and water and shall withstand cycles of wetting and drying and freezing and thawing.

Rip Rap shall be well graded in sizes ranging from 100 mm to 200 mm.

Sand bedding for buried utilities: shall consist of sand conforming to the gradation .10 requirements of mortar sand as following:

Gradation Requirements

MTO Lab Test no. LS-602

MTO Sieve Designation	Percentage Passing
4.75 mm	100
2.36 mm	95 – 100
1.18 mm	60 - 100
600 μm	35 - 80
300 μm	15 – 50
150 μm	2 - 15
75 μm	0 - 5

^{**} Where the aggregate is obtained from a quarry or blast furnace slag or nickel slag source.

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.11 Cobble Boulder Mix: Graded river stone or field stone which do not deteriorate when exposed to air and water and shall withstand cycles of wetting and drying and freezing and thawing.

River stone or field stone consisting of rounded, sound, hard particles, free from silt and clay lumps, soft shale, deleterious materials, organic matter, and foreign substances.

Graded as specified with a smooth gradation curve with no excess or deficiency of any particular grain size within the required range.

Where blending is required, thoroughly mix the cobble and boulder materials in a manner that produces a homogeneous fill of the specified gradation prior to placing the material into the Work or stockpiles.

Screen, wash, or otherwise process cobble and boulder products as required to achieve specified gradations except where specified otherwise.

Less than 12% loss of weight after 5 cycles in accordance with the requirements of CAN/CSA-A23.2-9A.

Natural stones with no crushed or otherwise manufactured component.

Gradation Requirements

MTO Sieve Designation	Percentage Passing
300 mm	100
250 mm	50 - 100
200 mm	20 - 50
150 mm	10 - 20
100 mm	0

.12 Granular Void Fill: Clearstone, consisting of sound, hard particles free from silt and clay lumps, soft shale, organic matter and deleterious substances.

Granular Void Fill shall be spread uniformly across the full width of the cross-section in order to fill the voids between successive layers of cobble/boulder mix.

Graded as specified with a smooth gradation curve with no excess or deficiency of any particular grain size within the required range.

Crush, screen, wash, or otherwise process material as required to achieve specified gradations except where specified otherwise.

Gradation requirements in accordance with Ontario Provincial Standard Specification: OPSD 1004 for 19 mm Nominal Maximum Type II Clearstone.

Less than 12% loss of weight after 5 cycles in accordance with the requirements of CAN/CSA-A23.2-9A.

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MTO Sieve Designation	Percentage Passing
26.5 mm	100
19 mm	90 - 100
16.0 mm	65 - 90
9.5 mm	20 - 55
0.475 mm	0 - 10
.75 um	0 - 2.0

Administrator for approval, at least two weeks before the work start-up, a substitute material that is cheaper and is of better quality than the designated material and is in conformity with one of the granular classes as described in the present Section. Granular classes that can be substituted for a better material consist only of granular type A,B,M and Select Subgrade Material. The Contract Administrator has no obligation to approve any granular material substitution.

2.2 ENVIRONMENTAL QUALITY

.1 Material imported to the Site for use within the Limits of Work must conform with the environmental quality requirements outlined in Section 312333.01 – *Filling and Backfilling*.

Part 3 Execution

3.1 PRODUCTION

.1 Stripping of aggregate source, processing, washing and blending of aggregates shall be done in accordance to OPSS 1001.

3.2 HANDLING AND STOCKPILING

- .1 Handling and stockpiling shall be done in accordance to OPSS 1001 and the following:
 - .1 If applicable, stockpile aggregates on-Site as directed by Contract Administrator.
 - .2 Stockpile aggregates in sufficient quantities to meet project schedules.
 - .3 Do not use intermixed or contaminated materials. Remove and dispose of rejected materials as directed by Contract Administrator within 48 hours of rejection. Removal and disposal of rejected materials shall be at the sole cost of the Contractor.
 - .4 Uniformly spot-dump aggregates delivered to stockpile in trucks and build up stockpile as required.
 - .5 Do not cone piles or spill material over edges of piles.

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3.3 QUALITY CONTROL

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- .1 The Contractor shall do sampling and testing for Quality Control as per S.P. no. F-3147.
- .2 The Contractor will be responsible for all costs associated with testing for Quality Control requirements.
- .3 Sampling and testing are required to ensure complete conformance of each aggregate with physical and production requirements.
- .4 All tests results shall be submitted to the Contract Administrator and approved prior to bringing the materials onto the Site.
- .5 Laboratories conducting tests for physical and production requirements shall be designated by the Contractor and must meet the requirements listed in SP no. F-3147
- .6 The Contractor shall provide access to the imported materials off-Site before importation to permit sampling at the discretion of the Contract Administrator. All material not meeting the quality requirements brought to site will shall be removed by the Contractor at no additional cost.

3.4 QUALITY ASSURANCE

.1 Quality Assurance will be carried out by the Contract Administrator to ensure that materials used in work conform to the physical and production requirements.

Victoria Island Section 312333.00

Site Remediation Project (Phase 3a)

Excavation of Overburden and Other Materials

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PART 1 GENERAL

1.1 General

.1 All conditions of the Contract and Section 010010 – General Requirements apply to this Section.

1.2 Related Work

- .1 Section 011100 Summary of Work
- .2 Section 013513 Special Procedures for Contaminated Sites
- .3 Section 013543 Environmental Protection
- .4 Section 013543 Site Specific Health and Safety
- .5 Section 017800 Closeout Submittals
- .6 Section 312333.03 Surface Water and Groundwater Management
- .7 Section 312333.01 Filling and Backfilling
- .8 Section 321560 Dust and Soil Tracking Control

1.3 Existing Conditions

.1 Refer to Section 011100 – *Summary of Work*, Clause 1.7, Background and Site Conditions and Clause 1.8, Complimentary Documentation

1.4 Outline of Work

- .1 Provide all supervision, labour, equipment, tools, materials, consumables, transportation and other services necessary for undertaking and completing the Work detailed and specified herein and on the Drawings, including but not limited to:
 - .1 Excavation of all Overburden Material to competent bedrock surface within the Remediation Limits, including all waste materials within the Overburden Material, including all existing former building slabs and foundations present in the remediation area, and transportation of the material to an MECP approved disposal facility with the exception of the following area:
 - 1. The landscaped berm on the east side of the site, north of the asphalt pathway that transects the site, above elevation 51 masl shall be separated and stockpiled for reuse. The precise depth and limits are to be determined in the field by the Contract Administrator.

1.5 Existing Utilities and Structures

- .1 Size, depth and location of existing utilities and structures as indicated on the Drawings and Specifications are for guidance only. Abandoned utilities from former development should be anticipated.
- .2 Prior to commencing excavation Work, notify Contract Administrator; establish location and state of use of buried utilities and structures.

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- .3 The following structures and utilities within the Remediation are to be protected during the completion of works:
 - .1 The buried 250 mm watermain crossing the site which services the east side of Victoria Island including the Carbide Mill and the fire systems. The Contractor shall install and maintain a bypass in the event this watermain is damaged and until repairs by the Contractor can be completed.
 - .2 The sanitary sewer, associated manholes and pump chamber located within a bedrock trench north of and within Middle Street, extending into the southern Portage Bridge abutment.
 - .3 Buried hydro from the Portage Bridge abutment running north along the Portage Bridge to below and east of the fenceline.
 - .4 The watermain valve and manhole controlling the abandoned irrigation line within the site shall be protected back to the main. Downstream of the valve shall be removed.
 - .5 The two actively used hydro poles located in the Remediation Area shall be protected and supported in place to permit remediation, as per the Contract Documents. Excavation around the two hydro poles shall include the removal of 0.3 m of soil within 1.5 m of the guy wires and poles followed by the placement of geotextile over residual soil prior to backfilling. Soil within the 1.5 m radius shall be excavated by hand.
 - .6 All work shall be complete such that the Portage Bridge abutment and Middle Street do not get undermined.
 - .7 The stored concrete curbs and paver stones shall be moved to the south of 150 Middle Street or as directed by the Contract Administrator.
- .4 All structures and utilities and landscaped areas outside the Remediation Area shall be protected and any damage repaired immediately at the Contractors cost to the satisfaction of the Contract Administrator. This includes but not limited to, fencing around the Energy Ottawa yard, fencing along Portage Bridge, Portage Bridge as well as Middle Street, and greenspace north and south of Middle Street.
- .5 Where unknown utilities or structures exist in the area of the excavation, obtain direction of the Contract Administrator before removing or rerouting.
- .6 Record location of maintained, rerouted and abandoned underground utilities.

1.6 Submittals

- .1 Prior to the commencement of any Site Work, the Contractor shall submit for the Contract Administrator's review and approval the following:
 - .1 Operating procedures respecting the excavation area and the contractor lay down area, including equipment inspection area and parking.
 - .2 Quantity and assignment of equipment and staff on the Work Site.
- .2 Prior to the commencement of any Site Work, the Contractor shall submit for the Contract Administrator's review and approval the following:

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- .1 Copies of all applicable Certificates of Approval issued by the MECP under Part V of the *Environmental Protection Act* for all off-Site waste management and recycling sites selected to receive waste soil and debris, as well as for all waste haulers.
- .3 Prior to the commencement of excavation Work, the Contractor shall submit for the Contract Administrator's review and approval the following:
 - .1 Copies of all clearance certificates from utility and service companies.
- .4 During and upon completion of the Work, the Contractor shall submit for the Contract Administrator's information the following:
 - .1 Documentation pertaining to off-Site disposal and movement of Overburden Material, wastes, recyclables and all other materials.
 - .2 Daily reports of quantities of Work executed for each relevant item of the Form of Tender.
 - .3 Details about any spill of Overburden Materials or Other Materials on public property and roadways, including the circumstances of the incident, reports to authorities and clean-up efforts.
- .5 Upon completion of the Work, the Contractor shall submit for the Contract Administrator's review and approval a survey of the final excavation area limits, features and elevations, as indicated in Section 017800 *Closeout Submittals*. The Survey shall be completed as part of the design, prior to backfilling. Survey to be completed at a 5 metre grid spacing plus any significant topographical features such as bedrock ledges, structures, or foundations.
- .6 Where appropriate, weigh bills from licensed disposal facilities must be turned over to the Contract Administrator, on a daily basis along with the report on quantities of Work executed.
- .7 Prior to commencing excavation Work the Contractor will provide the Contract Administrator a description of the procedure proposed to achieve the requirements of Bottom of Excavations in Clause 3.10 of this Section.

1.7 Testing

.1 The Contract Administrator may carry out laboratory testing to classify unexpected contamination. Regular laboratory turnaround will be completed for testing. The Contractor is responsible for staging the excavation Work such that laboratory testing does not delay the Work. The Contractor will not be compensated for delays resulting from analytical testing.

1.8 Reference Standards

- .1 Ontario Environmental Protection Act, 1990
- .2 Ontario Water Resources Act, 1990
- .3 Ontario Regulation 153/04, Record of Site Condition
- .4 Ontario Regulation 347, Waste Management
- .5 Ontario Regulation 406/19 On-Site and Excess Soil Management

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- .6 Canadian Council of Ministers on the Environment (CCME) Canadian Soil Quality Guidelines for the Protection of Human Health and the Environment
- .7 Ontario Regulation 903 Wells
- .8 Ontario Ministry of Labour: Occupational Health and Safety Act, R.S.O. 1990, c.O.1, as amended

PART 2 PRODUCTS

2.1 Excavation Equipment

.1 Excavation equipment shall be suited for the intended Work, be in good working condition and sized to effectively perform the Work.

2.2 Soil Handling Equipment

.1 Loaders, bulldozers, compactors, etc., as required.

2.3 Haulage Vehicles

- .1 Size and configuration of haulage vehicles will be appropriate for the Site conditions. It is anticipated that dual-axle and tri-axle vehicles will be required for haulage of Overburden Materials and Other Materials.
- .2 Haulage vehicles will be constructed in a manner to avoid spillage of material, with a tight-fitting tailgate closure arrangement complete with locking device.
- .3 Haulage vehicles are to be equipped with appropriate tarpaulins of suitable size and design to comply with Section 321560 *Dust and Soil Tracking Control*.
- .4 Vehicles required to access public roads shall be licensed to do so.
- .5 Haulage vehicles required to access public roads shall operate by authorization of a Certificate of Approval (Waste Management System) issued by the Ontario Ministry of the Environment under Part V of the *Environmental Protection Act*.

PART 3 EXECUTION

3.1 Site Preparation

- .1 Conduct a condition survey with the Contract Administrator of existing trees and other plants, lawns, fencing, service poles, wires, pavement, survey benchmarks and monuments, and any other structure or installation which may be affected by the Work.
- .2 Construction laydown area, temporary Site access roads shall be constructed, as required to execute the Work, and maintained by the Contractor for the duration of the excavation program.
- .3 Install temporary silt fencing around the perimeter of the work area either in compliance with or in addition to turtle fencing requirements. Turtle fencing must be installed by May 1. In the event of contract award delay beyond April 1, 2023, the NCC will arrange and pay for the installation of the turtle fence prior to mobilization to the site.

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- .4 Remove all surface infrastructure within the Remediation Area not identified as a feature to be protected.
- .5 Strip and recycle asphalt surfaces in the Remediation Area.

3.2 Decommissioning of Monitoring Wells

.1 The one (1) existing monitoring well in the Remediation Limits shall be decommissioned by a licensed well contractor in accordance with federal regulations and Ontario Regulation (O.Reg) 903 requirements before excavation of Overburden Materials.

3.3 Excavation

- .1 Excavate all Overburden Material to competent bedrock surface (see Clause 3.10 *Bottom of Excavations*) within the Remediation Limit shown on the Drawings with the exceptions outlined in Section 1.4 above and as shown in the Drawings. Overburden Material is defined as all material present above the bedrock surface and includes but is not limited to soil, gravel, cobbles, boulders, waste materials, and peat. Overburden Material may include boulders, former foundation elements, concrete, including reinforced concrete, maintenance holes, pipes and slabs that will require breaking to accommodate removal and transportation and placement at an MECP approved landfill.
- .2 Overburden Material is known to include concrete foundations and building slabs within the Remediation Limit. The approximate location of former buildings is shown on the Contract Drawings for reference. Concrete slabs are to be broken and removed with the contaminated soil as waste due to presence of tar waterproofing within the concrete. Concrete foundation walls without the tar material shall be crushed and recycled off-Site.
- .3 Bedrock surface is of geoheritage value and shall not be damaged by scraping or ripping of the bedrock surface during excavation.
- .4 Any damage to utilities or structures requiring protection will be immediately repaired at no extra cost to the owner by the Contractor. Specifically, the 250 mm watermain crossing the site which must maintain water supply to the east side of the island at all times
- .5 Load, haul and dispose of all excavated Overburden Material off-Site at an MECP approved landfill or recycling facility, except as noted in Clause 1.4 of this Section.
 - .1 Metal waste shall be separated and recycled at an approved recycling facility.
 - .2 Asphalt shall be stripped and recycled at an approved recycling facility.
 - .3 Large bedrock slabs and boulders that can be separated from the soil and stockpiled can be reused in the backfill. Loose soil material shall be brushed off any large boulders and bedrock slabs retained on site.
 - .4 Concrete waste containing tar shall be separated and disposed of off-site at an MECP approved landfill
 - .5 Concrete waste that does not contain tar shall be separated and recycled at an approved recycling facility.

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- .6 Clean soil from the landscaped berm as identified in Clause 1.4 of this Section shall be excavated and stockpiled on site for reuse in the backfill in locations directed by the Contract Administrator. The limit of the clean soil shall be determined in the field by the Contract Administrator.
- .6 Excavation Work shall be performed so that the previously excavated areas are kept clean and free of soil/materials and debris at all times.
- .7 Complete vertical excavations adjacent to Middle Street and Portage Bridge where the depth to bedrock is less than 1.2 metres. Areas of deeper bedrock shall be sloped from 1.2 metres to bedrock at a 1:1 slope or completed in sections to prevent undermining the roadway. 1:1 slopes shall be maintained from the base of any footings which are not founded on bedrock.
- .8 Hydro poles in the Remediation Area shall be supported in place using appropriate equipment and backfilled following remediation up to the pole, as approved by Hydro before undertaking the work.

3.4 Archaeology Considerations

- .1 Two areas of archeological interest have been identified on the Contract Drawings. Archaeological staff will be on-site on a full-time basis to monitor excavation activities in areas of archaeological interest. It is expected that all archaeological monitoring, including documentation, if required, will be completed within two hours of instruction to stop Work.
 - .2 If archaeological resources are uncovered during excavation work outside these areas of interest the archaeological staff will have the authority to halt work temporarily at that location, in order to assess the heritage value of the discovery and to collect artefacts and to document archaeological features. The Contract Administrator will contact the NCC's archaeologist for advice regarding mitigation measures to be put in place. Mitigation measures will conform to archaeological 'best practice' as currently followed in federal jurisdiction and will be authorized by the NCC archaeologist as part of its custodial responsibilities. In the event of the discovery of human remains, the procedures outlined in the Protocol for the Co-management of Archaeological Resources (2017) between the NCC, the Kitigan Zibi Anishinabeg and the Algonquins of Pikwakanagan First Nation will be applied. In brief:
 - All work within a minimum radius of 5 metres around the remains will be halted immediately and the NCC archaeologist will be notified forthwith. Work will not be resumed at that location until measures for the protection and management of the remains have been put in place.
 - The NCC archaeologist will contact the two Anishinabe Algonquin communities, the RCMP and the appropriate municipal and provincial authorities.
 - If the remains are determined to be Indigenous in origin and archaeological in character, then their disposition will be determined by the Kitigan Zibi Anishinabeg and Algonquins of Pikwakanagan.
 - Non-indigenous human remains determined not to be part of a crime scene will be documented and removed using "best practice" in archaeology.

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- .3 The Contractor will not be allowed to claim any standby time caused by such archaeological investigations, if the equipment can be reasonably relocated to another Work area within two hours of the instruction to stop Work. Should the Contractor be requested by the Contact Administrator to assist in the investigation, such Work shall be executed and compensated, in accordance with the hourly excavation rate, as directed and documented by the Contract Administrator.
- .4 It should be noted that the excavation work will take place entirely on federal land and that the *Ontario Heritage Act* does not apply to federal jurisdiction. The Contractor shall therefore not file a Project Information Form (PIF) with the Ministry of Heritage, Tourism, Sport and Cultural Industries for the archaeological work.

3.5 Geoheritage

- .1 An area of geological interest (ripple marks on the bedrock surface) has been identified in the south portion of the Remediation Area, on the exposed bedrock along Middle Street. This area is a provincially listed Areas of Natural and Scientific Interest (ANSI) The Contractor shall protect the bedrock surface from damage in this area and shall not use this area for the storage or movement of equipment or materials, including soil. The remaining bedrock surface is also of geological interest and shall not be backfilled until the bedrock surface has been documented by the geologist. Additionally, the bedrock surface of the entire site shall be protected from damage as best as practical and no ripping or scraping of the rock surface is permitted
- .2 The contactor will be required to contact the project geologist and coordinate documentation of the bedrock surface prior to backfilling. The project geologist will be retained by the NCC.

3.6 Overburden Material Haulage

- .1 Haulage vehicle drivers shall remain in their vehicles when inside the Work area.
- .2 Loading shall be such as to maximize vehicle capacity without mounding Overburden Material or Other Material over the sides and allowing for proper application of tarpaulins. Trucks shall not be filled above the box panels. Noting the load restrictions of the Middle Street Bridge (30 MT).
- .3 The Contractor shall comply with municipal and provincial restrictions concerning truck loads during the spring thaw period, of the territories his trucks have to travel through for off-Site disposal of Overburden Materials and Other Materials.
- .4 Upon return from the disposal location the driver shall provide the Contract Administrator with a copy of the weigh ticket issued by the disposal facility.
- .5 The Contractor shall maintain records of quantities of material disposed of off-Site at an MECP approved disposal facility, along with the weigh tickets from such approved disposal sites.
- .6 Haulage vehicles with water leaking from the tailgate or box shall be directed to return to the loading point and tip the contents of the box at the excavation Site to permit them to be mixed with drier material, as appropriate, before reloading to avoid spillage of liquid onto roadways.
- .7 Haulage operations shall be performed in accordance with applicable municipal, provincial and federal laws and regulations.

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- .8 Haulage vehicles shall follow the predetermined trucking routes approved by the Contract Administrator; see Section 015526 *Special Procedures: Traffic Control*.
- .9 Haulage vehicles shall carry the required tracking documentation required under Ontario Regulation 406/19 and as directed by the Contract Administrator. This information shall be prepared and supplied by the Contractor.

3.7 Backfill of Remediation Limits

- .1 Backfill and compact excavation within the Remediation Limit using suitable soil fill to specified grade.
- .2 Specified grade for backfill is to be approximately elevation 51 masl blended into the surrounding lands. Grade shall at all times maintain a positive drainage towards Middle Street. Grades in the southwest shall be kept at pre-excavation grades where manhole structures and hydro poles are present. No slopes greater than 5:1 are permitted except at the portage bridge abutment where the pre-remediation grade shall be maintained.
- .3 The imported soil fill shall meet the MECP Table 1 Site Condition Standards for Parkland land Use. The Contract Administrator may request access to the fill before importation to test for compliance. All material shall originate from a licensed pit or quarry. Proposed material which does not meet MECP Table 1 Standards will be rejected and an alternate source must be provided at no additional cost to the NCC.
- .4 The clean soil fill excavated from the berm shall be stockpiled on site for reuse as backfill. The Contractor Shall ensure this material is not mixed with underlying contaminated soil and any debris that may be present shall be sorted out before stockpiling. The Contract Administrator may undertake testing of the material and the Contractor shall facilitate the collection of samples and will not be compensated for delays resulting from testing should they be required.
- .5 Concrete foundation elements present in the overburden shall not be reused in the excavation. All backfill material shall be free of deleterious materials, including wastes, organics or boulders.
- .6 Any backfill brought on the Site which is found to be non-compliant with the quality requirement in this Section shall be removed by the Contractor at no additional cost.

3.8 Waste/Soil Spill Response

- .1 Every effort must be made to minimize the risk of a spill of Overburden Material, Other Material or waste on public property and roadways.
- .2 The Contractor shall submit to the Contract Administrator, before starting any Work on-Site, an Emergency Spill Response Plan and must implement this plan once approved by the Contract Administrator.
- .3 Advise the Contract Administrator and appropriate authorities of any spill in accordance with the requirements of Part X of the *Environmental Protection Act* and/or other applicable legislation.
- .4 Secure the affected area using markers or flares and minimize adverse effect on traffic. Advise police if spill impacts on traffic or public safety in any way, and MECP Spills Action Centre if spill occurs on public thoroughfare.

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.5 Dispatch labour and equipment to the spill area to proceed to cleanup to the satisfaction of the Contract Administrator at no extra cost.

3.9 Excavation Zone Perimeter Sloping and Protection against Cross-Contamination

- .1 Sloping shall be completed in accordance with the Drawings. Temporary unsupported soil excavations greater than 1.2 metres in vertical height shall be sloped at a grade of one vertical to one horizontal above the water table or one vertical to three horizontal below the water table or as approved by the Contract Administrator.
- .2 The bottoms and slopes of previously excavated areas shall be kept clean and free of soil/materials and debris at all times.
- .3 The temporary slope geometry used to determine requirements of the side slopes shall be according to the Occupational Health and Safety Act and sufficient to support all structures and utilities designated to be protected.

3.10 Bottom of Excavations

.1 The bottom of the remediated excavation area is to be comprised of an intact bedrock surface and will be free of Overburden Material (residual soil material), including loosened bedrock pieces that may be underlain by Overburden Material, to the satisfaction of the Contract Administrator. Standard of acceptance for residual soil shall be 0.0125 m³/ m² (roughly half of a standard 20 litre bucket) of excavated surface as determined by the Contract Administrator through visual observation and/or measurement. Residual Overburden Material remaining following standard machine excavation procedures may require removal from bedrock depressions, trenches, fractures, etc. by other means than standard machine excavation, as necessary to achieve the standard of acceptance. If compressed air is to be used to clean the bedrock surface, the residual soils shall be wetted to eliminate dust generation and if pressurized water is to be used, the runoff must be captured and contained for disposal off-site. Efforts to prevent damage to the bedrock surface must be implemented by the contractor. Scraping and ripping of the bedrock surface is not permitted.

3.11 End of Excavation

- .1 Notify the Contract Administrator when bottom of excavation is reached.
- .2 Obtain approval of the Contract Administrator for completed excavation. The Contractor shall allow 3 working days from the time of being notified that bottom of the excavation has been reached until such time that the Contract Administrator either directs the excavation to be backfilled, directs further excavation, or deems the excavation sufficient.
- .3 Allow for documentation of bedrock surface for geoheritage potential prior to backfilling.
- .4 Survey the final excavation area limits prior to backfilling, as indicated in Section 017800 *Closeout Submittals*, and submit to Contract Administrator for approval.

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Part 1 General

1.1 GENERAL

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 RELATED WORK

- .1 Section 013300 Shop Drawings and Samples
- .2 Section 013513 Special Procedures for Contaminated Sites
- .3 Section 013543 Environmental Protection
- .4 Section 310516 Aggregates
- .5 Section 312333.03 Surface Water and Groundwater Management
- .6 Section 312333.00 Excavation of Overburden and Other Material
- .7 Section 329121 Topsoil and Finish Grading
- .8 Section 329216 Hydraulic Seeding

1.3 OUTLINE OF WORK

- .1 Provide all supervision, labour, equipment, tools, materials, transportation and other services necessary for undertaking and completing the work detailed and specified herein and in the Contract Documents, including but not limited to:
 - .1 Loading and transportation to the Work Area, Select Subgrade Material from licensed aggregate pit or quarry.
 - .2 Placement and compaction of Select Subgrade Material to backfill the Work Site to specified grades.
 - .3 Cover any residual/unremedied exposed soil at the eastern remediation limit or where left in place within the remediation limit with geotextile, as indicated on the Contract Documents.

1.4 REFERENCE STANDARDS

- .1 American Society for Testing and Materials (ASTM)
 - .1 ASTM C 117-95, Standard Test Method for Material Finer Than 0.075 mm (No.200) Sieve in Mineral Aggregates by Washing.
 - .2 ASTM C 136-01, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - .3 ASTM D 422-65, Standard Test Method for Particle-Size Analysis of Soils.

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- .4 ASTM D 698-00, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft) (600 kN-m/m).
- .5 .Ontario Provincial Standard Specifications (OPSS)
 - .1 OPSS 401 (Nov. 2013), Trenching, Backfilling and Compacting.
 - .2 OPSS 1004 (Nov. 2012), Material Specification for Aggregates Miscellaneous.
 - .3 OPSS.MUNI 206 (Nov. 2013) Construction Specification for Grading.
 - .4 OPSS 1001 (Nov. 2013), Aggregates General.
 - .5 OPSS.MUNI 1004 (Nov. 2013), Aggregates Miscellaneous.
 - .6 OPSS 314 (Nov. 2013), Untreated Granular, Subbase, Base, Surface Shoulder, and Stockpiling.
- .6 Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines for the Protection of Environment and Human Health.
- .7 Ontario Regulation 406/19 On-site and Excess Soil Management.

1.5 SUBMITTALS

- .1 Submit documentation in accordance with Section 01340 *Shop Drawings and Samples*.
- .2 Inform Contract Administrator at least two (2) weeks prior to commencing work of the proposed source of any imported materials proposed for filling and provide access to the Contract Administrator for analytical testing to demonstrate compliance with the Ontario Ministry of the Environment Conservation and Parks (MECP) Table 1 Background Site Condition Standards before being accepted at the Site.
- .3 Obtain approval of the Contract Administrator for proposed imported materials prior to bringing them on-Site.
- .4 Upon completion of the excavation to bedrock and upon completion of the Work, the Contractor shall submit for the Contract Administrator's review and approval a survey of the bedrock surface and of final filling grades, as indicated in Section 017800 *Closeout Submittals*. Survey to be completed at a 5-metre grid spacing.

1.6 TESTING

- .1 The Contractor will be responsible for providing access to all source sites for imported materials to allow the collection and analysis by the Contract Administrator for confirmation of the environmental quality.
- .2 The Contractor will provide grain size testing result of each material type to demonstrate compliance with the requirements outlined in Section 310516 *Aggregates* and Clause 2.1 of this section.
- .3 Samples will be analyzed on a regular Turn Around Time. The Contract Administrator and NCC are not responsible for any delays due to testing.

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1.7 FILL QUALITY

.1 All imported soil fill must meet the MECP Table 1 Background Site Condition Standards. Any proposed material that does not meet these standards will be rejected and an alternate source provided at no additional cost. Any material brought to the site that does not meet this standard shall be removed by the Contractor at no additional cost.

Part 2 Products

2.1 MATERIALS

- .1 Engineered Granular Fill: includes Granular A and B, as per Section 310516 *Aggregates*. Must also comply with Clause 1.7 of this Section. May be required to support excavations adjacent to infrastructure.
- .2 Select Subgrade Material: selected material as per Section 310516 *Aggregates*. To be unfrozen, free from cinders, ashes, organic material, refuse or other deleterious materials. Must also comply with Clause 1.7 of this Section. Must be sourced form a licensed aggregate pit or quarry.
- .3 Overburden Material: includes all material present above the bedrock surface at the Site and includes but it not limited to soil, gravel, cobbles, boulders, waste materials, peat. Overburden Material may include boulders, former foundation elements, concrete, including reinforced concrete that will require breaking to accommodate removal, transportation, and transportation and placement at an MECP approved landfill. Excludes non-soil/rock waste material over 400 mm in diameter.
- .4 Geotextile: non-woven, needle-punctured Geotextile conforming to Class 1 OPSS 1860 with apparent opening size less than 0.6 mm.

Part 3 Execution

3.1 BACKFILLING

- .1 Load, transport and place Select Subgrade Material backfill compacted to 90% dry density in 300 mm lifts within the Remediation Limit to specified design grade.
- .2 Design grades are defined as being as required to blend into the surrounding land while maintaining positive drainage towards Middle Street. The average design elevation for backfill is an average grade of approximately elevation 51 masl. In the southwest of the site where existing manholes and hydro poles will remain, reinstate to pre-remediation grades. In the southeast of the site where bedrock is currently exposed at surface, blend to maintain pre remediation bedrock exposure. No grade should be greater than 5:1 except for the southern Portage Bridge Abutment that will be maintained at pre-remediation grades.
- .3 Any residual exposed soil along the eastern limit and within Remediation Limit that was left in place shall be covered with geotextile before filling.

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- .4 Allow 3 working days from the time of the completion of the remedial excavation until such time that the Contract Administrator either directs the excavation to be backfilled, directs further excavation, or deems the excavation sufficient.
- .5 Areas to be backfilled are to be free from debris, snow, ice, water and frozen ground and satisfy the Bottom of Excavation described in Section 312333.00 *Excavation of Overburden and Other Materials*.
- .6 Do not use backfill material which is frozen or contains ice, snow, or debris.
- .7 All backfill will also comply with Clause 1.7 of this Section or equivalent approved by the Contract Administrator.
- .8 During backfilling, take care to avoid displacing or damaging utilities. Utilize bedding sand backfill to protect the 250 mm water main during backfilling.
- .9 Reuse clean stockpiled soil where directed, which may be anywhere on the site within the remedial limits.
- .10 After placement of backfill, landscaped areas outside those consisting of exposed bedrock shall be topsoiled with 150 mm of topsoil and hydraulically seeded, refer to Section 329121 Topsoil and Finish Grading and Section 329216 Hydraulic Seeding

3.2 Final Survey

.1 Complete a Survey of the final site conditions following reinstatement using a 5-metre grid spacing capturing infrastructure and significant topographic features.

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PART 1 GENERAL

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 Related Work

- .1 Section 011100 Summary of Work
- .2 Section 013513 Special Procedures for Contaminated Sites
- .3 Section 312333.00 Excavation of Overburden and Other Materials
- .4 Section 013543 Environmental Protection

1.3 Reference Standards

- .1 Temporary Erosion and Sediment Control Measures OPSS 805 (Nov. 2010)
- .2 City of Ottawa Sewer Use By-Law 2003-514.
- .3 Ontario Regulation 64/16 (Amendment to Ontario Regulation 387/04 Water Taking).
- .4 Canadian Council of Ministers of the Environment (CCME) Surface Water Quality Guidelines for the protection of Aquatic Life.
- .5 Provincial Water Quality Objectives (PWQO)

1.4 Outline of Work

- .1 Provide all supervision, labour, equipment, tools, materials, consumables, transportation and other services necessary for undertaking and completing the Work detailed and specified herein, including but not limited to:
- .1 Water entering excavation area (i.e. precipitation) which mixes with contaminated soils shall not be discharged directly into the Ottawa River or the sewers found on Victoria Island.
- .2 Manage surface water to minimize entry into the excavations and maximize natural infiltration. As required, divert surface water from entering the Work Area to the Ottawa River. Diversions must not cause erosion of the site. Diversion resulting in unacceptable water quality will be diverted to an alternate on-land discharge point including storage tanks and/or soak away pits where the rate of infiltration permits. Alternate on-land discharge points and soak away pits shall not be constructed in remediated areas. The proposed location of on-land discharge points must be pre-approved by the Contract Administrator.
- .3 Construct drainage ditches and sumps with filter-equipped pumps, to be located at the bottom of the excavation(s) as required to collect excavation water and maintain dry conditions. Discharge of collected water shall not be permitted to discharge directly to the Ottawa River or on-site sewers and shall be containerized, filtered or discharged to a soak away pit located outside the remediation area for natural infiltration. The Contractor may also obtain approval at their cost to discharge to an off site municipal sanitary sewer.
- .4 Excavation areas shall be free of water in order to complete remediation activities and for the Contract Administrator to verify and accept the remediated area.

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- .5 Operate and maintain the Water Management Facilities with all pumps and filters and those described in Section 013513 Special Procedures for Contaminated Sites Clause 3.6 for the duration of the Contract.
- .6 Provide, operate and maintain pumping equipment at the water collection areas.

1.5 Existing Conditions

- .1 Refer to Section 011100 *Summary of Work*, Clause 1.8 Complementary Documentation.
- .2 Excavation is not expected to encounter groundwater. However, some areas of perched groundwater may be encountered in areas of deeper bedrock or following prolonged periods of precipitation.

1.6 Permits and Testing

- .1 It is not anticipated that there will be the need for an Environmental Activity Sector Registry (EASR) or Permit to Take Water (PTTW) under Regulation 387/04 as amended by Regulations 63/16 and 64/16, with any pumping, if required, being under 50,000 litres pre day.
- .2 Water which may collect in the excavations and which may be mixed with contaminated soils shall be discharged to an on-land feature such as a soak away pit or off-site municipal sanitary sewer, subject to receipt of the applicable permits and approvals to be obtained and paid for by the Contractor. No direct discharge of this water is permitted to the Ottawa River or on-site sewers.
- .3 All discharges of surface water and groundwater from the Site must comply with all applicable permits and environmental regulations and by-laws.

1.7 Submittals/Shop Drawings

.1 The Contractor shall submit to the Contract Administrator a water management plan for review and approval 14 days prior to commencing excavation work. The water management plan will include sediment management system(s) and an outline of the installation to prevent migration of turbidity outside the work area.

PART 2 PRODUCTS

2.1 Equipment

- .1 Provide, operate and maintain pumps, hoses, silt curtains and other equipment sufficient to control water ingress to the work areas.
- .2 Water supplies for the decontamination of equipment shall be stored, as required, in tanks of sufficient capacity. The Contractor shall supply, operate and maintain the required tanks and pumps.

PART 3 EXECUTION

- .1 Divert overland flow and groundwater from entering active work areas to prevent sediment laden water from entering the Ottawa River.
- .2 Redirect surface water from excavation areas or areas of ponding to an alternate onland discharge point for controlled natural infiltration.

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Part 1 GENERAL

1.1 General

.1 All conditions of the Contract and Section 010010 – *General Requirements* apply to this Section.

1.2 Related Work

- .1 Section 011100 Summary of Work
- .2 Section 013513 Special Procedures for Contaminated Sites
- .3 Section 013543 Environmental Protection
- .4 Section 013529 Site-Specific Health and Safety
- .5 Section 312333.03 Surface Water and Groundwater Management
- .6 Section 312333.00 Excavation of Overburden and Other Materials
- .7 Section 312333.01 Filling and Backfilling

1.3 **Outline of Work**

.1 Provide all supervision, labour, equipment, tools, materials, consumables, transportation and other services necessary for undertaking and completing the Work detailed and specified herein, including but not limited to dust and soil tracking control. (Note: in this context soil is defined as material originating on the Sites including Overburden Material defined in Section 312333.00).

1.4 Existing Conditions

.1 Refer to Section 011100 – Summary of Work, Clause 1.7.

1.5 Reference Standards

- .1 Ontario Provincial Standard Specifications (Material):
 - .1 OPSS 2501 Calcium Chloride Flake and Calcium Chloride solution.
- .2 Ontario Provincial Standard Specifications (Construction):
 - .1 OPSS 506 Construction Specification for Dust Suppressants.
- .3 Canadian General Standards Board Specification:
 - .1 15.1-92 Standard for calcium chloride.

1.6 **Submittals**

.1 14 days prior to the commencement of any Site Work, the Contractor shall submit for the Contract Administrator's review and approval, the following:

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- A Dust Control Plan detailing measures to be taken to minimize the release of airborne particulates during all Work activities.
- .2 A Soil Tracking Control Plan detailing measures to be taken to minimize the tracking of soil onto public roadways and methods to be used to clean compacted surfaces.
- During and upon completion of the Work, the Contractor shall submit for the Contract Administrator's information the following:
 - .1 All reported complaints associated with dust, which may have been generated as a result of the Work.
 - .2 All reported complaints addressing the tracking of soil onto public roadways.

Part 2 PRODUCTS

2.1 Materials

- .1 Calcium chloride, Type I, to CGSB 15-GP-1M or equivalent is to be delivered to the Site in moisture-proof bags with name of manufacturer, name of product and net weight (mass), or alternatively, a liquid calcium chloride solution or equivalent, subject to the approval of the Contract Administrator.
- .2 Water shall be free of contaminants that could adversely affect fill material or the environment.

Part 3 EXECUTION

3.1 **Dust Control Measures**

- .1 The contractor must comply with Section 49 of O. Reg. 419/05.
- .2 Dust control measures shall include:
 - .1 Instructing workers on dust control methods.
 - .2 Adjustment of the excavation rate, grading activities and soil handling to minimize dust emission.
 - .3 Limiting the speed of construction vehicles in the construction area to 15 km/h.
 - .4 Use of dust suppression technologies (e.g., application of water, calcium chloride (CaCl₂) or any other equivalent dust suppressing agent), as required and as approved by the Contract Administrator. Soils should be wetted to control dust but shall not be permitted to be applied at levels resulting in erosion or surface water runoff.
 - .5 Use of tarpaulins over haulage trucks (incoming and outgoing).
 - .6 Monitoring dust emission visually and taking action to suppress dust, as necessary.

- .7 Monitoring wind conditions and adjusting excavation, soil handling and/or haulage rates or suspending work, as necessary.
- .8 Supplying and having available at all times suitable dust suppressant equipment to control and prevent dust on the Work Site.
- .3 Spray water using a system equipped with shut-off device and capable of uniform application at the following rates using low pressure, low volume nozzles:
 - .1 0.36 L/m² for every 20 heavy vehicular passes during very hot and dry conditions.
 - .2 0.36 L/m² for every 38 heavy vehicular passes during warm and overcast conditions.
 - .3 0.36 L/m² for every 76 heavy vehicular passes during cool conditions.
 - .4 No stipulated watering rate is specified for wet or rainy conditions.
- .4 Apply calcium chloride or equivalent to supplement the mandated water application as instructed by the Contract Administrator.

3.2 Recording and Documentation

.1 The Contractor shall maintain a daily log of dust control related activities recording the following information: date, time, vehicular traffic, water application rates (L/m²), weather conditions and visual observations regarding dust and submit daily to the Contract Administrator.

3.3 **Dust Monitoring**

- .1 The Contract Administrator will monitor dust emissions, as well as the effectiveness of dust control methods and complaints or reports from the public.
- .2 Should the dust control measures implemented by the Contractor not address the problem to the satisfaction of the Contract Administrator, the activities generating the dust shall be discontinued until conditions change, to allow the operation to continue in compliance with the requirements.
- .3 Should the Contract Administrator determine that the weather conditions are such that control of dust emission becomes difficult or that exposure to unacceptable dust level might occur, the Contractor will be ordered to stop any operation that is aggravating the condition and take the appropriate mitigating action.
- .4 The Contractor shall not resume the ceased activities or operations until, in the opinion of the Contract Administrator, weather conditions and/or Site conditions are suitable.

3.4 Soil Tracking Control Measures

- .1 Clean all equipment and vehicles exiting the Sites, including brushing and washing tires and undercarriage, as may be required to remove the soil. See Section 013513 *Special Procedures for Contaminated Sites*.
- .2 Avoid overfilling haulage vehicles. Loads should be lower than the top of the dump box at all times.

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- .3 Apply tarpaulins and secure tailgates of all loaded haulage vehicles prior to accessing public roads.
- .4 Take all necessary precautions to prevent the tracking of soil waste onto public roadways and private properties. All movement of equipment off the Work Site is to be controlled through decontamination zones. The Contractor shall immediately clean all debris and dust deposits resulting from the work, to the satisfaction of the Contract Administrator, using strict dust control measures.
- .5 A street sweeper will be used to clean the public roadways where soil tracking off-Site has occurred, or as required by the Contract Administrator. It is expected that daily sweeping will be required after rainfall events or where work areas are wet. Where this occurs, daily sweeping will continue until Site conditions dry out and soil tracking is reduced to acceptable levels.

3.5 Haulage Vehicle Tarpaulins

- .1 Roller tarpaulins will be permitted and used for both incoming and outgoing haulage vehicles when moist fill conditions exist and dust is not generated from the truck boxes as set out in the Dust Control Plan.
- .2 Roller tarpaulins shall be maintained in a state of good repair at all times.
- .3 When dry conditions exist and dust is seen to be coming from the truck boxes from above the edge of the box or below the side of the roller tarpaulins, the latter shall be tied down to the side of the box to reduce the opening.
- .4 In the event that properly secured roller tarpaulins do not eliminate dust emissions from the truck box, additional controls including the use of a water spray to dampen the surface of the load or the use of overlapping tarpaulins tied down to the outside of the box shall be applied.

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Part 1 - GENERAL

1.1 Related Work Specified Elsewhere

- .1 Excavation of Overburden and Other Materials Section 312333.00
- .2 Hydraulic Seeding Section 32 92 16

1.2 Testing

- .1 Obtain Contract Administrator's initial approval of imported topsoil at source.
- .2 Test existing and imported topsoil for NPK, Mg, soluble salt content, organic matter and pH value prior to delivery to site.
 - .1 Submit 0.5 kg sample of topsoil to testing laboratory and indicate intended use.
 - .2 Determine requirements for amendments to bring pH value of soil to 5.5 to 7.7 level.
 - .3 Submit two copies of soil analysis and recommendations for corrections to Contract Administrator.
 - .4 Inspection and testing of topsoil will be carried out by testing laboratory designated by Contract Administrator.
 - .5 The Contractor will arrange and pay the cost of testing.

1.3 Scheduling of Work

.1 Schedule placing of topsoil to permit immediate hydro-seeding.

Part 2 PRODUCTS

2.1 Topsoil: Sports Field Mix or approved equal

Mix Ratio Example:

72% Sand

18% Silt

10% Clay

- PH: 5.5-7.5
- Free from subsoil, roots, grass, weeds, toxic materials, stones, foreign objects
- Topsoil containing crabgrass, couch grass or other noxious weeds, not acceptable.

Imported topsoil: friable loam, neither heavy clay nor of very light sandy nature containing minimum of 5 to 10% organic matter. Free from subsoil, roots, grass, weeds, toxic materials, stones, foreign objects. Topsoil containing crabgrass, couch grass or other noxious weeds, not acceptable.

Lime: Ground agricultural limestone containing minimum 85% of total carbonates, 90% passing 1.0 mm sieve, 50% passing 0.125 mm sieve by weight.

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2.2 Sulphur: Horticultural Grade

.1 Composted yard waste shall conform to the requirements for Category A Compost as defined in the Guidelines for Compost Quality (2005), Canadian Council of Ministers of the Environment and meet the following criteria: pH 5.5-7.8 dark brown color, not contain debris, sweet odor (not sour), soluble salt concentration < 3.5 mmhos/cm, Moisture 35- 55% wet weight basis, organic matter >35% dry weight basis, carbon to nitrogen ration 15:1 to 25:1

Part 3 EXECUTION

3.1 Topsoil cap to obtain a full 150 mm thickness after compaction.

3.2 Preparation

- .1 Grade subgrade, eliminating uneven areas and low spots, ensuring positive drainage. Remove stones larger than 50 mm diameter and other deleterious materials. Remove subsoil that has been contaminated with oil, gasoline or calcium chloride. Dispose of removed materials as directed. Any excavated topsoil is to be handled as per Section 313333.00- Excavating of Overburden and Other Materials.
- .2 Do not cultivate soils around existing trees and shrubs. Refer to contract drawings for surface treatments prior to installation of topsoil.

3.3 Reuse of Existing Topsoil

.1 Topsoil and clean soil above 51 masl from the soil berm in the north east of the site can be reused. All other excavated materials are to be removed from site in accordance with 013513 – Special Procedures for Contaminated Sites.

3.4 Spreading of Topsoil

- .1 Do not spread topsoil until Contract Administrator has inspected and approved subgrade.
- .2 Spread topsoil with adequate moisture in uniform layers during dry weather over approved, dry, unfrozen subgrade.
- .3 Bring topsoil up to finished grade.
- .4 Remove stones, roots, grass, weeds, construction materials, debris and foreign nonorganic objects from topsoil.
- .5 Manually spread topsoil around surface utilities and other obstacles.

3.5 Finish Grading

- .1 Fine grade entire top soiled area to contours and elevations as indicated or as directed. Eliminate rough spots and low areas to ensure positive drainage.
- .2 Roll topsoil with 50 kg roller, minimum 900 mm wide, to compact and retain surface.
- .3 Leave surface smooth, uniform, firm against deep foot printing, with fine loose texture.
- .4 Apply topsoil to the depths and compaction as per contract drawings

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3.6 Surplus Material

.1 Dispose of surplus topsoil not required for fine grading/landscaping off site.

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Part 1 General

1.1 RELATED SECTIONS

.1 Topsoil and Finish Grading Section 32 91 21

1.2 SPECIAL INSTRUCTIONS

- .1 Hydroseed to happen between May 15 to June 30 or from August 15 to October 1. Timing slightly later is possible if weather conditions are suitable, as determined by the Contract Administrator (generally daytime temp above 10°C). If seeding must occur outside that weather window, as determined by the NCC representative, undertake dormant seeding using a brillion seeder applied at a rate of 240kg/Ha, in the timing window as instructed by the NCC (generally when daytime temperatures are below 4°C).
- .2 Fertilize with 7-24-12 prior to seeding, but do not add water or mulch. Do not water until the following spring. Delay topsoil application until just before seeding.
- .3 Over-seed bare patches in spring, as determined by NCC approximately late May.

1.3 1REFERENCES

.1 OPSS 572 – Ontario Provincial Standard Specification, Construction Specification for Seeding

1.4 PRODUCT DATA

.1 Provide product data for: Seed mixture, Mulch, cover adhesive, fertilizer.

1.5 SCHEDULING

- .1 Submit schedule or work for approval by the Contract Administrator.
- .2 Schedule hydraulic seeding to immediately follow preparation of soil surface. See 1.2.1 for special instruction.
- .3 Hydroseed to happen between May 15 to June 30 or from August 15 to October 1.

Part 2 Products

2.1 MATERIALS

Seed:

.1 Grass mixture: "Certified", "Canada No. 1 Lawn Grass Mixture" in accordance with Government of Canada "Seeds Act" and "Seeds Regulations"

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- .2 Lawn Mixture Compositions:
 - 40% Kentucky Bluegrass
 - 40% Creeping Red Fescue
 - 20% Perennial Ryegrass
- .3 Mulch: specially manufactured for use in hydraulic seeding equipment, non-toxic, water activated, green colouring, free of germination and growth inhibiting factors with following properties:
 - Made from biodegradable newsprint wood fibre, raw cotton fibre and straw, processed to produce fibre lengths of 15mm minimum and 25mm maximum.
 - Greater proportions of ingredients to be straw.
- .4 Cover adhesive: water dilutable, liquid dispersion in accordance with OPSS 572.
- .5 Water: Free of impurities that would inhibit germination and growth.
 - .1 Supplied by contractor.
 - .2 Tank(s) used for storage or application of water shall be clean and free of any contaminants which may be hazardous to the growth and development of turf and to the environment in general.
 - .3 Hoses used for watering shall be capable of reaching the limits of the Contract site. Pumps shall be under pressure. The outlet end of the hose(s) shall be 25 mm in diameter with a suitable adjustable nozzle or nozzles, and a quick shut-off valve.
- .6 Cover adhesive
 - .1 Water dilutable, liquid dispersion or water-soluble vegetable carbohydrate powder in accordance with OPSS 572.
 - .2 Use maximum application as per manufacturer's specifications.
- .7 Fertilizer
 - .1 To Canada "Fertilizers Act" and "Fertilizers Regulations".
 - .2 Complete synthetic, slow release with 35% of nitrogen content in water-insoluble form.

Part 3 Execution

3.1 OPERATIONAL CONSTRAINTS

.1 Seeding shall be carried out from May 15 to June 30 or from August 15 to October 1. Any minor exceptions must be approved by Contract Administrator.

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3.2 WORKMANSHIP

- .1 Do not spray onto structures, signs, guide rails, fences, plant material, utilities and other than surfaces intended.
- .2 Clean up immediately any material sprayed where not intended, to satisfaction of Contract Administrator.
- .3 Do not perform work under adverse field conditions such as wind speeds over 10 km/h, frozen ground or ground covered with snow, ice or standing water.

3.3 PREPARATION OF SURFACES

- .1 Fine grade areas to be seeded so it forms a uniform slope, free of humps and hollows that follows the adjacent natural slope profile and proper drainage of surfaces. Ensure areas are free of deleterious and refuse materials.
- .2 Ensure no weeds, debris, gravel and stones 50 mm in diameter or large are present.
- .3 Obtain Contract Administrator approval of grade, topsoil depth and outline of areas to receive only mulch (i.e. no seed) before starting to seed.

3.4 PREPARATION OF SLURRY

- .1 Measure quantities of materials by weight or weight-calibrated volume measurement satisfactory to Contract Administrator. Supply equipment required for this work.
- .2 Charge required water into seeder. Add material into hydraulic seeder under agitation. Pulverize mulch and charge slowly into seeder.
- .3 After all material is in the seeder and well mixed, charge tackifier into seeder and mix thoroughly to complete slurry.

3.5 HYDRO SEEDING

- .1 Undertake hydro-seeding in one application consisting of .
 - Seed and fertilizer slurry at a Sowing rate of 150 kg / ha (17 gram per m2). Fertilizer shall consist of 8-24-12 NPK at a rate of 350kg/ha. The quantity of water shall be as required to form an homogenous slurry, but shall not be less than 7600L.
 - Hydraulic mulch. Apply mulch at a rate of 2200 kg per hectare (22 kg per 100 square metres). On erosion prone slopes, hydraulic mulch shall be used in combination with cover adhesive. Apply cover adhesive and water at rates of application indicated in OPSS 572.
- .2 Apply slurry uniformly, at optimum angle of application for adherence to surfaces and germination of seed.
- .3 Using correct nozzle for application, using hoses for surfaces difficult to reach and to control application.

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- .4 Blend application 300 mm into adjacent grass areas or sodded to form uniform surfaces.
- .5 Hydroseeding must be done when the wind speed is lower than 10km/h.
- .6 Re-apply at no additional costs where application is not uniform.

3.6 PROTECTION OF SEEDED AREAS

.1 All seeded areas shall be protected as indicated with temporary fencing from time of seeding until final acceptance of seeding.

3.7 MAINTENANCE

- .1 Contractor shall be responsible for maintenance until final acceptance.
- .2 Water seeded areas to maintain optimum soil moisture level for germination and continued growth of grass. Control watering to prevent washouts. Provide all water required to keep soil within and around the root and in the soil at optimum moisture content between 10 and 20% as measured using a General Digital Moisture Meter.
- .3 The contractor shall submit for approval a watering schedule at the beginning of the warranty period and report on actual watering on a bi-weekly basis.
- .4 Cut grass to 60mm whenever it reaches a height of 80mm. Remove clippings.
- .5 Do not apply herbicides or pesticides unless specifically directed to do so by the Contract Administrator.

3.8 ACCEPTANCE

- .1 Hydraulically seeded areas shall be accepted provided that the followings conditions are met:
 - Seeded areas display uniform coverage of seeded species. Turf is free of eroded, bare or dead spots of 150 mm square or greater and is 98% free of weeds. No surface soil is visible when grass is cut to height of 60 mm.
 - Areas seeded after September 30 may be accepted the following spring, approximately six weeks after the start of the growing season provided acceptance conditions are met.
 - Hydraulically seeded areas shall not be given final acceptance until they have been inspected and approved by the Contract Administrator.
 - Any seeded areas which fail to meet the requirements of this specification shall be re-seeded
 and maintained by the Contractor at no cost to the owner. Re-seeding shall be subject to the
 same acceptance conditions.