

Tender for Construction

Tender Description: Kitchener Corridor, Weston Subdivision - Construction of Natural Gas Line and Sewer Connections

Tender Number: IT-2016-CKU-085



INTRODUCTION

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

<u>TITLE</u>	<u>NO OF PAGES</u>
List of Contents	1
Any Addenda Issued Hereto.....	1
Introduction	1
Definitions	4
Instructions To Bidders.....	21
Form of Tender	5
Appendix "A" - List of Tender Documents.....	7
Appendix "B" – Contract Prices.....	3
Appendix "C" – Bidder’s Qualifications.....	6
Appendix "D" – Agreement to Bond	1
Appendix "E" – Conflict of Interest.....	2
Appendix "F" – Mandatory Technical/Personnel Requirements.....	1
Appendix "G – Bidder’s Submission Checklist	1
Supplementary Agreement Between Owner and Contractor	2
Form of Agreement	1
Supplementary Definitions of the Contract	3
Definitions of the Contract	1
Supplementary General Conditions of the Contract.....	40
General Conditions of the Contract	1

<u>SECTION NO.</u>	<u>TITLE</u>	<u>NO. OF PAGES</u>
--------------------	--------------	---------------------

GENERAL REQUIREMENTS

01000	General Instructions.....	7
01140	Work Restrictions.....	2
01200	Mobilization and Demobilization	3
01300	Shop Drawings and Other Submittals.....	4
01400	Quality Control	3
01500	Temporary Facilities	1
01545	Railway Safety Requirements.....	7
01560	Environmental Protection.....	13

INTRODUCTION

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

01570	Traffic Control.....	4
01600	Safety Requirements	8
01700	Material and Equipment.....	3
01710	Cleaning.....	1
01800	Project Closeout.....	3

SPECIFICATIONS

02000	Special Requirements -Sewer.....	2
02001	Special Requirements –Natural Gas.....	8
02140	Dewatering.....	3
02202	Construction Noise and Vibration Control.....	3
02225	Demolition and Removal.....	3
02270	Erosion Control.....	6
02311	Site Grading.....	3
02315	Excavating, Trenching and Backfilling.....	9
02340	Geosynthetics.....	3
02353	Special Procedures for Traffic Control.....	3
02362	Water for Compaction, Dust and Mud Control.....	2
02511	Watermains.....	9
02630	Storm and Sanitary Sewers.....	6
02631	Maintenance Holes, Catchbasins, Ditch Inlets and Valve Chambers....	6
02634	Utility Adjustments.....	1
02700	Site Restoration for Underground Services.....	2
02701	Aggregates – General.....	4
02721	Granular Base.....	4
02723	Granular Sub-Base.....	4
02743	Asphalt Paving.....	3
02744	Driveway and Parking Lots.....	2
02745	Tack Coat.....	1
02761	Painted Traffic Lines.....	2
02825	Chain Link Fencing.....	2
02906	Planting of Trees, Shrubs, and Ground Cover.....	24

INTRODUCTION

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

02911	Topsoil, Placement and Grading.....	6
02920	Hydraulic Seeding.....	6
02933	Sodding.....	1
03100	Concrete Formwork and Falsework.....	3
03201	Concrete Reinforcement.....	3
03203	Concrete Accessories.....	2
03290	Joints in Concrete.....	12
03300	Cast in Place Concrete.....	17
03310	Concrete Work.....	7
03312	Concrete Curb and Gutter.....	2
03313	Concrete Sidewalk.....	2
16170	Underground Duct Bank System.....	3
16180	Snow Clearing Devices.....	3

DRAWINGS

GENERAL

	Title Sheet
	Signature Sheet
C-001	Site Specific General Notes

SEWER CONNECTION

C-002	400mm Watermain-Carlingview Drive STA . 9+011 TO 9+070
C-003A	900mm Storm Sewer- Carlingview Drive 200m S. OF DISCO ROAD
C-003B	900mm Storm Sewer Outlet- Carlingview Drive 200m S. OF DISCO ROAD
C-004	Erosion and Sediment Control
C-005	Tree Preservation Details and Notes
C-006	Filtrexx Ring and Fence Details
C-007	Slope Blanket Installation

NATURAL GAS LINE

GS-100	General Notes, Drawing List, Legend, Specifications
GS-101	Gas Line Plan Sta. 25+737 TO 25+400
GS-102	Gas Line Plan Sta. 25+400 TO 25+075

INTRODUCTION

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

GS-103	Gas Line Plan Sta. 25+075 TO 24+731
GS-104	Gas Line Plan Sta. 24+731 TO 24+383
GS-105	Details and Sections

ATTACHMENTS

Attachment # 1	Contract Performance Appraisal	1
Attachment # 2	GO-CMO Pocket Safety Guide	94
Attachment # 3	GO CMO Corridor Construction Safety Management Program	188
Attachment # 4	Report on Geotechnical Investigation Carlingview Drive Grade Separation Structure, Sewer and Associated Works, August 26, 2011; Prepared by Thurber Engineering Ltd. for MRC	137
Attachment # 5	T.S. 1.00 – Construction Specification for Maintenance of Traffic	18
Attachment # 6	T.S. 3.50 Construction Specification for Concrete Curb and Concrete Curb and Gutter	9
Attachment # 7	T.S. 3.70 Construction Specification for Concrete Sidewalk and Concrete Raised Median	11
Attachment # 8	T.S. 5.00 Construction Specification for Sodding	7
Attachment # 9	T.S. 5.10 Construction Specification for Topsoil	5
Attachment # 10	T.S. 7.30 Procedure for Disinfecting Watermains	13
Attachment # 11	T.S. 13.10 Specification for Unshrinkable Fill	5
Attachment # 12	T.S. 310 Construction Specification for Hot Mixed, Hot Laid Asphaltic Concrete	28
Attachment # 13	T.S. 409 Construction Specification for Closed Circuit Television Inspection of Pipelines	2
Attachment # 14	T.S. 441 Construction Specification for Watermain Construction by Open Cut Method	2
Attachment # 15	T.S. 1003 Material Specification for Aggregate Hot Mixed, Hot Laid Asphaltic Concrete	3
Attachment # 16	T.S. 1150 Material Specification for Hot Mixed, Hot Laid Asphaltic Concrete	20
Attachment # 17	City of Toronto Construction Management Plan (CMP) Requirements	3
Attachment # 18	City of Toronto Urban Forestry Tree Protection Policy and Specifications for Construction Near Trees	12

INTRODUCTION

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

Attachment # 19	Requirements for Construction Work near Works Facilities and Structures Trunk Sewers and Watermains, City of Toronto, May 2004	6
Attachment # 20	T.S. 7.22 Watermain Replacement and Connection Procedure	10
Attachment # 21	T.S. 4.60 Construction Specification for Utility Cut Restoration	14
Attachment # 22	T.S. 408 Construction Specification for Adjusting or Rebuilding Manholes, Catch Basins, Ditch Inlets and Valve Chambers	1
Attachment # 23	T.S. 7.22 Construction Specification for Cathodic Protection of New Watermains	9
Attachment # 24	T.S. 7.40 Construction Specification for Watermain and Water Service Tracer Wire	5
Attachment # 25	T.S. 1350 Material Specification for Concrete – Materials and Production	20
Attachment # 26	T.S. 4.50 Construction Specification for Utility Adjustments	8
Attachment # 27	T.S. 3.30 Construction Specification for Hot Mix Asphalt Sidewalks, Boulevards and Driveways	3
Attachment # 28	T.S. 3.20 Construction Specification for Tack Coat	4
Attachment # 29	Requirements for Construction Work near Toronto Bridges, Sewers and Watermains	8
Attachment # 30	Specification for Television Inspection Main Sewer	2
Attachment # 31	Construction Sequencing and By-Pass Flow Plan for Sewer Work	2
Attachment # 32	Construction Sequencing and Watermain Shut Plan for Watermain Work	3
Attachment # 33	Metrolinx Safety Guidelines for Contractors, Consultants and Project Coordinators	75
Attachment # 34	T.S. 7.80 Material Specification for Large Diameter Watermains	25
Attachment # 35	T.S. 401 Construction Specification for Trenching, Backfilling and Compacting	12
Attachment # 36	TC_E_10 Standards Respecting Pipeline Crossings Under Railway	13
Attachment # 37	GO Transit Track Standards Precautionary Measures for Signal and Communications	3
Attachment # 38	GO Transit Track Standards - Excavation Limits adjacent to Railway	1

INTRODUCTION

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

Attachment # 39	Instructions to Excavators for the Protection of Underground S&C Cables	15
Attachment # 40	scp 801 - Safety Instructions for lp gas	6
Attachment # 41	scp 802 - Oil Burning Winter Switch Protection Systems	5
Attachment # 42	scp 803 -Minimum Side Clearances for Snow Melters and Snow Blowers	3
Attachment # 43	scp 804 – Leak Testing Snow Melter lp gas Piping Systems	10
Attachment # 44	scp 805 – Natural gas Winter Switch Protection Systems	4
Attachment # 45	scp 806 – Leak Testing Snow Melter Natural Gas Piping Systems	9
Attachment # 46	scp 807 – Fuel Oils Recommended for Snow Melter Service	2
Attachment # 47	scp 808 – Detection and Removal of Water	2
Attachment # 48	scp 809 – Working on Switch Heater Plenum Ducts	5
Attachment # 49	Railway Switch Heater Manual	81
Attachment # 50	Railway Switch Heater Spare Parts	7
Attachment # 51	Rail Corridor Infrastructure Handover Protocols	18
Attachment # 52	Track Worker Safety Instructions	51
Attachment # 53	GO Transit Track Standards	390
	Bidder Q and A Template	1
	Sample Letter of Credit	1
	Parental Guarantee	1
	Metrolinx Merx Portal	1
	Sample Reference Check Questionnaire	3

END OF SECTION

INTRODUCTION

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

1.0 General

- 1.1 Metrolinx is issuing this call for Tenders to retain the services of a Contractor to provide the goods and/or services described herein. Metrolinx intends to award a Contract through an open, fair and competitive process.
- 1.2 You are invited to send your Submission for **IT-2016-CKU-085** as more particularly described in this Tender Document as required by Metrolinx, which Work relates to **Kitchener Corridor, Weston Subdivision Construction of Natural Gas Line and Sewer Connection**.
- 1.3 The Work includes, but shall not be limited to:
 - 1.3.1 Reroute existing watermain and remove and replace storm sewer connection at 441 Carlingview Drive, Etobicoke.
 - 1.3.2 Install the new natural gas line inclusive of connection and modifying existing snow clearing devices to accept natural gas within the railway corridor at Scarboro Street, Mississauga.

DEFINITIONS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 4

- 1.0 In this Tender Document,
- 1.1 **"Addenda"** is the formal release of additions, deletions, revisions, clarifications to this Tender Document that form a part of the Contract.
- 1.2 **"Bidder"** means the legal entity that sends a Submission in response to this Tender Document and who if selected for award shall execute the Contract with Metrolinx for provision of the Work.
- 1.3 **"CCDC"** means Canadian Construction Documents Committee
- 1.4 **"Closing"** means, the deadline for Metrolinx to receive Submissions as specified in Section 2.4 of Instructions to Bidders.
- 1.5 **"Conflict of Interest"** means:
- 1.5.1 in relation to this Tender Process, the Bidder has an unfair advantage or engages in conduct, directly or indirectly, that may give it an unfair advantage, including but not limited to (i) having, or having access to, confidential information of Metrolinx in the preparation of its Submission that is not available to other Bidders, (ii) communicating with any person with a view to influencing preferred treatment in this Tender Process (including but not limited to the lobbying of decision makers involved in this Tender Process), or (iii) engaging in conduct that compromises, or could be seen to compromise, the integrity of this Tender Process; or
- 1.5.2 in relation to the performance of its contractual obligations contemplated in the Contract that is the subject of this procurement, the Bidder's other commitments, relationships or financial interests (i) could, or could be seen to, exercise an improper influence over the objective, unbiased and impartial exercise of its independent judgement, or (ii) could, or could be seen to, compromise, impair or be incompatible with the effective performance of its contractual obligations.
- 1.6 **"Consultant"** is Hatch Corporation and shall have the same meaning ascribed in Supplementary Definitions of the Contract.
- 1.7 **"Contract"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.8 **"Contract Documents"** shall have the same meaning ascribed in Definitions of the Contract.

DEFINITIONS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 2 OF 4

-
- 1.9 **"Contractor"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.10 **"Drawings"** shall have the meaning ascribed in Definitions of the Contract.
- 1.11 **"EBS"** means Electronic Bid Submission.
- 1.12 **"E-Bid Authorized Signer"** is the designated individual in the Bidder's organization who has the authority to bind the Bidder to each and every term, condition, article and obligation of the Tender Document and any resultant Contract.
- 1.13 **"E-Bid Confirmation Number"** is the receipt received by a Bidder from MERX indicating that the Submission was uploaded successfully.
- 1.14 **"FIPPA"** shall have the same meaning ascribed in Section 27.0 of Instructions to Bidders.
- 1.15 **"Joint Venture"** means a business arrangement of two or more parties proposed for this Tender Process further described in Section 22.0 of Instructions to Bidders.
- 1.16 **"Metrolinx"** is a provincial crown agency continued under the *Metrolinx Act*, S.O. 2006, Chapter 16, and its successors and assigns and shall have the same meaning ascribed to "Owner" in Definitions of the Contract.
- 1.17 **"Option"** means a component of the Work that is to be exercised at the sole discretion of Metrolinx.
- 1.18 **"Owner"** shall have the same meaning ascribed in the Definition of the Contract and is also known as Metrolinx.
- 1.19 **"PDF"** means Portable Document Format
- 1.20 **"Participant in Charge"** shall have the same meaning ascribed in Section 22.3 of Instructions to Bidders.
- 1.21 **"Place of the Work"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.22 **"Procurement Office"** means the Metrolinx Procurement Services office located at 97 Front St. W., Toronto, Ontario, Canada M5J 1E6.
- 1.23 **"Procurement Representative"** means the following individual in the Procurement Services Department:

DEFINITIONS

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 3 OF 4

Diana Serrano, Procurement Officer, Construction Division	
Telephone number	(416) 202-5575
Email	Diana.Serrano@metrolinx.com

- 1.24 **"Project"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.25 **"Submission"** means all documentation and other materials and information submitted (sent) by the Bidder in response to this Tender Document or in respect of this Tender Process.
- 1.26 **"Subcontractor"** shall have the same meaning ascribed in Definition of the Contract.
- 1.27 **"Substantial Performance of the Work"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.28 **"Supplier"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.29 **"Specifications"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.30 **"Tender Document"** means this Tender document comprised of sections listed in the List of Contents, issued by Metrolinx for the Work to be provided, and any Addenda thereto.
- 1.31 **"Tender Document Forms"** means any sections of this Tender Document which require completion and must be included with the Submission.
- 1.32 **"Tender Process"** means the Tender procurement process set out in the Tender Document herein.
- 1.33 **"Total Contract Price"** shall have the same meaning ascribed to "Contract Price" in Definitions of the Contract.
- 1.34 **"Total Performance of the Work"** shall have the same meaning ascribed in Supplementary Definitions of the Contract.
- 1.35 **"Work"** means Reroute existing watermain and remove and replace storm sewer connection at 441 Carlingview Drive, Etobicoke and install the new natural gas line inclusive of connection and modifying existing snow clearing devices to accept natural gas within the railway corridor at Scarboro street, Mississauga.

DEFINITIONS

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

PAGE 4 OF 4

- 1.36 **"Working Day"** shall have the same meaning ascribed in Section 01000-General Instructions under General Requirements.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 22

1.0 General

1.1 ***NOTE: ELECTRONIC BID SUBMISSION

Your Submission for this opportunity must be sent to Metrolinx through the use of **MERX EBS**. Bidders shall be solely responsible for the delivery of their Submission using MERX EBS by the Closing, in accordance with these Instructions to Bidders.

1.2 Your Submission is to be firm and irrevocable for hundred twenty 120 calendar days from the Closing.

1.3 Your Submission will be evaluated in accordance with Section 20 – Submission Evaluation of Instructions to Bidders.

1.4 Tender Timetable

Milestone	Date
Issuance of Tender Documents	April 12, 2017
Deadline to Submit Request for Alternate Products and Materials	April 21, 2017
Deadline to Submit Questions	May 1, 2017 @3:00 p.m. Toronto time
Last day for issuance of Addenda	May 4, 2017
Closing	May 11, 2017 @ 3:00 p.m. Toronto time
Commencement Date of Work	July 07, 2017

Metrolinx may, without liability, cost or penalty and in its sole discretion amend the Tender Timetable.

2.0 Tender Enquiries

2.1 All written enquiries and other communications prior to full Contract execution are to be directed solely to the Procurement Representative.

2.2 Information received from any other sources shall be considered informal and Metrolinx shall not be bound by any information given in such a manner.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 2 OF 22

- 2.3 Any questions concerning the Tender Documents, the contents herein, or the Work contemplated herein are to be directed, in writing, to the Procurement Representative prior to the deadline for submitting questions. No questions or requests for clarifications, changes or amendments of Tender Documents shall be entertained after this time regardless of the reason.
- 2.4 All questions/requests for clarification related to the Tender Documents are to be submitted via e-mail to the attention of the Procurement Representative as specified in Section 1.23 of Definitions using the question and answer template which is a Word file attached separately as:
- 2.4.1 Q and A Template_TENDER-IT-2016-CKU-085.xlsx
- Indicate the document section related to each question being submitted as well as page, drawing, section number and details of the specific question/clarification requested. For each set of questions submitted by the Bidder, a new copy of the above referenced Q and A Template should be submitted.
- 2.5 When necessary, revisions to, or clarifications of the Tender Documents will be incorporated into a written addendum issued by the Procurement Representative identified herein. Information regarding the Tender Documents or the Work, whether provided by the Procurement Representative identified herein, or from any other source, whether verbally or in writing, shall be considered informal and Metrolinx shall not be bound by, or liable for, any such information unless incorporated into a written addendum.

3.0 Mandatory Site / Information Meeting

- 3.1 Not Applicable.

4.0 Addenda / Changes to the Tender Documents

- 4.1 In the event that Metrolinx determines in its sole discretion, that clarifications of, or revisions to the Tender Documents are required, all Bidders who received copies of the Tender Documents shall be advised of such clarifications or revisions during the tendering period by written Addenda. Such Addenda shall become part of the Tender Documents and the contents thereof shall be allowed for in the prices bid for the Work.
- 4.2 It is the Bidder's responsibility to ensure that they have received copies of all Addenda, and to ensure that the Addenda have been considered in their Submission. Addenda, if applicable, will be issued through MERX. Information concerning the number of Addenda issued and the date of issue of the most

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 3 OF 22

recent Addendum can be found at www.merx.com for this Tender Process. Bidders are urged to select automatic notification of Addenda issuance when registering on MERX.

- 4.3 The Bidder, when ascertaining if copies of all Addenda issued have been received, shall be responsible for allowing sufficient time prior to the Closing to receive any missing Addenda and to review and allow for the contents thereof in the Submission.
- 4.4 The Bidder shall remit the Submission using the most current revised Tender Document Forms as issued via Addenda. Failure to use the most current pages of the Tender Document Forms may result in the Bidder's Submission being found non-responsive resulting in disqualification from the Tender Process.

5.0 Tender Submission

- 5.1 Bidders sending a Submission to Metrolinx shall exercise extreme care when completing and submitting all Tender Document Forms.
- 5.2 Bidders shall examine carefully the whole of the Tender Documents and any data referred to therein. They shall make the necessary investigations to inform themselves thoroughly as to the character and magnitude of the Work.
- 5.3 The Bidder shall not claim at any time after the Closing and/or after notification of award of the Contract that there was any misunderstanding or uncertainty in regard to the Tender Documents or any of the contents therein. No plea of ignorance of conditions which exist, or any conditions or difficulties that may be encountered, shall be accepted as a reason for failure to complete the Contract or as a basis for claims for additional compensation or extension of time.
- 5.4 Your Submission should be completed fully in a clear and comprehensible manner.
- 5.5 Submissions shall be sent electronically through MERX EBS only. Submissions sent in any other manner shall be deemed non-responsive and automatically disqualified.
- 5.6 The Submission shall be submitted on the original Tender Document Forms as issued by Metrolinx through the MERX website and except for designated sections where the Bidder is to enter information, the Tender Document and Tender Document Forms shall not be altered in any way including, but not limited to, write-ins, strike-outs of the pre-printed provisions or any other conditional and/or qualifying statements.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 4 OF 22

-
- 5.7 Any Submission which contains such conditional and/or qualifying statements shall be deemed non-compliant and disqualified unless such conditional and/or qualifying statements are withdrawn in writing by the Bidder, upon request by Metrolinx.
- 5.8 If during the preparation of their Submission, the Bidder desires to make a change which requires correction, alteration or erasure to any information previously entered in a designated section of the Submission by the Bidder, documents that have been uploaded to MERX using EBS can be added, removed and/or re-submitted as often as required at any time, prior to Closing.
- 5.9 Any Submission documents that are attempted to be uploaded via MERX EBS after the Closing has occurred (as confirmed by the MERX Audit Report) shall be automatically rejected by Metrolinx, regardless of the reason for lateness.
- 5.10 All prices shall be firm and quoted in Canadian funds. The prices quoted in the Submission shall represent full payment for all Work necessary for the proper completion of the Contract.
- 5.11 Submissions shall be sent on MERX by the Bidder's E-bid Authorized Signer.
- 5.11.1 NOTE: The Bidder can have only one (1) E-Bid Authorized Signer which is to be used for any EBS submission process.
- 5.11.2 The E-Bid Authorized Signer does not have to be either the person placing the order for the Tender Document on MERX, nor do they have to be subscribed to MERX. Once an E-Bid Authorized Signer has been setup, a letter from MERX will be sent via email to the E-Bid Authorized Signer.
- 5.11.3 For the purposes of a Joint Venture, the E-Bid Authorized Signer of the Participant-in-Charge shall emit the Submission.
- 5.12 Submissions must be sent electronically through the MERX EBS system. For assistance in using MERX EBS, please watch the online Electronic Bid Submission tutorial at: <http://www.youtube.com/watch?v=To0fqSccw3M> . Alternatively, you can contact MERX directly at 1-800-964-MERX (**6379**) or visit the MERX website at www.merx.com for further instruction or assistance regarding EBS and/or E-Bid Authorized Signer registrations.
- 5.12.1 Please review the E-bid checklist on MERX as this will provide some general assistance regarding uploading of documents.
- 5.12.2 It is the Bidder's sole responsibility to ensure that all required information for their Submission is uploaded to MERX via EBS. Failure of the Bidder to include all required items may result in the Bidder's Submission being deemed non-responsive and disqualified.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 5 OF 22

- 5.12.3 The largest individual file size that can be submitted through MERX is 100MB, although there is no limit to the number of files that can be submitted. If any individual file size is over 100MB, the Bidder's Submission can be split into multiple parts, and submitted as clearly labelled, multiple files once the Submission has been broken up into files of 100MB or smaller.
- 5.12.4 MERX places no restriction on file format and does not convert or zip files during the upload process.
- 5.12.5 In order to complete the Submission, the on-line authorization of the Bidder's E-Bid Authorized Signer will be required. It is the Bidder's sole responsibility to have an E-Bid Authorized Signer PIN number issued from Merx at least one (1) day prior to Closing. Visit tenders.merx.com/RequestEBSPin to request a PIN for the Bidder's E-bid Submission Authorized Signer.
- 5.13 Information contained in the most recent Submission sent via MERX EBS and received prior to the Closing will take precedence over the information contained in previously received Submissions from the Bidder.
- 5.14 The Bidder may withdraw a Submission at any time prior to the Closing specified by Metrolinx by logging into MERX on the E-bid Submission screen locating the opportunity and clicking 'Delete' for the opportunity in question. Once deleted, an E-bid is given the status 'Not Submitted'
- 5.14.1 Submission Deadline
- (a) Submissions must be fully uploaded via MERX EBS by the Closing . Any Submission or portions thereof received after the Closing (as confirmed by MERX Audit Report) shall be deemed non-responsive and the entire Submission shall be disqualified regardless of the reason for lateness. The Bidder shall send the Submission with sufficient time to ensure its arrival before the Closing.
 - (i) It is recommended by MERX to allow at least four (4) hours to send the Submission via EBS, which shall provide the Bidder with the opportunity to upload all documents and resolve any potential issues that may arise. If you have many large documents or you are not running on high speed internet access you may want to give yourself additional time. If the problem persists, call MERX directly at 1-800-964-MERX (6379). Metrolinx staff will be unable to assist with any EBS related issues.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 6 OF 22

- (ii) If the Bidder attempts to send their Submission, or portions thereof, after the Closing, such documents shall not be accepted by the MERX system.
- (iii) In the event that the MERX system allows late Submissions, this will not supersede any stipulations herein regarding late submissions.
- (b) Upon successful completion of the EBS process , the Bidder shall be provided with an E-bid Confirmation Number from MERX. All reports are kept on the Bidder's MERX account for seven (7) years after the Closing.
- (c) Notwithstanding the above, Metrolinx reserves the right to postpone the Closing at which time all potential Bidders shall be advised of the new Closing by way of Addenda.
- (d) After the Closing has occurred, all Submission received will be opened by Metrolinx staff. There shall be no public access to this opening. Results of the Tender opening will be made public within approximately 24-hours on the MERX website at www.merx.com/metrolinx (search "Metrolinx" or the Tender Number and select "Bid Results").
- (e) Upon execution of the final Contract, all Bidders that have sent a Submission shall be notified in writing of the results of the award to the successful Bidder. Results of the award to the successful Bidder shall also be posted on the Metrolinx website at www.metrolinx.com/tenders under "Bid Award Results" (Tender) and/or the MERX website at www.merx.com/metrolinx (search "Metrolinx" or the Tender Number and select "Awards").
- (f) All documentation received by Metrolinx with regards to this Tender Process will be retained by Metrolinx and will not be returned to the Bidder.

6.0 Clarification of Submissions

- 6.1 Metrolinx reserves the right, within ninety (90) calendar days following the Closing, to request that any Bidder clarify its Submission and such Bidders shall submit responses to such request within five (5) Working Days following receipt of such request or within such shorter time as Metrolinx may require. Metrolinx may, in its sole discretion, choose to meet with some or all of the Bidders to discuss aspects to their Submission. Metrolinx may require Bidders to submit information clarifying any matters contained in their Submission or Metrolinx may

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 7 OF 22

- prepare a written interpretation of any aspect of a Submission and seek the respective Bidder's acknowledgement of that interpretation.
- 6.2 Such information accepted by Metrolinx, for purposes of clarification, and written interpretations which have been acknowledged by the relevant Bidder shall be considered to form part of the Submission of those Bidders.
- 6.3 After the Closing, only information specifically requested by Metrolinx for purposes of clarification shall be considered as additions to a Bidders Submission.
- 6.4 Metrolinx is not obliged to seek clarification of any aspect of a Submission.

7.0 Bidder Qualifications

- 7.1 Only qualified Bidders will be considered for award of this Contract. In order to be considered qualified, the Bidder shall demonstrate to the satisfaction of Metrolinx it has:
- 7.1.1 satisfactorily completed in the sole opinion of Metrolinx, a contract for work similar in scope and nature as "the Work of this Contract"; and
- 7.1.2 the physical and financial resources to sustain and complete the Work.
- 7.2 With respect to the experience requirements set out in Subsections 7.1.1 and 7.1.2 above, each Bidder is solely responsible to provide, in Appendix "E" of the Form of Tender:
- 7.2.1 a detailed description of the completed relevant work, starting with the most recent, that the Bidder has performed and that the Bidder is representing to Metrolinx it meets the requirements of Subsections 7.1.1 and 7.1.2 herein; and
- 7.2.2 the names and coordinates of an owner's representative and a consultant's representative (for each project) that are prepared to speak to Metrolinx with respect to the Bidder's performance on each project described in Appendix "C".
- 7.3 In respect of the owner and consultant representatives provided by Bidders in Appendix "C", Metrolinx may, in its sole discretion, decline to contact the owner and/or consultant representatives provided by any Bidder and rely on the detailed descriptions provided by the Bidder in Appendix "C".
- 7.4 The Bidder is permitted to list work completed under a Metrolinx contract to meet the requirements of Subsections 7.1.1 and 7.1.2 herein and, if it does so, Metrolinx will contact the owner and consultant representatives named in

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 8 OF 22

accordance with Subsection 7.3 herein in the same manner as it would for projects listed in Appendix "C" that are completed or carried out for a third party.

- 7.5 In its determination of whether a Bidder meets the requirements of Section 7.1 herein, Metrolinx may, in its sole discretion:
- 7.5.1 take into account the experience of Metrolinx itself in dealing with the Bidder in circumstances where the Bidder has carried out (or is carrying out) a project for Metrolinx (whether or not the Bidder has listed such a project in Appendix "C"); and
 - 7.5.2 make general inquiries of third parties with respect to the qualifications of a Bidder and take the results of these general inquiries into account (whether or not the Bidder has listed the third party or the applicable project in Appendix "C").
- 7.6 Before any Submission is accepted, any Bidder may be required to demonstrate to the satisfaction of Metrolinx, that it is capable of performing the Work. Metrolinx reserves the right to inspect the equipment to be used, and/or the facilities where the proposed Work is to be carried, of any and all Bidders and nominated Subcontractors, and make any and all further investigations it deems, in its sole opinion, necessary, prior to the acceptance of any Submission, to determine if a Bidder is qualified to perform the Work.
- 7.7 In the event the Bidder does not demonstrate to the satisfaction of Metrolinx that it possesses the necessary qualifications and experience to be considered for award of the Contract its Submission shall be found non-responsive and disqualified.

8.0 Insurance

- 8.1 The Bidder shall, in accordance with the Supplementary General Conditions of the Contract, provide a valid certificate of insurance in the types and amounts specified, within five (5) Business Days of notification of acceptance of its Submission by Metrolinx. Failure by the successful Bidder to comply with this requirement shall result in acceptance of the Bidder's Submission to be declared void and forfeiture of the Bidder's Bid Deposit to Metrolinx.

9.0 Workplace Safety and Insurance Clearance Certificate

- 9.1 The Bidder shall send as part of its Submission a valid Workplace Safety and Insurance Clearance Certificate for the premium rate class, subclass or group as appropriate for the Work of this Contract, as issued by the Workplace Safety and

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 9 OF 22

Insurance Board. Failure to comply with this requirement may cause the Submission to be deemed non-responsive and disqualified.

- 9.2 In addition, the Bidder to whom this Contract is awarded shall furnish a valid Workplace Safety and Insurance Clearance Certificate for the premium rate class, subclass or group as appropriate for the Work of this Contract, as issued by the Workplace Safety and Insurance Board, within five (5) business days of notification of acceptance of its Submission by Metrolinx. Failure by the Bidder to comply with this requirement shall result in the Contract award being declared VOID and forfeiture of the Bidder's Bid Deposit to Metrolinx.

10.0 Parent Company Indemnity

- 10.1 Solely upon Metrolinx request, within five (5) Business Days of notification of acceptance of its Submission by Metrolinx, the Bidder if deemed to be a subsidiary company shall be required to submit a 'Guarantee' from its parent company, included as "Parental Guarantee" and provided under Attachments, or in a form satisfactory to Metrolinx and indicating that the Parent company agrees to provide all the necessary financial and technical support for the proper completion of the said Contract and shall guarantee the performance of the said Contract in accordance with the terms and conditions, including timely completion thereof, and agrees to guarantee the Work for the warranty period(s) stipulated therein.
- 10.2 Failure by the successful Bidder to comply with this requirement shall result in acceptance of the Bidder's Submission to be declared void and forfeiture of the Bidder's Bid Deposit to Metrolinx.

11.0 Bid Deposit

- 11.1 Each Submission shall include a PDF copy of a bid bond from a recognized Canadian Surety or a PDF copy of either a certified cheque, bank draft or letter of credit drawn upon a recognized Canadian Financial institution, payable to "Metrolinx" in the amount of **\$100,000.00** (the "Bid Deposit"). The bid bond shall be duly executed and sealed by the Surety and executed by the Bidder. Certified Cheques, Bank Drafts or Letters of Credit shall be duly executed and sealed by the financial institution. All signatures and seals shall be originals.
- 11.2 After the Closing, Metrolinx shall notify the three (3) lowest Bidders in writing requesting that the original Bid Deposits be submitted within seventy-two (72) hours or sooner, as required by Metrolinx, to the Procurement Representative. Failure by a notified Bidder to submit their original Bid Deposit within the requested deadline, shall result in the Bidder's Submission to be found non-

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 10 OF 22

responsive and disqualified and shall also result in the Bidder's bidding rights being suspended by Metrolinx for a period of twelve (12) months

- 11.3 Bid bonds and letters of credit shall include the Contract name and number.
- 11.4 Failure by the Bidder to submit the required PDF copy of the Bid Deposit with their Submission shall cause the Bidder's Submission to be found non-responsive and disqualified.
- 11.5 Certified cheques and bank drafts shall not be deposited and interest shall therefore not be paid.
- 11.6 The original Bid Deposit will be retained until all Submissions received have been reviewed and evaluated. The Bid Deposits, with the exception of the two (2) lowest, responsive Submissions received, may be returned to unsuccessful Bidders, upon request, ten (10) Working Days after the Closing. Otherwise the Bid Deposits shall be returned after award of Contract.
- 11.7 The Bidder acknowledges and agrees that its Bid Deposit will be forfeited to Metrolinx as liquidated damages on the occurrence of any of the following events:
 - 11.7.1 Withdrawal of the Submission by the Bidder after the Closing; or
 - 11.7.2 Failure by the Bidder to execute the Contract; or
 - 11.7.3 Failure by the Bidder to provide any of the documents required by the Tender Documents as a condition of entering into the Contract, including, but not necessarily limited to, the Contract Security, Insurance Certificates or Workplace Safety and Insurance Clearance Certificate within the times specified in the Tender Documents.

12.0 Contract Security

- 12.1 The Bidder shall send as part of its Submission a PDF copy of a completed Agreement to Bond from a recognized Canadian Surety, for a Performance Bond and a Labour and Materials Payment Bond in favour of "Metrolinx" each equal to fifty percent (50%) of the Contract Price. The Agreement to Bond shall be duly executed and sealed by the Surety and the Bidder (if required by the form) and include the Contract name and number. All signatures and seals on the original Agreement to Bond shall be originals.
- 12.2 In lieu of a PDF copy of an Agreement to Bond the Bidder may send with its Submission a PDF copy of one of the following specified alternative forms of

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 11 OF 22

Contract Security from a recognized Canadian financial institution in the amount of twenty-five percent (25%) of the Contract Price.

12.2.1 Letter of Credit

- (a) A PDF copy of a written surety statement from a recognized Canadian financial institution, stating that a Letter of Credit shall be available upon award of Contract, must be submitted with the Submission. The surety statement shall be duly executed by the financial institution and sealed if required.
- (b) The Letter of Credit to be provided by the Bidder to Metrolinx upon award of Contract shall expressly state that it may be drawn upon by Metrolinx on the delivery of a certificate from the President and CEO of Metrolinx confirming that the Bidder has defaulted in the performance of its obligations under the Contract. No other documentary evidence is required to be provided by Metrolinx.
- (c) The Letter of Credit must indicate that "Metrolinx" is the named beneficiary and include the Contract name and number.

12.2.2 Certified Cheque/Bank Draft

- (a) If a Certified Cheque or Bank Draft is used in lieu of a Performance Bond and Labour and Material Bond, it must be submitted as a PDF copy with the Submission.
- (b) Certified Cheques and Bank Drafts shall be made payable to "Metrolinx" and shall be duly sealed and executed by the financial institution

- 12.3 All original specified alternative forms of Contract Security submitted shall have original signatures and original seals where required.
- 12.4 Failure by the Bidder to send a PDF copy of the required Agreement to Bond, or specified alternative, with its Submission shall cause the Bidder's Submission to be found non-responsive and disqualified.
- 12.5 After the Closing, Metrolinx shall notify the three (3) lowest Bidders in writing requesting that their original Contract Security in the form of an Agreement to Bond or one of the specified alternatives be submitted within seventy-two (72) hours or sooner, as determined by Metrolinx, to the Procurement Representative. Failure by a notified Bidders to submit their original Contract Security within the requested deadline shall result in the Bidder's Submission to be found non-

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 12 OF 22

responsive and disqualified and shall also result in the Bidder's bidding rights being suspended by Metrolinx for a period of twelve (12) months.

- 12.6 The recommended Bidder shall deliver the Performance Bond and Labour and Materials Payment Bond, or specified alternative, to Metrolinx within five (5) business days of notification of acceptance of its Submission by Metrolinx. The Performance Bond and the Labour and Material Bond shall include the Contract name and number. Failure of the Bidder to fulfill this requirement shall result in the award of the Contract being cancelled and forfeiture of the Bidder's Bid Deposit.

13.0 Alternate Products and Materials

- 13.1 Bidders wishing to propose alternate products or materials, other than those specified in the Tender Documents, for use in the Work shall, no later than the date specified in Section 1.2, Tender Timetable, of Instructions to Bidders, submit a request in writing to the Procurement Representative seeking approval for the proposed alternate. The request must include supporting documentation to establish the proposed alternate's equivalence to the product or material specified.
- 13.2 Metrolinx shall, within five (5) business days or receipt of such requests, respond as follows:
- 13.2.1 Should Metrolinx, in its sole discretion, approve the proposed alternate, it shall issue an addendum, in accordance with Section 4 of these Instructions to Bidders, identifying the alternate and stating it is approved for use as part of the Work; or
- 13.2.2 Should Metrolinx, in its sole discretion, not approve the proposed alternate, it shall only inform the Bidder who proposed the alternate of its decision.
- 13.3 Metrolinx is under no obligation to accept or reject any proposed alternate. Metrolinx shall accept or reject any proposed alternate at its sole discretion. Metrolinx is under no obligation to disclose the reason, or reasons, to any Bidder for the acceptance or rejection of any proposed alternate.

14.0 Mandatory Requirements

- 14.1 Bidders must meet all mandatory requirements in order for their Submission to be considered further. Failure of a Bidder to meet all of the mandatory requirements listed below shall result in the Bidder's Submission to be deemed non-compliant and shall not be considered further.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 13 OF 22

- 14.2 The mandatory requirements for this Tender Document are as follows:
- 14.2.1 The Submission shall be submitted by the Bidder's E-Bid Authorized Signer. For the purposes of a Joint Venture, the E-Bid Authorized Signer of the Participant-in-Charge shall submit the Submission.
 - 14.2.2 Pricing information must be completed and submitted with the Submission using Appendix "B" – Contract Prices.
 - 14.2.3 The Bidder shall declare any conflicts of interest in Section **Error! Reference source not found.** of "Appendix "E" - Conflict of Interest". If Section **Error! Reference source not found.** is left blank or is not returned with the Submission, the provisions of Section **Error! Reference source not found.** of "Appendix "E - Conflict of Interest" shall apply.
 - 14.2.4 Bidders shall submit the required PDF copy of the Bid Deposit , as per Section 11.0 of Instructions to Bidders, with the Submission.
 - 14.2.5 Bidders shall submit a PDF copy of the required Agreement to Bond, or specified alternative, as per Section 12.0 of Instructions to Bidders, with the Submission.

15.0 Rights of Metrolinx

- 15.1 Metrolinx has the right, in its sole discretion:
- 15.1.1 to cancel this call for Tenders and any acceptance of a Submission for any reason and at any time before the Agreement Between Owner and Contractor has been executed and delivered by both parties, without any obligation whatsoever to a Bidder, except the obligation to return the Bid Deposit;
 - 15.1.2 to reject any or all Submissions. The Submission with the lowest price will not necessarily be accepted. Metrolinx's selection shall be based on which Bidder has provided a Submission which Metrolinx determines, in its sole discretion, to provide the greatest value based on quality, service and price and determined on the evaluation criteria contained in this Tender Document;
 - 15.1.3 to disqualify any Submission which contains misrepresentations or any other inaccurate or misleading information;
 - 15.1.4 to waive any requirement of the Tender Documents or request amendment where, in the sole opinion of Metrolinx, there is an

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 14 OF 22

irregularity or omission in the information provided that is not material to the Submission unless a specific consequence has been identified herein for the commission of such an irregularity or omission;

15.1.5 to waive the requirement to check references;

15.1.6 to not respond to a Bidder's questions;

15.1.7 to use its own experiences, and the experiences of any other third party, with the Bidder in previous contracts in order to evaluate the Bidder's performance. Specifically to,

- (a) take into account the experience of Metrolinx itself in dealing with the Bidder in circumstances where the Bidder has carried out (or is carrying out) a project for Metrolinx (whether or not the Bidder has listed such project on Appendix "C" of Form of Tender; and
- (b) make general inquiries of third parties with respect to the qualifications of a Bidder and take the results of these general inquiries into account (whether or not the Bidder has listed the third party or the applicable project in Appendix "C" of Form of Tender.

15.1.8 to award or not award based on submitted references and/or references independently obtained by Metrolinx;

15.1.9 to award or not award based on the Bidder's experiences with Metrolinx or other departments or agencies within the Ontario government, if the Bidder:

- (a) was previously given a "Notification of Award" of contract by a department or agency within the Ontario government and defaulted in proceeding with the work of the contract;
- (b) failed or refused to comply with any applicable federal, provincial or municipal law governing a bid or a prior contract with a department or agency within the Ontario government;
- (c) had a previous contract with a department or agency within the Ontario government that was terminated for default in the past year; or
- (d) is an affiliate of or successor to any corporation described in Sections 15.1.9(a) through (c) above, including any firm that is controlled within the meaning of the Ontario Business Corporations Act by the same person or group of persons who so

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 15 OF 22

-
- controlled any corporation described in Sections 15.1.9(a) through (c) above.
- 15.1.10 to request a listing of all projects, regardless of scope, complexity or estimated value, completed for or terminated by Metrolinx within the past three (3) years or currently active;
- 15.1.11 to distribute via Addenda, copies of any Bidder's questions received and responses provided by Metrolinx, to all Bidders who received the Tender Documents;
- 15.1.12 to postpone the Closing, at which time all Bidders who received Tender Documents shall be advised of the new Closing via written Addenda;
- 15.1.13 within ninety (90) days following the Closing, to request that any Bidder clarify its Submission and such Bidders shall submit responses to such request within five (5) Working Days following receipt of such request or within such shorter time as Metrolinx may require;
- 15.1.14 to prepare a written interpretation of any aspect of a Submission and require the relevant Bidder's acknowledgement of the accuracy of that interpretation;
- 15.1.15 to request that a Bidder voluntarily withdraw its Submission without penalty where in the opinion of Metrolinx the Submission is substantially below internal budget estimates and therefore the Work would not be satisfactorily completed;
- 15.1.16 to correct arithmetical errors in any or all Submissions where such errors affect the Contract Price. Arithmetical corrections will only be made based upon the unit prices submitted by the Bidder. Corrections to extensions, sums, differences or other arithmetical operations based on the unit prices submitted will be identified on the Tender Document by Metrolinx and acknowledged in each instance by the initials of the Bidder's and Metrolinx's authorized signatories. Such corrections will become part of the Bidder's Submission. Failure of the Bidder to acknowledge such corrections will result in its Submission being deemed non-responsive and disqualified.
- 15.1.17 to, upon failure of the Bidder whose Submission was accepted to fulfil the conditions of Section 16.2 herein, cancel award of Contract and consistent with industry practice award to another qualified Bidder.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 16 OF 22

16.0 Contract To Be Executed

- 16.1 Metrolinx shall notify the Bidder in writing of acceptance of its Submission by Metrolinx. Metrolinx will prepare the Form of Agreement and bind it into the Contract Documents. Three (3) sets of Contract Documents will be forwarded to the Bidder for review and execution.
- 16.2 The Form of Agreement shall be executed by the Bidder and delivered to Metrolinx within five (5) business days of notification to the Bidder that Metrolinx has accepted its Submission. Failure by the Bidder to execute and deliver the Form of Agreement and Contract Documents with the required Insurance Certificates and Workplace Safety and Insurance Clearance Certificate and the Performance and Labour and Materials Payment Bonds, or specified alternatives, shall result in the cancellation of the Contract award and forfeiture of the Bidder's Bid Deposit.
- 16.3 Upon failure of the Bidder, whose Submission was accepted, to fulfil the conditions of Section 16.2 herein, Metrolinx may, at its sole discretion, cancel award the Contract. Consistent with industry practice, Metrolinx may notify another Bidder who was determined to be qualified in accordance with the evaluation criteria stated herein and who submitted a responsive Submission that its Submission has been accepted and, subsequent to the fulfillment of the conditions of Section 16.2 herein, that Bidder shall be deemed to be the successful Bidder and the Bidder to whom the Contract is awarded.
- 16.4 There is no binding contract for the supply of the Work unless and until Metrolinx and the Bidder whose Submission has been accepted have executed the written agreements contemplated in the Tender Document.
- 16.5 The Bidder shall not start the Work before the Contract Documents have been executed by the Bidder and Metrolinx and all documents required by the Tender Document, as a condition of award of the Contract, have been delivered to Metrolinx.

17.0 Commencement and Completion

- 17.1 The dates for commencement and completion of the Work are set out in the Form of Agreement.

18.0 Subcontractors and Suppliers

- 18.1 The successful Bidder shall complete and submit a list of Subcontractors and Suppliers five (5) Working Days after execution of the Contract, in accordance with the requirements of Section 01000 – General Instructions.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 17 OF 22

- 18.2 Bidders shall be responsible for the distribution of all the Instruments of Contract and Addenda thereto to all Subcontractors or Suppliers.
- 18.3 Metrolinx, its Consultant, or their representatives shall have no obligation whatsoever to supply any Subcontractor or Supplier with all or part of the Contract Documents and Addenda thereto, and they shall not be liable for any damages suffered by any Bidder, Subcontractor or Supplier who does not receive or review the Contract Documents or Addenda. No claims for payment or for a change order will be entertained because of the failure of any Subcontractor or Supplier to receive or review the Contract Documents or Addenda which have been supplied to the Bidders up to the Closing.

19.0 Allowances

- 19.1 The Contract Price bid must include any and all Cash and/or Contingency Allowances as stated in Appendix "B" of Form of Tender.

20.0 Submission Evaluation

- 20.1 Subject always to the "Rights of Metrolinx" set out herein and without creating any obligations whatsoever to any Bidder, Metrolinx advises that it shall evaluate Submissions using the following criteria:
- 20.1.1 Contract Price;
 - 20.1.2 Bidder's Qualifications;
 - 20.1.3 Proper Completion of Tender Documents and Appendices;
 - 20.1.4 Compliance to Tender Document Requirements;
 - 20.1.5 Submission of all Mandatory Requirements; and
 - 20.1.6 Attendance at Mandatory Site Visit, if any.
- 20.2 Metrolinx's selection of the successful Submission will be based on which Bidder has provided a Submission which Metrolinx determines in its sole discretion, to be most beneficial to Metrolinx.

21.0 Conflict of Interest

- 21.1 For the purposes of this section, "Conflict of Interest" shall have the meaning ascribed to it in Appendix "E" of Form of Tender.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 18 OF 22

-
- 21.2 Each Bidder shall disclose to Metrolinx any actual or potential Conflict of Interest that may be relevant to this Tender Process and provide a declaration, in the Form of Tender that, except as disclosed, the Bidder is free of any actual or potential Conflict of Interest. Conflicts of Interest arise when the Bidder is in a position that could affect the integrity of this Tender Process or the performance of the Work. Examples of Conflict of Interest include but are not limited to:
- 21.2.1 any director, officer, or employee or advisor of Metrolinx has any connection or relationship with, or any pecuniary interest in the Bidder or any Subcontractor thereof;
 - 21.2.2 the Bidder or any Subcontractor thereof is in possession of confidential information relating to the Work; and
 - 21.2.3 any director, officer or employee or advisor of Metrolinx who has knowledge of the Work has assisted the Bidder in the preparation of its Submission.
- 21.3 The Conflict of Interest declaration included in the Form of Tender shall be completed and provided with the Submission.
- 21.4 If, at the determination of Metrolinx in its sole discretion, a Bidder is found to be in a Conflict of Interest that cannot be resolved or the Bidder fails to disclose any actual or potential Conflict of Interest, Metrolinx may, at its sole discretion, disqualify the Bidder from the Tender Process or terminate any agreement entered into with the Bidder pursuant to this Tender Process.

22.0 Joint Ventures

- 22.1 If a Joint Venture is proposed, the Bidder shall state in its Submission the Joint Venture arrangements that form the basis on which the Joint Venture plans to carry out its obligations.
- 22.2 The Joint Venture shall not change its Joint Venture arrangement without the prior written approval of Metrolinx in its sole discretion.
- 22.3 One of the Joint Venture participants shall be nominated as being in charge during this Tender Process and, in the event of a successful Submission during finalization of the Contract (the "Participant in Charge"). The Participant in Charge shall be authorized by the other joint venture participants to incur liabilities and receive instructions for and on behalf of any and all participants of the joint venture.
- 22.4 Each Joint Venture participant shall demonstrate its authorization of the Participant in Charge by submitting with their Submissions a power of attorney,

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 19 OF 22

or similar document, signed by a legally authorized representative of the Joint Venture participant.

- 22.5 All participants of the Joint Venture shall be legally liable, jointly and severally, during this Tender Process and during the Contract for carrying out the obligations pursuant to the Contract.

23.0 Prohibited Contacts and Lobbying Prohibition

- 23.1 A Bidder and all of the Bidder's respective Subcontractors, advisors, employees and representatives are prohibited from engaging in any form of political or other lobbying, of any kind whatsoever, to influence the outcome of this Tender Process.
- 23.2 Without limiting the generality of Section 23.1, neither Bidders or any of their respective Subcontractors, advisors, employees or representatives shall contact or attempt to contact, either directly or indirectly, at any time during the Tender Process, any directors, officers, employees and advisors of Metrolinx, other than the Procurement Representative.

24.0 Media Releases, Public Disclosures and Public Announcements

- 24.1 A Bidder shall not, and shall ensure that its advisors, employees or representatives do not, issue or disseminate any media release, public announcement or public disclosure (whether for publication in the press on the radio, television, internet, or any other medium) that relates to this Tender Process, this Submission or any matters related thereto, without the prior written consent of Metrolinx.
- 24.2 A Bidder and all of the Bidder's respective advisors, employees and representatives shall not make any public comment, respond to questions in a public forum, or carry out any activities to either criticize another Bidder or Submission or to publicly promote or advertise its own qualifications, interest in or participation in the Tender Process without the prior written consent of Metrolinx, which may be withheld in the sole discretion of Metrolinx. Notwithstanding this item, the Bidder, Bidder's team members and all of the Bidder's respective advisors, employees and representatives are permitted to state publicly that it/they are participating in the Tender Process.
- 24.3 For greater clarity, this section does not prohibit disclosures necessary to permit the Bidder to discuss the Tender Document with prospective Subcontractors' participation in this Tender Process.

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 20 OF 22

25.0 Restriction on Communications Between Bidders – No Collusion

25.1 A Bidder shall not discuss or communicate, directly or indirectly, with any other Bidder, any information whatsoever regarding the preparation of its own Submission or the Submissions of other Bidders. Bidders shall prepare and submit Submissions independently and without any connection, knowledge, comparison of information or arrangements, direct or indirect, with any other Bidder. This obligation extends to all team members of a Bidder and all of the Bidder's respective advisors, employees and representatives.

26.0 Disclosure of Information

26.1 The Bidder hereby agrees that any information provided in its Submission, even where it is identified as being supplied in confidence, may be disclosed by Metrolinx where required by law, order of a court, or tribunal.

26.2 The Bidder hereby consents to the disclosure, on a confidential basis, of its Submission by Metrolinx to Metrolinx's advisors retained for the purpose of evaluating or participating in the evaluation of the Submissions.

27.0 Freedom of Information and Protection of Privacy Act ("FIPPA")

27.1 Bidders are advised that Metrolinx may be required to disclose all, a part, or parts of a Bidder's Submission and a part or parts of any Submission pursuant to FIPPA.

27.2 Under Ontario's Open Data Directive, Metrolinx is required to publish certain procurement information. Accordingly, the Proponent acknowledges that, subject to any applicable FIPPA exemptions, Metrolinx may publish procurement data including but not limited to the names of the Proponents and the winning bid in accordance with Ontario's Open Data Directive. For more information, see: www.ontario.ca/page/ontarios-open-data-directive.

28.0 Submission to Be Retained by Metrolinx

Metrolinx shall not return a Submission or any accompanying documentation, with the exception of a Bid Deposit and/or Contract Security, submitted by a Bidder.

29.0 Confidential Information of Metrolinx

29.1 All information provided by or obtained from Metrolinx in any form in connection with the Submission process;

INSTRUCTIONS TO BIDDERS

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 21 OF 22

29.1.1 is the sole property of Metrolinx and shall be treated as confidential;

29.1.2 shall not be used for any purpose other than replying to the Tender Document and the performance of any subsequent agreement; and

29.1.3 shall not be disclosed without prior written authorization from Metrolinx.

30.0 Bidders Shall Bear Their Own Costs

The Bidder shall bear all costs associated with or incurred in connection with its participation in this Tender Process, including, but not limited to, preparation of its Submission.

31.0 Vendor Performance Management Program

31.1 Vendor Performance Management (VPM) Program means the Metrolinx policy for monitoring, evaluating and recording vendor performance, as same may be amended or replaced from time to time. The Vendor Performance Management Program establishes a standard methodology for the incorporation of a vendor's past performance as a criterion in assessing that vendor's bids or tenders for future work with Metrolinx.

31.2 Pursuant to Metrolinx's VPM Program, Metrolinx may consider a Bidder's past performance under contracts with Metrolinx in evaluating Submissions received in response to this Tender Document. The Vendor Performance Rating ("VPR") is the average of a vendor's performance evaluation scores (as assessed by or on behalf of Metrolinx) for a thirty-six (36) month period preceding the Closing. If a Bidder has not completed any work for Metrolinx in the three (3) years preceding the Closing, for the purpose of evaluating the Submission, the Bidder will be assigned a VPR which is the straight average of all the VPRs of all vendors who have performed services for Metrolinx during the prior fiscal year.

31.3 If the VPR is being applied as a component of the award evaluation for this Tender Process, the legal name of the Bidder stated on the Form of Tender will be used. It is the responsibility of the Bidder to ensure that its proper legal name has been stated on the Form of Tender. Metrolinx will not accept any requests from the Bidder to change the legal name provided after the Closing.

31.4 In case of a Joint Venture where multiple parties will sign the Contract, the VPR of each participant will be added and the average will be applied.

31.5 For the purposes of this Tender Process, the application of the VPR is set out in Attachment # 1 – Contract Performance Appraisal.

INSTRUCTIONS TO BIDDERS

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 22 OF 22

END OF SECTION

FORM OF TENDER AND APPENDICES

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

The Form of Tender comprised of the documents listed below, form part of the Tender Document and are included herein in Word fillable format, as applicable, with the exception of Appendix "B" which is attached as an Excel file entitled "Appendix B Contract Prices- IT-2016-CKU-85"

<u>DOCUMENT TITLE</u>
Agreement/ Declaration
Appendix "A" – List of Tender Documents
Appendix "B" – Contract Prices (Attached as separate Excel file)
Appendix "C" – Bidder's Qualifications
Appendix "D" – Agreement to Bond
Appendix "E" – Conflict of Interest
Appendix "F" - Mandatory Technical/Personnel Requirements
Appendix "G" – Bidder's Submission Checklist

**FORM OF TENDER
AGREEMENT/DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 1 OF 4

CONTRACT NUMBER: IT-2016-CKU-085

CONTRACT DESCRIPTION: Kitchener Corridor, Weston Subdivision Construction of Natural Gas Line and Sewer Connection

Submission By: [Click here to enter text.](#)

(Full Legal Name of Bidder)

1.0 Contact Information

- 1.1 Bidder's registered legal business name (or individual) and any other name under which it carries on business:

[Click here to enter text.](#)

- 1.1.1 If a Joint Venture, enter the registered legal business name of the Participant-in-Charge:

[Click here to enter text.](#)

- 1.1.2 If a Joint Venture, enter the registered legal business name of the other Joint Venture members:

[Click here to enter text.](#)

- 1.2 Bidder's (if Joint Venture, insert Participant-in-Charge information) address, telephone and facsimile numbers:

[Click here to enter text.](#)

- 1.3 Name, title, address, telephone, e-mail and facsimile numbers of the contact person(s) for the Bidder (if a Joint Venture, insert Participant-in-Charge information)

[Click here to enter text.](#)

- 1.4 Name of the person who is primarily responsible for the Submission:

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 2 OF 4

Click here to enter text.

2.0 Total Contract Price

The Bidder, by submitting this Submission, hereby offers to Metrolinx to furnish all goods and services necessary to execute the Work described by the Tender Documents, including Addenda, and to perform this Work for the Total Contract Price quoted in Appendix "B" – Contract Prices.

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 3 OF 4

The Contract Price bid in addition to all Unit Prices quoted in Appendix "B" – Contract Prices shall be firm and quoted in Canadian funds. The Contract Price includes all specified cash allowances, contingency allowances (if applicable) and all applicable taxes, except Harmonized Sales Tax (H.S.T.), in force at the date the Submission is sent.

This Form of Tender including all required Appendices is submitted in accordance with the terms and requirements of the Instructions to Bidders.

The Bidder has informed itself of the conditions relating to the Work to be performed and have inspected and is thoroughly familiar with the location of the Work and the plans, Specifications, Drawings and all terms, conditions and covenants of the Contract.

The Contract Price quoted shall represent full payment for all the Work necessary for the proper completion of the Contract.

The Contract Price includes customs duties, royalties, handling, transportation, overhead, profit and all other charges.

The Bidder acknowledges receipt of any and all Addenda issued hereto and that their Submission has been developed in consideration of the Addenda.

The Bidder acknowledges that it meets all mandatory requirements in order for their Submission to be considered further. Failure of a Bidder to meet all of the mandatory requirements shall result in the Bidder's Submission to be deemed non-compliant and shall not be considered further.

The Bidder acknowledges that their Submission includes the appropriate Tender Document Forms. Failure to comply may result in the Bidder's Submission being found non-responsive and disqualified at the sole discretion of Metrolinx.

All Addenda, the Form of Tender and Appendices, the Supplementary Agreement Between Owner and Contractor, the Form of Agreement, the Supplementary Definitions of the Contract, the Supplementary General Conditions of the Contract, the Definitions of the Contract, the General Conditions of the Contract, the General Requirements (Sections 01000 to 01800), Specifications, Drawings and Attachments set out in this Tender Document shall be included in and form part of the Contract. **Remitting a Submission constitutes acknowledgement that the Bidder has read and agrees to be bound by such conditions.**

This Form of Tender including all required Appendices is hereby submitted on the condition and with the full understanding that it is an irrevocable offer by the Bidder for a period of one hundred and twenty days (120) calendar days from the Closing and the Bidder hereby covenants that it enter into the Contract with Metrolinx as contemplated by the Tender Documents by executing the CCDC 4, 2011 Unit Price Contract Agreement Between Owner and Contractor and will perform and execute the Work at the Contract Price if it is notified, in

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 4 OF 4

writing, by Metrolinx within one hundred and twenty (120) calendar days of the Closing that it is the successful Bidder.

The Bidder hereby declares that no Conflict of Interest exists in accordance with Appendix "E" – Conflict of Interest.

The Bidder hereby declares that no person, firm or corporation (including any agent of Metrolinx), other than the undersigned or Suppliers or Subcontractors identified herein or engaged in the ordinary course of business, has any interest in this call for Tenders or the proposed Contract for which the Submission is made.

The remitting of a Submission by a Bidder shall be considered prima facie evidence that the above requirements have been met. Failure to have complied with said requirements shall not relieve the Bidder of its obligation to enter into the Contract and to carry out the Work for the terms and conditions set forth in the Tender Documents.

The Bidder acknowledges that by way of the E-Bid Authorized Signer remitting a Submission, the Bidder is agreeing to be bound to each and every term, condition, article and obligation of the Tender Document and any resultant Contract.

The Bidder acknowledges that consistent with Section 16.2 of Instructions to Bidders, failure by the Bidder, whose Submission was accepted by Metrolinx, to execute and deliver the Form of Agreement and Contract Documents with the required Insurance Certificates, Workplace Safety and Insurance Clearance Certificate and the Performance and Labour and Materials Payment Bonds, or specified alternatives, shall result in the cancellation of the Contract award and forfeiture of the Bidder's Bid Deposit.

**FORM OF TENDER
APPENDIX "A" – LIST OF TENDER DOCUMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

The following is the list and description of documents which form part of the Tender Document for the Work:

TITLE	NO OF PAGES
List of Contents	1
Any Addenda Issued Hereto.....	1
Introduction	1
Definitions	4
Instructions To Bidders.....	21
Form of Tender	5
Appendix "A" - List of Tender Documents.....	7
Appendix "B" – Contract Prices.....	3
Appendix "C" – Bidder’s Qualifications.....	6
Appendix "D" – Agreement to Bond	1
Appendix "E" – Conflict of Interest.....	2
Appendix "F" – Mandatory Technical/Personnel Requirements.....	1
Appendix "G – Bidder’s Submission Checklist	1
Supplementary Agreement Between Owner and Contractor	2
Form of Agreement	1
Supplementary Definitions of the Contract	3
Definitions of the Contract	1
Supplementary General Conditions of the Contract.....	40
General Conditions of the Contract	1

SECTION NO.	TITLE	NO. OF PAGES
-------------	-------	--------------

GENERAL REQUIREMENTS

01000	General Instructions.....	7
01140	Work Restrictions.....	2
01200	Mobilization and Demobilization	3
01300	Shop Drawings and Other Submittals.....	4

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 2 OF 7

01400	Quality Control	3
01500	Temporary Facilities	1
01545	Railway Safety Requirements	7
01560	Environmental Protection.....	13
01570	Traffic Control.....	4
01600	Safety Requirements	8
01700	Material and Equipment.....	3
01710	Cleaning.....	1
01800	Project Closeout.....	3

SPECIFICATIONS

02000	Special Requirements -Sewer.....	2
02001	Special Requirements –Natural Gas.....	8
02140	Dewatering.....	3
02202	Construction Noise and Vibration Control.....	3
02225	Demolition and Removal.....	3
02270	Erosion Control.....	6
02311	Site Grading.....	3
02315	Excavating, Trenching and Backfilling.....	9
02340	Geosynthetics.....	3
02353	Special Procedures for Traffic Control.....	3
02362	Water for Compaction, Dust and Mud Control.....	2
02511	Watermains.....	9
02630	Storm and Sanitary Sewers.....	6
02631	Maintenance Holes, Catchbasins, Ditch Inlets and Valve Chambers....	6
02634	Utility Adjustments.....	1
02700	Site Restoration for Underground Services.....	2
02701	Aggregates – General.....	4
02721	Granular Base.....	4
02723	Granular Sub-Base.....	4
02743	Asphalt Paving.....	3

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 3 OF 7

02744	Driveway and Parking Lots.....	2
02745	Tack Coat.....	1
02761	Painted Traffic Lines.....	2
02825	Chain Link Fencing.....	2
02906	Planting of Trees, Shrubs, and Ground Cover.....	24
02911	Topsoil, Placement and Grading.....	6
02920	Hydraulic Seeding.....	6
02933	Sodding.....	1
03100	Concrete Formwork and Falsework.....	3
03201	Concrete Reinforcement.....	3
03203	Concrete Accessories.....	2
03290	Joints in Concrete.....	12
03300	Cast in Place Concrete.....	17
03310	Concrete Work.....	7
03312	Concrete Curb and Gutter.....	2
03313	Concrete Sidewalk.....	2
16170	Underground Duct Bank System.....	3
16180	Snow Clearing Devices.....	3

DRAWINGS

GENERAL

	Title Sheet	
	Signature Sheet	
G-001	Index	
G-002	Legend	
C-001	Site Specific General Notes	

SEWER CONNECTION

C-002	400mm Watermain-Carlingview Drive STA . 9+011 TO 9+070	
C-003A	900mm Storm Sewer- Carlingview Drive 200m S. OF DISCO ROAD	
C-003B	900mm Storm Sewer Outlet- Carlingview Drive 200m S. OF DISCO ROAD	

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 4 OF 7

C-004	Erosion and Sediment Control
C-005	Tree Preservation Details and Notes
C-006	Filtrexx Ring and Fence Details
C-007	Slope Blanket Installation

NATURAL GAS LINE

GS-100	General Notes, Drawing List, Legend, Specifications
GS-101	Gas Line Plan Sta. 25+737 TO 25+400
GS-102	Gas Line Plan Sta. 25+400 TO 25+075
GS-103	Gas Line Plan Sta. 25+075 TO 24+731
GS-104	Gas Line Plan Sta. 24+731 TO 24+383
GS-105	Details and Sections

ATTACHMENTS

Attachment # 1	Contract Performance Appraisal	1
Attachment # 2	GO-CMO Pocket Safety Guide	94
Attachment # 3	GO CMO Corridor Construction Safety Management Program	188
Attachment # 4	Report on Geotechnical Investigation Carlingview Drive Grade Separation Structure, Sewer and Associated Works, August 26, 2011; Prepared by Thurber Engineering Ltd. for MRC	137
Attachment # 5	T.S. 1.00 – Construction Specification for Maintenance of Traffic	18
Attachment # 6	T.S. 3.50 Construction Specification for Concrete Curb and Concrete Curb and Gutter	9
Attachment # 7	T.S. 3.70 Construction Specification for Concrete Sidewalk and Concrete Raised Median	11
Attachment # 8	T.S. 5.00 Construction Specification for Sodding	7
Attachment # 9	T.S. 5.10 Construction Specification for Topsoil	5
Attachment # 10	T.S. 7.30 Procedure for Disinfecting Watermains	13
Attachment # 11	T.S. 13.10 Specification for Unshrinkable Fill	5
Attachment # 12	T.S. 310 Construction Specification for Hot Mixed, Hot Laid Asphaltic Concrete	28
Attachment # 13	T.S. 409 Construction Specification for Closed Circuit Television Inspection of Pipelines	2

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 5 OF 7

Attachment # 14	T.S. 441 Construction Specification for Watermain Construction by Open Cut Method	2
Attachment # 15	T.S. 1003 Material Specification for Aggregate Hot Mixed, Hot Laid Asphaltic Concrete	3
Attachment # 16	T.S. 1150 Material Specification for Hot Mixed, Hot Laid Asphaltic Concrete	20
Attachment # 17	City of Toronto Construction Management Plan (CMP) Requirements	3
Attachment # 18	City of Toronto Urban Forestry Tree Protection Policy and Specifications for Construction Near Trees	12
Attachment # 19	Requirements for Construction Work near Works Facilities and Structures Trunk Sewers and Watermains, City of Toronto, May 2004	6
Attachment # 20	T.S. 7.22 Watermain Replacement and Connection Procedure	10
Attachment # 21	T.S. 4.60 Construction Specification for Utility Cut Restoration	14
Attachment # 22	T.S. 408 Construction Specification for Adjusting or Rebuilding Manholes, Catch Basins, Ditch Inlets and Valve Chambers	1
Attachment # 23	T.S. 7.22 Construction Specification for Cathodic Protection of New Watermains	9
Attachment # 24	T.S. 7.40 Construction Specification for Watermain and Water Service Tracer Wire	5
Attachment # 25	T.S. 1350 Material Specification for Concrete – Materials and Production	20
Attachment # 26	T.S. 4.50 Construction Specification for Utility Adjustments	8
Attachment # 27	T.S. 3.30 Construction Specification for Hot Mix Asphalt Sidewalks, Boulevards and Driveways	3
Attachment # 28	T.S. 3.20 Construction Specification for Tack Coat	4
Attachment # 29	Requirements for Construction Work near Toronto Bridges, Sewers and Watermains	8
Attachment # 30	Specification for Television Inspection Main Sewer	2
Attachment # 31	Construction Sequencing and By-Pass Flow Plan for Sewer Work	2
Attachment # 32	Construction Sequencing and Watermain Shut Plan for Watermain	

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 6 OF 7

	Work	3
Attachment # 33	Metrolinx Safety Guidelines for Contractors, Consultants and Project Coordinators	75
Attachment # 34	T.S. 7.80 Material Specification for Large Diameter Watermains	25
Attachment # 35	T.S. 401 Construction Specification for Trenching, Backfilling and Compacting	12
Attachment # 36	TC_E_10 Standards Respecting Pipeline Crossings Under Railway	13
Attachment # 37	GO Transit Track Standards Precautionary Measures for Signal and Communications	3
Attachment # 38	GO Transit Track Standards - Excavation Limits adjacent to Railway	1
Attachment # 39	Instructions to Excavators for the Protection of Underground S&C Cables	15
Attachment # 40	scp 801 - Safety Instructions for lp gas	6
Attachment # 41	scp 802 - Oil Burning Winter Switch Protection Systems	5
Attachment # 42	scp 803 -Minimum Side Clearances for Snow Melters and Snow Blowers	3
Attachment # 43	scp 804 – Leak Testing Snow Melter lp gas Piping Systems	10
Attachment # 44	scp 805 – Natural gas Winter Switch Protection Systems	4
Attachment # 45	scp 806 – Leak Testing Snow Melter Natural Gas Piping Systems	9
Attachment # 46	scp 807 – Fuel Oils Recommended for Snow Melter Service	2
Attachment # 47	scp 808 – Detection and Removal of Water	2
Attachment # 48	scp 809 – Working on Switch Heater Plenum Ducts	5
Attachment # 49	Railway Switch Heater Manual	81
Attachment # 50	Railway Switch Heater Spare Parts	7
Attachment # 51	Rail Corridor Infrastructure Handover Protocols	18
Attachment # 52	Track Worker Safety Instructions	51
Attachment # 53	GO Transit Track Standards	390
	Bidder Q and A Template	1
	Sample Letter of Credit	1
	Parental Guarantee	1

**FORM OF TENDER
AGREEMENT/ DECLARATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 7 OF 7

Metrolinx Merx Portal	1
Sample Reference Check Questionnaire	3

END OF SECTION

**FORM OF TENDER
APPENDIX "B" – CONTRACT PRICES**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 1 OF 3

1.0 Contract Unit Prices

- 1.1 Contract Unit Prices are subject to the Form of Tender in addition to this Appendix "B" – Contract Prices.
- 1.2 Payment for services rendered and goods supplied in accordance with the terms and conditions of the Contract shall be based on the requirements of the Tender Document Form - Form of Tender in addition to the following:
 - 1.2.1 The Total Contract Price bid shall be firm and quoted in Canadian funds.
 - 1.2.2 The Total Contract Price includes all specified cash allowances, contingency allowances (if applicable) and all applicable taxes, except Harmonized Sales Tax (H.S.T.), in force at the date the Submission is submitted.
 - 1.2.3 The Total Contract Price quoted shall represent full payment for all the Work necessary for the proper completion of the Contract.
 - 1.2.4 The Total Contract Price includes all labour, superintendence, plant, tools, appliances, equipment, supplies and other accessories, services and facilities customs duties, royalties, handling, transportation, travel overhead, profit and all other charges.
 - 1.2.5 The quantities shown in the Schedule of Prices are estimated. The Contract Price shall be the final sum of the products of the actual quantities that are incorporated in, or made necessary by the Work, as confirmed by count and measurement, and the appropriate Contract Unit Prices, together with any adjustments that are made in accordance with the provisions of the Contract Documents.
 - 1.2.6 Deductions from the said Contract, if any, shall be made at the Unit Prices shown in this Appendix "B" – Contract Prices of the Form of Tender.
 - 1.2.7 The Contract Price shall be the sum of the products of the estimated quantities and the appropriate Contract Unit Prices in the Schedule.

2.0 Provisional Items

- 2.1 Not Applicable

**FORM OF TENDER
APPENDIX "B" – CONTRACT PRICES**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 2 OF 3

3.0 Allowances

3.1 Cash Allowances

3.1.1 Cash Allowances are subject to GC 4.1 of General Conditions of the Contract.

3.1.2 Descriptions of each Cash Allowance are listed below and amounts are specified in the attached Excel spreadsheet.

3.2 Description of Cash Allowances

3.2.1 Cash Allowance - Testing and Inspection

(a) This Cash Allowance is to be used solely for work pertaining to testing and inspection not currently covered under Quality Assurance, which become apparent during the course of the Work . Part or all of these funds shall be administered on a case by case basis as the requirement for testing and inspection arises for work pertaining to this project.

3.2.2 Cash Allowance – Tree Plantings

(a) This Cash Allowance is to be used solely for planting any tree that was removed or as directed by the City of Toronto (CoT) or Ministry of the Environment and Climate Change (MOEC) issued permits or as the work progresses. Part or all of these funds shall be administered on a case by case basis as the requirement for tree planting is known.

3.2.3 Additional Construction Services

(a) This Cash Allowance is to be used solely for any additional construction services required for the Natural Gas portion of the Work.

3.3 Contingency Allowances

3.3.1 If applicable, Contingency Allowances are subject to GC 4.2 of General Conditions of the Contract.

4.0 Completion of Appendix B

4.1 Bidders shall fully complete the Excel file entitled "Appendix B" and insert a Unit Price into each space provided under the Contract Unit Price column.

**FORM OF TENDER
APPENDIX "B" – CONTRACT PRICES**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 3 OF 3

- 4.2 The file entitled "Appendices B", must be returned as a separate file preferably in Excel format and may not be retyped or recreated. Failure to follow the submission instructions or format requirements may result in the Submission being found non-responsive and disqualified.
- 4.3 It is Metrolinx preference that Bidders submit the pricing using the appended Excel file format to facilitate the Metrolinx pricing evaluation process.
- 4.4 The Excel spreadsheet pricing table is numbered, under the "Item No." column to correspond with the following stages of the Work:
- (a) A: General and Site Inspection Preparation
 - (b) B: Removals
 - (c) C: Roadway
 - (d) D: Drainage - Storm Sewer Connection
 - (e) E: Watermain - Storm Sewer Connection
 - (f) O: Landscaping/Site Restoration - Storm Sewer Connection
 - (g) M: Mechanical – Natural Gas Connection
 - (h) G: Allowances and Other
- 4.5 If a "0" is entered in any of the spaces where price information is to be provided, it shall be interpreted as meaning the Contractor shall provide the specified service to Metrolinx at no charge.
- 4.6 If any space is left blank or an entry of "N/C" or "N/A" or "—" is entered where price information should be entered then the Submission may be found non-responsive and disqualified consistent with the provisions of the Instructions to Bidders.

FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

PAGE 1 OF 8

1.0 Qualifications

1.1 Metrolinx will use the information submitted by the Bidder in this Appendix "C" to determine if the Bidder meets the Bidder's Qualifications set out in Subsection 7.1.2 of Instructions to Bidders. Projects listed by the Bidder in this Appendix must demonstrate that the Bidder has successfully completed contracts for work that meets the criteria as set out in Subsection 7.1.2 of Instructions to Bidders.

1.2 The Bidder shall complete the following:

1.2.1 Approximate annual value of construction work in Canada for the past five (5) years.

(a) 2016 Type in Amount

(b) 2015 Type in Amount

(c) 2014 Type in Amount

(d) 2013 Type in Amount

(e) 2012 Type in Amount

1.3 The Bidder shall complete Section 2.0 charts **for each project** that the Bidder is describing to demonstrate that the Bidder meets the Bidder's Qualifications. Bidders are required to start with the most recent project and to use additional pages if required.

2.0 Reference Checks

2.1 References will be checked using a standard uniform method. Opinions of previous customers regarding budget and schedule experience, dependability, attitudes of employees and/or Subcontractors concern for efficiency, safety, economy and environment, sensitivity to community, and quality of service among others may be taken into account when evaluating the reference projects.

2.2 The Bidder shall ensure that contact information provided for each reference project is current and accurate in order to enable Metrolinx to obtain all necessary information for evaluation purposes in a timely manner. If Metrolinx is unable to validate a reference project through the customer contact person

FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

PAGE 2 OF 8

provided by the Bidder, Metrolinx may, at its sole discretion consider the reference project invalid.

- 2.3 Metrolinx reserves the right to forward the information provided by the Bidder within its Submission in relation to the cited project to the identified customer contact person to verify the various elements of the information provided.
- 2.4 In order to provide the sought after information in relation to a reference project, the named customer contact person identified as a reference for a cited reference project shall have held a position within the reference organization, shall have been directly involved in the referenced project, and shall have been in a position to verify that the work was carried out by the Bidder in relation to the reference project in question.
- 2.5 For any discrepancies resulting from the reference check, Metrolinx may, at its sole discretion, re-contact the Bidder in writing for a written clarification or validation of information provided. Section 15.1.3 shall apply for any misrepresentations, inaccurate or misleading information provided in under this Appendix "C" - Bidder's Qualifications.

3.0 Reference Projects

- 3.1 The Bidder shall complete the following charts using relevant completed projects, as per the requirements of Section **Error! Reference source not found.** of Instructions to Bidders. The Bidder must submit descriptions of relevant projects, in Section 4.0 below, for work that meets the criteria stated in Sections 7.0 of Instructions to Bidders. Metrolinx recommends that the Bidder submit three (3) to five (5) relevant reference projects.
 - 3.1.1 Reference projects submitted shall be for work completed by the Bidder providing the Submission, and not for a Subcontractor or individual, unless indicated otherwise by Metrolinx.
 - 3.1.2 Where Section **Error! Reference source not found.** of Instructions to Bidders, and/or Appendix "F" - Mandatory Corporate, Personnel and Technical Requirements" requests the Bidder to submit its Subcontractor's experience and qualifications, the Bidder shall provide completed relevant references for its Subcontractor(s) in Section **Error! Reference source not found.** herein, Subcontractor(s) Reference Projects, herein.
- 3.2 The Bidder shall complete the following chart for each project that the Bidder is describing to demonstrate that the Bidder meets the Bidder's Qualifications.

**FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 3 OF 8

Bidders are required to start with the most recent project and to use additional pages if required.

4.0 Bidder's References Projects

The Bidder must submit descriptions of a minimum of three (3) to a maximum of five (5) completed reference projects below to demonstrate compliance with Section 7.0 of Instructions to Bidders.

Reference projects submitted shall be for work completed by the Bidder providing the Submission and not for a Subcontractor or individual, unless indicated otherwise by Metrolinx.

**FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 4 OF 8

4.1 Reference Project # 1

Project Name and Location:	Click here to enter text.		
Role of Bidder:	Click here to enter text.		
Customer Name:	Click here to enter text.		
Customer Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Customer Contact Email Address:	Click here to enter text.		
Customer's Consultant:	Click here to enter text.		
Consultant's Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Contact Email Address:	Click here to enter text.		
Contract Value (Estimated)	\$Click here to enter text.	Contract Value (Actual)	\$Click here to enter text.
Reasons for variances in contract value:			
Click here to enter text.			
Completion Date (Estimated)	Click here to enter text.	Completion Date (Actual)	Click here to enter text.
Reasons for schedule variances:			
Click here to enter text.			
Project Description (Provide a detailed description of the reference project and the Bidder's responsibilities for the reference project. The Bidder should specifically list below similarities between this reference project and the Work specified herein)			
Click here to enter text.			
Provide an overview of the scope of work:			
List the major components of the work:			
Did any safety issues arise during construction?			

**FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 5 OF 8

4.2 Reference Project # 2

Project Name and Location:	Click here to enter text.		
Role of Bidder:	Click here to enter text.		
Customer Name:	Click here to enter text.		
Customer Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Customer Contact Email Address:	Click here to enter text.		
Customer's Consultant:	Click here to enter text.		
Consultant's Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Contact Email Address:	Click here to enter text.		
Contract Value (Estimated)	\$Click here to enter text.	Contract Value (Actual)	\$Click here to enter text.
Reasons for variances in contract value:			
Click here to enter text.			
Completion Date (Estimated)	Click here to enter text.	Completion Date (Actual)	Click here to enter text.
Reasons for schedule variances:			
Click here to enter text.			
Project Description (Provide a detailed description of the reference project and the Bidder's responsibilities for the reference project. The Bidder should specifically list below similarities between this reference project and the Work specified herein)			
Click here to enter text.			
Provide an overview of the scope of work:			
List the major components of the work:			
Did any safety issues arise during construction?			

**FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 6 OF 8

4.3 Reference Project # 3

Project Name and Location:		Click here to enter text.	
Role of Bidder:		Click here to enter text.	
Customer Name:		Click here to enter text.	
Customer Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Customer Contact Email Address:	Click here to enter text.		
Customer's Consultant:	Click here to enter text.		
Consultant's Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Contact Email Address:	Click here to enter text.		
Contract Value (Estimated)	\$Click here to enter text.	Contract Value (Actual)	\$Click here to enter text.
Reasons for variances in contract value:			
Click here to enter text.			
Completion Date (Estimated)	Click here to enter text.	Completion Date (Actual)	Click here to enter text.
Reasons for schedule variances:			
Click here to enter text.			
Project Description (Provide a detailed description of the reference project and the Bidder's responsibilities for the reference project. The Bidder should specifically list below similarities between this reference project and the Work specified herein)			
Click here to enter text.			
Provide an overview of the scope of work:			
List the major components of the work:			
Did any safety issues arise during construction?			

**FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 7 OF 8

4.4 Reference Project # 4

Project Name and Location:	Click here to enter text.		
Role of Bidder:	Click here to enter text.		
Customer Name:	Click here to enter text.		
Customer Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Customer Contact Email Address:	Click here to enter text.		
Customer's Consultant:	Click here to enter text.		
Consultant's Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Contact Email Address:	Click here to enter text.		
Contract Value (Estimated)	\$Click here to enter text.	Contract Value (Actual)	\$Click here to enter text.
Reasons for variances in contract value:			
Click here to enter text.			
Completion Date (Estimated)	Click here to enter text.	Completion Date (Actual)	Click here to enter text.
Reasons for schedule variances:			
Click here to enter text.			
Project Description (Provide a detailed description of the reference project and the Bidder's responsibilities for the reference project. The Bidder should specifically list below similarities between this reference project and the Work specified herein)			
Click here to enter text.			
Provide an overview of the scope of work:			
List the major components of the work:			
Did any safety issues arise during construction?			

**FORM OF TENDER
APPENDIX "C" – BIDDER'S QUALIFICATIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 8 OF 8

4.5 Reference Project # 5

Project Name and Location:	Click here to enter text.		
Role of Bidder:	Click here to enter text.		
Customer Name:	Click here to enter text.		
Customer Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Customer Contact Email Address:	Click here to enter text.		
Customer's Consultant:	Click here to enter text.		
Consultant's Contact Person:	Click here to enter text.	Phone No.	Click here to enter text.
Contact Email Address:	Click here to enter text.		
Contract Value (Estimated)	\$Click here to enter text.	Contract Value (Actual)	\$Click here to enter text.
Reasons for variances in contract value:			
Click here to enter text.			
Completion Date (Estimated)	Click here to enter text.	Completion Date (Actual)	Click here to enter text.
Reasons for schedule variances:			
Click here to enter text.			
Project Description (Provide a detailed description of the reference project and the Bidder's responsibilities for the reference project. The Bidder should specifically list below similarities between this reference project and the Work specified herein)			
Click here to enter text.			
Provide an overview of the scope of work:			
List the major components of the work:			
Did any safety issues arise during construction?			

**FORM OF TENDER
APPENDIX "D" - AGREEMENT TO BOND**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 1 OF 1

Name of Owner: **METROLINX**

Description of Work: **Kitchener Corridor, Weston Subdivision Construction of
Natural Gas Line and Sewer Connection**

Location: **Weston Subdivison**

Contract No: **IT-2016-CKU-085**

For good and valuable consideration, the undersigned surety (the "Bonding Company") hereby agrees to be bound as surety for

Type in Full Legal Name of Bidder
(Full Legal Name of Bidder)

in a Performance Bond and a Labour and Materials Payment Bond each totalling Fifty Per Cent (50%) of the Contract Price (the "Bond Amount") pursuant to the Tender Documents to which this Agreement to Bond is attached, for the full and due performance of the Work (as defined herein), if the Tender for the Contract is accepted by Metrolinx.

It is a condition of the Tender Process that if the Bidder's Submissions is accepted, application for a Performance Bond and a Labour and Material Payment Bond by the Bidder must be completed with the undersigned within five (5) Working Days of acceptance of the Submission by Metrolinx. The undersigned acknowledges that failure to obtain a Performance Bond and a Labour and Materials Payment Bond equal to the Bond Amount within the time period stipulated herein may result in the immediate revocation of acceptance of the Bidder's Submission by Metrolinx and forfeiture of the Bidders' Bid Deposit.

In witness whereof the Bonding Company has executed this agreement this ___ day
of _____, 20____.

(Name of Bonding Company)

(Signature of authorized person signing for Bonding Company)

(Position)

**FORM OF TENDER
APPENDIX "E" - CONFLICT OF INTEREST**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

1.0 Conflict of Interest

1.1 If the box below is left blank, the Bidder will be deemed to declare that (a) there was no Conflict of Interest in preparing its Submission; and (b) there is no foreseeable Conflict of Interest in performing the contractual obligations contemplated in the Tender Document. Otherwise, if the statement below applies, check ("X") the box.

- The Bidder declares that there is an actual or potential Conflict of Interest relating to the preparation of its Submission, and/or the Bidder foresees an actual or potential Conflict of Interest in performing the contractual obligations contemplated in the Tender Document.

1.2 If the Bidder declares an actual or potential Conflict of Interest by marking the box above, the Bidder must set out below details of the actual or potential Conflict of Interest:

Type detail conflict of interest

Type detail conflict of interest

Type detail conflict of interest

1.3 The following individuals, as employees, advisers, or in any other capacity (a) participated in the preparation of our Submission (whether as employees, advisers, or in any other capacity); AND (b) were employees, advisers or consultants of Metrolinx at any time within the twelve (12) months prior to the Closing:

Name of Individual: <u>Type</u>
Job Classification: <u>Type</u>
Department: <u>Type</u>
Last Date of Employment with Metrolinx: <u>Type</u>
Name of Last Supervisor: <u>Type</u>
Brief Description of Individual's Job Functions: <u>Type</u>
Brief Description of Nature of Individual's Participation in the Preparation of the Submission: <u>Type</u>

1.4 (Repeat above for each identified individual)

**FORM OF TENDER
APPENDIX "E" - CONFLICT OF INTEREST**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 2 OF 2

The Bidder agrees that, upon request, the Bidder shall provide Metrolinx with additional information from each individual identified above in the form prescribed by Metrolinx.

**FORM OF TENDER
APPENDIX "F" – MANDATORY TECHNICAL/PERSONNEL
REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

- 1.0 Bidders shall complete the mandatory technical/personnel requirements compliance checklist below, and send this Appendix "F" with your Submission. Failure of a Bidder to complete and submit this Appendix "F", may result in the Bidder's Submission being found non-responsive and disqualified.
- 2.0 Bidders must meet all mandatory requirements stated below in order for their Submission to be considered further. Failure of a Bidder to meet all of the mandatory requirements listed below shall result in the Bidder's Submission being considered non-responsive. Non-responsive Submissions shall not be considered further and shall be disqualified.
- 3.0 Bidders shall provide supporting documentation to substantiate compliance to each of the listed mandatory requirements. Failure of a Bidder to provide information required to substantiate compliance to a mandatory requirement, may result in the Bidder's Submission being found non-responsive and disqualified.
- 4.0 Metrolinx has the right but not the obligation, to carry out further investigations to ensure the Bidder and/or designated Subcontractor can meet the mandatory technical/personnel requirements to the satisfaction of Metrolinx in its sole discretion.

Reference Section No.	Mandatory Technical/Personnel Requirements	Compliance (Check Yes or No)	Supporting Documentati on Required to Substantiate Compliance
5.0 of Section 01000 – General Instructions	The Bidder has achieved COR™ "Registered" status with IHSA.	YES <input type="checkbox"/> NO <input type="checkbox"/>	The Bidder shall provide a screen shot demonstrating "Registered" status with IHSA as it pertains to COR™.

FORM OF TENDER

APPENDIX 'G' – BIDDER'S SUBMISSION CHECKLIST

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

1.0 Submission Checklist

The following checklist provides the Bidder with a consolidated listing of the requirements for the Submission. Bidders should review the checklist prior to Submission to ensure compliance.

Requirement	Confirmation (left click with your mouse in the box to select)
The Submission has been remitted by the E-Bid Authorized Signer.	<input type="checkbox"/>
Contact information for the individual responsible for the Submission has been included in the Form of Tender.	<input type="checkbox"/>
The Bidder understands the requirements for Electronic Bid Submission and will comply with the Submission requirements.	<input type="checkbox"/>
The Bidder's Submission has been prepared in accordance with the Instructions to Bidders (i.e. mandatory formats, templates and requirements) as outlined in the Tender Documents.	<input type="checkbox"/>
The Bidder's Price Submission has been completed in full and included with the Submission.	<input type="checkbox"/>
The Bidder has read through all the Tender Documents including any Addenda that have been issued and these have all been considered in your Submission.	<input type="checkbox"/>
The Bidder has reviewed the mandatory criteria and acknowledges that it meets all mandatory requirements in order for their Submission to be considered further.	<input type="checkbox"/>
The Bidder has reviewed the Tender Timetable and understands all the dates and timelines associated with the Tender Process	<input type="checkbox"/>
The Bidder has not included any qualifying statements in its Submission	<input type="checkbox"/>
If a Joint Venture, attach a copy of the Joint Venture agreement electing the Participant-in-Charge.	<input type="checkbox"/>

The "Agreement Between Owner and Contractor" of CCDC 4 2011 Unit Price Contract, is hereby amended as follows:

1.0 Article A-1 The Work

Paragraph 1.3 is amended as follows:

1.3 the words ", and attain *Total Performance of the Work* by the 22nd day of September in the year 2017" after the words "in the year 2017" in the third line of paragraph 1.3.

2.0 Article A-3 Contract Documents

Paragraph 3.1 is amended as follows:

3.1 Add the words "Supplementary Agreement Between Owner and Contractor
Supplementary Definitions of the *Contract*
Supplementary General Conditions of the *Contract*"
to the list of *Contract Documents* in paragraph 3.1.

3.0 Article A-6 Receipt Of And Addresses For Notices In Writing

Paragraph 6.1 is amended as follows:

6.1 Delete the words "or other form of electronic communication" from the second line of paragraph 6.1.

Delete the words "or other form of electronic communication" from the seventh line of paragraph 6.1.

Delete the words "email address" from the signature lines for the Owner, Contractor and Consultant in paragraph 6.1.

4.0 Article A-9 Severability

Add new Article A-9 as follows:

"ARTICLE A-9 SEVERABILITY

9.1 If any provision of this *Contract* is found to be invalid or unenforceable in any circumstances, the remainder of this *Contract*, and the application of such provision in any other circumstances, shall not be affected."

5.0 **Article A-10 Time Of Essence**

Add new Article A-10 as follows:

"ARTICLE A-10 TIME OF ESSENCE

10.1 Time shall be of the essence of the *Contract* and under all *Contract Documents*."

END OF SECTION

FORM OF AGREEMENT

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 1

1.0 Form of Agreement

The "Agreement Between Owner and Contractor" in CCDC 4 2011 Unit Price Contract is referred to herein as the Form of Agreement and shall constitute the form of agreement of this Contract in its entirety. CCDC 4 2011 is available for purchase at www.ccdc.org.

The Owner is: Metrolinx
97 Front Street, 2nd Floor
Toronto, Ontario
M5J 1E6

The Consultant is: Hatch Corporation
Contact: Philip Murray
2800 Speakman Drive
Mississauga, Ontario
L5K 2R7

The Work is: Reroute existing watermain and remove and replace storm sewer connection at 441 Carlingview Drive, Etobicoke. Install the new natural gas line inclusive of connection and modifying existing snow clearing devices to accept natural gas within the railway corridor at Scarboro street, Mississauga.

Contract No. IT-2016-CKU-085

Article A-1: Date of Commencement of Work: **July 7th, 2017**
Date of Substantial Performance of the Work: **September 8th**

, 2017

Date of Total Performance of the Work: **September 22nd, 2017**

Article A-2: Contract Documents:

This list of Contract Documents are the documents as listed in Appendix "A" of the Form of Tender, as completed and submitted by the Contractor, including any Addenda, and as accepted by Metrolinx.

END OF SECTION

SUPPLEMENTARY DEFINITIONS OF THE CONTRACT

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 1 OF 3

The "Definitions" of CCDC 4 2011 Unit Price Contract, are hereby amended as follows:

1.0 Contract Documents

1.1 Contract Documents is amended as follows:

1.1.1 Add the words "in writing" after the word "upon" in the second line of paragraph 6.

2.0 Contract Time

2.1 Contract Time is amended as follows:

2.1.1 Delete the word "*Substantial*" and substitute the word "*Total*" in the second line.

3.0 Submittals

3.1 Add new definition, Submittals, as follows:

"Submittals

Submittals are documents or items required by the *Contract Documents* to be provided by the *Contractor*, such as:

- *Shop Drawings*, samples, models, mock-ups to indicate details or characteristics, before the portion of the *Work* that they represent can be incorporated into the *Work*; and
- Record drawings and manuals to provide instructions for the operation and maintenance of the *Work*."

4.0 Total Performance of the Work

4.1 Add new definition, Total Performance of the Work, as follows:

"Total Performance of the Work

Total Performance of the Work means when the entire *Work*, except for those items arising from GC 12.3 – WARRANTY, has been performed in accordance with the requirements of the *Contract Documents* and is so certified by the *Consultant*."

SUPPLEMENTARY DEFINITIONS OF THE CONTRACT

KITCHENER CORRIDOR, WESTON SUBDIVISION CONSTRUCTION OF NATURAL GAS LINE AND SEWER CONNECTION IT-2016-CKU-085

PAGE 2 OF 3

5.0 Toxic and Hazardous Substances

5.1 Add new definition, Toxic and Hazardous Substances, as follows:

"Toxic and Hazardous Substances

Toxic and Hazardous Substances means, collectively, any contaminant, waste, subject waste, pollutant, toxic substance, dangerous goods, asbestos, petroleum, its derivatives, by-products or other hydrocarbons, as defined in or pursuant to any applicable laws, regulations, by-laws, guidelines or orders rendered by any governmental authority having jurisdiction or any other substance or material which, when released to, or present in, the natural environment, is likely to cause in some immediate or foreseeable future time, material harm or degradation of the natural environment or material risk to human health."

6.0 Railway

6.1 Add new definition, Railway, as follows:

"Railway

Railway or *Railways* means one or more of the Canadian National Railway Company, Canadian Pacific Railway Company, or The Toronto Terminals Railway Company Limited, owning or operating the *Railway Right-of-Way* on which all or part of the *Work* may be performed."

7.0 Paragraph 31 – Railway's Engineer

7.1 Add new definition, Railway's Engineer, as follows:

"Railway's Engineer

Railway's Engineer means the person designated as such by the applicable *Railway* or the *Owner*."

8.0 Railway Flag Person

8.1 Add new definition, Railway Flag Person, as follows:

"Railway Flag Person

Railway Flag Person means the person designated as such by the applicable *Railway* or the *Owner* to provide flagging services."

SUPPLEMENTARY DEFINITIONS OF THE CONTRACT

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

PAGE 3 OF 3

9.0 Railway Right-of-Way

9.1 Add new definition, Railway Right-of-Way, as follows:

“Railway Right-of-Way

Railway Right-of-Way means the land, property, trackage, equipment and facilities of the *Railway*, including main tracks, side tracks, branch lines, yards and terminals owned or controlled by the *Railway* or the *Owner*.”

END OF SECTION

DEFINITIONS OF THE CONTRACT

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

PAGE 1 OF 1

1.0 Definitions of the Contract

- 1.1 The "Definitions" of CCDC 4 2011 Unit Price Contract shall constitute the Definitions of the Contract in their entirety as amended by the Supplementary Definitions herein. CCDC 4 2011 can be purchased at www.ccdc.org.

END OF SECTION

The "General Conditions of the CCDC 4 2011 - Unit Price Contract, are hereby amended as follows:

2.0 GC 1.1 - Contract Documents

2.1 Paragraph 1.1.7.1 is amended as follows:

Add the words "- Supplementary Agreement Between Owner and Contractor" at the beginning of the order of priority of documents in paragraph 1.1.7.1.

Add the words "- Supplementary Definitions of the Contract" above the words "the Definitions" in the order of priority of documents in paragraph 1.1.7.1.

2.2 Paragraph 1.1.7.5, add new paragraph as follows:

"1.1.7.5 In case of discrepancies, noted materials and annotations shall take precedence over graphic indications in the *Contract Documents*."

2.3 Paragraph 1.1.11, add new paragraph as follows:

"1.1.11 Subject to paragraph 1.1.9, all surveys, reports, drawings, calculations, designs, plan, specifications and other data, information, materials, collected, compiled, drawn or produced, including computer printouts, pursuant to the *Contract* are the property of the *Owner*. The *Contractor* shall transfer the copyright, including an express waiver and release of all moral rights, of all *Drawings*, plans, *Specifications*, models, photos, and other written or graphic materials produced under the *Contract* to the *Owner* which will be free to use them as it sees fit. Any waiver or release obtained under this clause may include a reasonable exclusion of liability regarding the use of materials for other projects. In the event of any dispute or disagreement pertaining to the *Work* between the *Owner* and the *Contractor*, the *Owner* will have the unqualified right and license to use the design as it may have evolved from time to time and any *Drawings*, *Specifications*, documents, materials of any nature and kind which may now or hereafter exist and which the *Contractor* may have any right, title, interest or copyright for the purpose of completing the design and construction of the *Work* for which they were prepared."

1.4 Paragraph 1.1.13, add new paragraph as follows:

“1.1.13 Wherever in the *Contract Documents* items are noted as “N.I.C.” (“Not In Contract”) the *Owner* will provide such items either during or after the *Contract Time*. The *Contractor* shall accommodate the entry of such items into the *Work* when N.I.C. items are delivered to the *Place of the Work*.”

3.0 GC 1.2 - Law Of The Contract

3.1 Delete paragraph 1.2.1 in its entirety and replace with new paragraph 1.2.1 as follows:

“1.2.1 This *Contract* shall be governed by the laws of the Province of Ontario.”

4.0 GC 1.3 – Rights and Remedies

4.1 Add new paragraph 1.3.3 as follows:

“1.3.3 Notwithstanding paragraph 1.3.1, the *Owner* shall not be liable, whether in contract, tort or any other theory of law, for any claim arising from any prior negotiation, representation, or agreement, whether written or oral, which is superseded by the *Contract* under Article A-2 of the Agreement – Agreements and Amendments.”

5.0 GC 1.5 – Advertising and Public Notices

5.1 Add new GC 1.5 – Advertising and Public Notices as follows:

“GC 1.5 – ADVERTISING AND PUBLIC NOTICES

1.5.1 The *Contractor* will obtain the *Owner’s* prior written approval for any public advertising, written public sales promotions, press release or other general publicity matter, in which the name or trademarks of the *Owner* or any *Railway* are mentioned or used or in which words are used from which any connection with the *Owner* or any *Railway* or their trademarks may be inferred. The *Contractor* will not allow or permit any public ceremony in connection with the *Work* without the prior written permission of the *Owner*. The *Contractor* will not erect or permit the erection of any sign or advertising without the prior written approval of the *Owner*.”

6.0 GC 1.6 – Confidential Information

6.1 Add new GC 1.6 - CONFIDENTIAL INFORMATION as follows:

“GC 1.6 – CONFIDENTIAL INFORMATION

1.6.1 The *Contractor* shall not disclose or provide any technical, business, financial, operational, scientific, or any other information or data obtained by the *Contractor* during the course of the *Work* to third parties who do not require that information or data to complete any portion of the *Work* and who are not authorized by the *Owner* to receive, or have access to, such confidential information.”

7.0 GC 1.7 - Maintenance Of Records And Audit Rights

7.1 Add new GC 1.7 - MAINTENANCE OF RECORDS AND AUDIT RIGHTS as follows:

“GC 1.7 - MAINTENANCE OF RECORDS AND AUDIT RIGHTS

1.7.1 The Contractor shall maintain complete and accurate books, records, accounts and invoices in relation to the Contract and shall grant the Owner, full audit rights in respect of all said books, records, accounts and invoices relating to the performance of the Work.”

8.0 GC 1.8 – Further Assurances

8.1 Add a new GC 1.8 - FURTHER ASSURANCES as follows:

“GC 1.8 - FURTHER ASSURANCES

1.8.1 Each party agrees that it shall at any time and from time to time, at its own expense, execute and deliver such further documents and do such further acts and things as the other party may reasonably request for the purpose of giving effect to the *Contract* or carrying out the intention of facilitating the performance of the *Contract*.

1.8.2 Without limiting the generality of paragraph 1.8.1 and notwithstanding any other provisions of the *Contract*, the *Contractor* acknowledges that it may, from time to time during the *Contract Time*, be requested to provide its agreement to indemnify, or to directly indemnify third parties for any liability, damages or claims which may arise in connection with the performance of the *Work* and as a result of the acts or omissions of the *Contractor* or those persons or entities for who it is responsible at law, and the *Contractor* shall reasonably cooperate with the *Owner* and

shall execute and deliver such documents and agreements as may be required and requested by the *Owner*."

9.0 GC 2.2 – Role of the Consultant

9.1 Paragraph 2.2.6 is amended as follows:

1.1.1 Add the words "schedules" after the word "techniques," in the second line of paragraph 2.2.6.

9.2 Paragraph 2.2.7 is amended as follows:

1.1.2 Delete the words "Except with respect to GC 5.1 – FINANCING INFORMATION REQUIRED FOR THE OWNER, the" and substitute the word "The" at the beginning of the paragraph 2.2.7.

9.3 Paragraph 2.2.14 is amended as follows:

1.1.3 Delete the word "submittals," and substitute the words "*Submittals* which are provided" after the word "*Contractor's*" in the first line of paragraph 2.2.14.

9.4 Add new paragraph 2.2.19 as follows:

"2.2.19 The *Consultant* will conduct reviews of the *Work* to determine the date of *Total Performance of the Work*."

10.0 GC 2.3 – Review and Inspection of the Work

10.1 Add new paragraph 2.3.8 as follows:

"2.3.8 The *Contractor* shall immediately inform the *Owner* and the *Consultant* of any notices, warnings or asserted violations issued by any regulatory or government agencies having jurisdiction relating to the *Work*."

10.2 Add new paragraph 2.3.9 as follows:

"2.3.9 No review of the *Work* by the *Owner* or the *Consultant* shall relieve the *Contractor* from its responsibility to perform the *Work* in accordance with the Contract Documents."

10.3 Add new paragraph 2.3.10 as follows:

"2.3.10 Where standards of performance are specified in the Contract Documents and the *Work* does not comply with the performance

specified, such deficiency shall be corrected as directed by the Consultant. Any testing of work identified as defective in accordance with GC 2.4, including retesting required by the Owner to verify performance, shall be done at the Contractor's expense."

11.0 GC 2.4 - Defective Work

11.1 Paragraph 2.4.1 is amended as follows:

"2.4.1 Add the words "If the said defective work was in any way identified as a result of, or during the course of, an inspection by the Owner, the Contractor shall reimburse the Owner in full for any costs or expenses incurred by the Owner in respect of, or as a result of, the inspection."

11.2 Paragraph 2.4.3 is amended as follows:

2.4.3 Delete the words "the difference in value between the work as performed and that called for by" and substitute the words "the value of such work as is necessary to correct any non-compliance with" in the second and third lines of paragraph 2.4.3.

12.0 GC 3.1 - Control Of The Work

12.1 Paragraph 3.1.2 is amended as follows:

1.1.4 Add the word "schedules" after the word "techniques" in the first line of paragraph 3.1.2.

12.2 Add new paragraph 3.1.3 as follows:

"3.1.3 Notwithstanding paragraphs 3.1.1 and 3.1.2, the Contractor agrees that it shall fully comply with all policies and procedures of the Owner which are relevant to any activity of the Contractor to be performed under the Contract. The Contractor further agrees that it will use reasonable efforts to inquire from the Owner if such policies or procedures exist which are relevant to any activity of the Contractor to be performed under the Contract. The Owner agrees that it will use reasonable efforts to communicate to the Contractor all policies or procedures it may have which are relevant to any such activity."

12.3 Add new paragraph 3.1.4 as follows:

"3.1.4 Prior to commencing individual procurement, fabrication and construction activities, the Contractor shall verify, at the Place of the

Work, all relevant measurements and levels necessary for proper and complete fabrication, assembly and installation of the Work and shall further carefully compare such field measurements and conditions with the requirements of the Contract Documents. Where dimensions are not included or exact locations are not apparent, the Contractor shall immediately notify the Consultant in writing and obtain written instructions from the Consultant before proceeding with any part of the affected work.”

13.0 GC 3.4 - Document Review

13.1 Paragraph 3.4.1 is amended as follows:

“3.4.1 Delete the words “be to the best of the Contractor’s knowledge, information and belief and in making such review” and substitute the words “comply with the standard of care described in paragraph 3.15.1 of the Contract. Except for its obligation to make such review and report the result,” in the second and third lines of paragraph 3.4.1.

Delete the word “review” and substitute the words “Contract Documents” in the fourth line of paragraph 3.4.1.

Delete the words “did not discover” and substitute the words “could not reasonably have discovered” in the fifth line of paragraph 3.4.1.

13.2 Add new paragraph 3.4.2 as follows:

“3.4.2 If the Contractor finds discrepancies in or omissions from the Contract Documents or has any doubt as to the meaning or intent of any part thereof, the Contractor shall immediately notify the Consultant, who will provide written instructions or explanations. Neither the Owner nor the Consultant will be responsible for oral instructions.”

14.0 GC 3.5 – Construction Schedule

14.1 Paragraph 3.5.1.1 is amended as follows:

3.5.1.1 Delete the words “prior to the first application for payment” and substitute the words “within five (5) *Working Days* of the date that the Agreement between the *Owner* and the *Contractor* has been fully executed by the *Owner*.” in the first line of paragraph 3.5.1.1.

14.2 Add new paragraph 3.5.2 as follows:

“3.5.2 If the *Contract Price* is greater than \$500,000.00, the schedule shall be prepared using the critical path method and the *Contractor* shall submit with the schedule a Gantt Chart (a list of tasks and related information, including duration, with a bar type chart showing tasks and durations over time) and a PERT Chart (a network diagram showing all tasks and task dependencies).”

15.0 GC 3.6 – Supervisor

15.1 Add new paragraph 3.6.3 as follows:

“3.6.3 The *Contractor* shall provide the *Owner* and the *Consultant* with the name, address, and telephone number of the representative referred to in paragraph 3.6.1 and other responsible persons who may be contacted for emergency and other reasons during non-working hours throughout the course of the *Work*.”

15.2 Add new paragraph 3.6.4 as follows:

“3.6.4 The *Owner* may, at any time, for reasonable cause, object to the representative referred to in paragraph 3.6.1 and require the *Contractor* to dismiss and replace the said representative.”

16.0 GC 3.7 – Subcontracts and Suppliers

16.1 Add new paragraph 3.7.1.4 as follows:

“3.7.1.4 ensure that the *Contractor*, all *Subcontractors* and *Suppliers*, and anyone employed or engaged by them directly or indirectly, have the qualifications, technical skills, levels of experience and knowledge required, and all applicable permits, licences and approvals necessary, to discharge the work to be performed by them in accordance with the terms of the *Contract*.”

16.2 Add new paragraph 3.7.7 as follows:

“3.7.7 Subcontracting shall be conducted in a manner consistent with the principles of open, fair and transparent procurement.”

16.3 Add new paragraph 3.7.8 as follows:

“3.7.8 In the event that the *Contractor* reasonably wishes to change any of the *Subcontractors* or *Suppliers*, the *Contractor* shall advise the *Owner* in writing, giving the *Contractor's* reasons for the change. No change

of *Subcontractors* or *Suppliers* may be made without the prior written approval of the *Owner*."

16.4 Add new paragraph 3.7.9 as follows:

"3.7.9 The *Contractor* shall not be entitled to compensation by the *Owner* or any extension to the *Contract Time* arising out of, or in any way relating to, any breach of contract or failure to perform work by any *Subcontractor* or *Supplier* for any reason, including but not limited to, the insolvency or bankruptcy of the *Subcontractor* or *Supplier*, even though the *Subcontractor* or *Supplier* may have been designated or pre-qualified by the *Owner* or the *Consultant*."

17.0 GC 3.8 - Labour And Products

17.1 Paragraph 3.8.3 is amended as follows:

3.8.3 Add the words "and qualified" after the word "skilled" in the first line of paragraph 3.8.3.

17.2 Add new paragraphs 3.8.4 as follows:

"3.8.4 The *Owner* may at any time, for reasonable cause, require the *Contractor* to promptly remove from the *Place of the Work* any employee of the *Contractor* as well as any *Subcontractor* or employee of any *Subcontractor*."

17.3 Add new paragraphs 3.8.5 as follows:

"3.8.5 The *Contractor* is responsible for the safe on-site storage of *Products* and their protection (including *Products* supplied by the *Owner* and other contractors to be installed under the *Contract*) in such ways as to avoid dangerous conditions or contamination to the *Products* or other persons or property and in locations at the *Place of the Work* to the satisfaction of the *Owner* and the *Consultant*. The *Owner* shall provide all relevant information to the *Contractor* in relation to the *Products* to be supplied by the *Owner*."

17.4 Add new paragraph 3.8.6 as follows:

"3.8.6 The *Contractor* shall ensure that all *Products* are of good quality, fit for their intended purpose and maintained in a safe, serviceable condition in accordance with this *Contract* and good industry practice."

18.0 GC 3.10 - Shop Drawings and Other Submittals

18.1 Add the words "And Other Submittals" to the end of the heading for GC 3.10 – SHOP DRAWINGS

18.2 Paragraphs 3.10.1, 3.10.2, 3.10.3, 3.10.4, 3.10.7, 3.10.8, 3.10.9, 3.10.10 and 3.10.11 are amended as follows:

Add the words "and *Submittals*" after the words "*Shop Drawings*" in paragraphs 3.10.1, 3.10.2, 3.10.3, 3.10.4, 3.10.7, 3.10.8, 3.10.9, 3.10.10 and 3.10.11.

18.3 Paragraph 3.10.8.2 is amended as follows:

Add the words "and *Submittal*" after the words "*Shop Drawing*" in the first line of paragraph 3.10.8.2.

19.0 GC 3.11 - Use Of The Work

19.1 Paragraph 3.11.1 is amended as follows:

Add the words "the *Owner's* reasonable instructions," after the word "permits," in the second line of paragraph 3.11.1.

19.2 Add new paragraph 3.11.3 as follows:

"3.11.3 Subject to paragraph 9.4.6 of GC 9.4 - CONSTRUCTION SAFETY, The *Owner* shall have the right to enter and occupy the *Place of the Work* in whole or in part for the purpose of placing materials, fittings, and equipment, or for any other use at any time before completion of the *Contract* if, in the reasonable opinion of the *Consultant*, such entry and occupation does not prevent or interfere with the *Contractor* in achieving *Substantial Performance of the Work* within the *Contract Time* stipulated in the *Contract*."

19.3 Add new paragraph 3.11.4 as follows:

"3.11.4 No entry or occupation by the *Owner* as referenced in paragraph 3.11.3 shall constitute or be considered as acceptance of the *Work* in whole or in part, or in any way relieve the *Contractor* of its responsibility to complete the *Contract*."

20.0 GC 3.14 – Interference

20.1 Add new GC 3.14 - INTERFERENCE as follows:

“GC 3.14 - INTERFERENCE

3.14.1 If the *Work*, in whole or in part, involves the renovation of, or addition to, existing and occupied premises:

.1 the *Contractor* shall maintain normal business operations and traffic flow, with a minimum of inconvenience to the tenants and occupants of the *Place of the Work*;

.2 subject to the provisions of the *Contract Documents*, the *Contractor* shall ensure that no essential services such as electric power, water supply or other public utilities are interrupted;

.3 in every case where an interruption to existing services or utilities is to occur during execution of the *Work*, the *Contractor* shall give the *Owner* five (5) working days prior written notice. The *Contractor* shall reschedule any such interruption if requested to do so in writing by the *Owner*, and

.4 any work by the *Contractor* that generates excessive noise shall be subject to the restrictions set out elsewhere in the *Contract Documents*.”

21.0 **GC 3.15 – Performance by Contractor**

21.1 Add new GC 3.15 – PERFORMANCE BY CONTRACTOR as follows:

“GC 3.15 – Performance by Contractor

3.15.1 In performing its services and obligations under the *Contract*, the *Contractor* shall exercise a standard of care, skill and diligence that would normally be provided by an experienced and prudent contractor supplying similar services for similar projects. The *Contractor* acknowledges and agrees that throughout the *Contract*, the *Contractor’s* obligations, duties and responsibilities shall be interpreted in accordance with this standard. The *Contractor* shall exercise the same standard of due care and diligence in respect of any *Products*, personnel, or procedures which it may recommend to the *Owner*.

3.15.2 The *Contractor* further represents, covenants and warrants to the *Owner* that:

.1 the personnel it assigns are appropriately experienced and qualified;

- .2 it has a sufficient staff of qualified and competent personnel to replace its designated supervisor and project manager, subject the *Owner's* approval, in the event of death, incapacity, removal or resignation; and
- .3 there are no pending, threatened, or anticipated claims that would have a material effect on the financial ability of the *Contractor* to perform its work under the *Contract*."

22.0 PART 4 – ALLOWANCES AND PROVISION ITEMS

- 22.1 Add the words "AND PROVISIONAL ITEMS" to the end of the heading for PART 4 – ALLOWANCES.

23.0 GC 4.3 – Provisional Items

- 23.1 Add new GC 4.3 – PROVISIONAL ITEMS as follows:

"GC 4.3 – Provisional Items

- 4.3.1 The Contract Price includes the Provisional Items, if any, stated in the Contract Documents.
- 4.3.2 The Provisional Items shall be authorized individually in writing by the Owner through the Consultant. The Contractor shall not proceed with any Provisional Item without such prior written authorization.
- 4.3.3 The prices stated for any and all items identified as "Provisional Items" in Appendix "B" of Form of Tender shall be for the completed Work "in place" and shall be inclusive of all costs related thereto including, but not necessarily limited to, all overhead, profit and applicable taxes, except Harmonized Sales Tax, unless otherwise specified by the Owner. In the event the Owner decides, in its sole discretion, not to proceed with any or all of the identified Provisional Items, the Contract Price shall be adjusted by the Extended Price for the applicable Item No.'s stated in Appendix "B" – Provisional Items of Form of Tender for such Provisional Item(s)
- 4.3.4 In the event changes are made to the stated estimated quantities for a Provisional Item, the Extended Price for that Provisional Item as stated in Article A-3 Contract Price of the Agreement Between Owner and Contractor shall be adjusted based on the actual quantity of work performed and the Contract Unit Price for that Provisional Item."

24.0 **GC 5.1 - Financing Information Required Of The Owner**

24.1 Delete paragraphs 5.1.1 and 5.1.2 in their entirety.

25.0 **GC 5.2 - Applications For Progress Payment**

25.1 Add new Paragraph 5.2.8 as follows:

“5.2.8 The *Contractor* shall submit, with each application for progress payment after the first, a Statutory Declaration, on an original form of CCDC Document 9A-2001 Statutory Declaration of Progress Payment Distribution by Contractor, stating that payments in connection with the *Work*, as noted in the Statutory Declaration, have been made to the end of the period immediately preceding that covered by the current application and, if requested by the *Owner*, a Statutory Declaration from any *Subcontractor*, as may be identified by the Owner, on an original form of CCDC Document 9B-2001 Statutory Declaration of Progress Payment Distribution by Subcontractor. The Statutory Declarations shall be dated the same date as the *Contractor's* application for payment.”

25.2 Add new paragraph 5.2.9 as follows:

“5.2.9 The *Contractor* shall prepare and maintain current as-built drawings which shall consist of the *Drawings* and *Specifications* revised by the *Contractor* during the *Work*, showing changes to the *Drawings* and *Specifications*, including but not limited to architectural, structural, mechanical, electrical, cabling, *Shop Drawings*, single-line diagrams and any other graphical representations, and shall be maintained by the *Contractor* and made available to the *Consultant* for review with each application for progress payment.”

26.0 **GC 5.3 - Progress Payment**

26.1 Delete paragraph 5.3.1.3 in its entirety and replace with new paragraph 5.3.1.3 as follows:

“5.3.1.3 the *Owner* shall make payment to the *Contractor* on account as provided in Article A-5 of the Agreement – Payment no later than fifteen (15) days after the date of issuance by the *Consultant* of a certificate for payment.”

26.2 Add new paragraph 5.3.2 as follows:

“5.3.2 Certificates for payment may provide for retention of amounts as determined by the *Consultant* to ensure correction or replacement of deficient work done or unacceptable product provided.”

27.0 GC 5.5 - Payment Of Holdback Upon Substantial Performance Of The Work

27.1 Paragraph 5.5.1.2 is amended as follows:

5.5.1.2 Add the words “and, if requested by the *Owner*, as Statutory Declaration from any *Subcontractor*, as may be identified by the *Owner*, on an original form of CCDC Document 9B – 2001 Statutory Declaration of Progress Payment Distribution by Subcontractor.”

27.2 Paragraph 5.5.3 is deleted in its entirety.

28.0 GC 5.7 – Final Payment

28.1 Paragraph 5.7.1 is amended as follows:

28.1.1 Delete the words “is completed” and substitute the words “has been totally performed” in the first line of paragraph 5.7.1.

28.1.2 Add the words “, together with a written application for review by the *Consultant* to establish *Total Performance of the Work*.” After the word “payment” at the end of paragraph 5.7.1.

28.2 Paragraph 5.7.2 is amended as follows:

28.2.1 Delete the words “and advise the *Contractor* in writing that the application is valid or give reasons why it is not valid” and substitute the words “and:

- .1 advise the *Contractor* in writing that the *Work* is not totally performed and give reasons why, or
- .2 state the date of *Total Performance of the Work* in a certificate and issue a copy of that certificate to each of the *Owner* and the *Contractor*.”

at the end of paragraph 5.7.2.

28.3 Paragraph 5.7.3 is amended as follows:

Delete the words "finds the *Contractor's* application for final payment valid" and substitute the words "issues the certificate of *Total Performance of the Work*" in the first line of paragraph 5.7.3.

28.4 Paragraph 5.7.4 is amended as follows:

Delete the number "5" and substitute "fifteen (15)" in the second line of paragraph 5.7.4.

28.5 Add new paragraph 5.7.6 as follows:

"5.7.6 The *Contractor* shall submit to the *Consultant*, with the application for final payment, the following documentation:

- .1 all closeout documentation required by the *Contract Documents*, including but not limited to, warranties, manuals, guarantees, as-built drawings and all other relevant literature from *Suppliers* and manufacturers including, but not limited to:
 - (a) equipment, maintenance and operations manuals;
 - (b) equipment specifications, data sheets and brochures, parts lists and assembly drawings, performance curves and other related data;
 - (c) line drawings, value charts and control sequences with description of the sequence of operations;
 - (d) warranty documents;
 - (e) service and maintenance reports as applicable;
 - (f) specifications; and
 - (g) HVAC balance reports.
- .2 a Statutory Declaration, on an original form of CCDC Document 9A – 2001, stating that payments in connection with the *Work*, as noted in the statutory declaration, have been made to the end of the period immediately preceding that covered by the application for final payment and, if requested by the *Owner*, as Statutory Declaration from any *Subcontractor*, as may be identified by the *Owner*, on an original form of CCDC Document 9B – 2001 Statutory Declaration of Progress Payment Distribution by Subcontractor."

29.0 **GC 5.10 - Claims For Lien**

29.1 Add new GC 5.10 - CLAIMS FOR LIEN as follows:

“GC 5.10 – Claims for Lien

5.10.1 The *Contractor* shall cause any and all construction liens and certificates of action relating to the *Work* registered or preserved by any *Subcontractor, Supplier, Contractor’s* employees, or any other party to whom the *Contractor* is or may be responsible at law, to be discharged or vacated by the *Contractor* with seven (7) *Working Days* of the date of registration or reservation, all at the *Contractor’s* sole expense. The *Contractor* shall not be entitled to receive any payment from the *Owner* until all such claims for lien and certificates of action have been vacated or discharged.

5.10.2 The *Contractor* shall cause any and all written notices of lien relating to the *Work* given to any person, including, but not limited to, the *Owner* by any *Subcontractor, sub-subcontractor, Supplier, Contractor’s* employees, or any party to whom the *Contractor* is or may be responsible at law, to be withdrawn, and the *Contractor* shall do so within seven (7) *Working Days* of the written notice of lien having been given, all at the *Contractor’s* sole expense.

5.10.3 If the *Contractor* fails to discharge or vacate any such lien or certificate of action, or to have any such written notice of lien withdrawn, then the *Owner* may, at its sole option, do so and set off and deduct from any amount owing to the *Contractor*, all costs and expenses of so doing, and of defending any related action, including without limitation, the costs of borrowing the appropriate cash, letter of credit or bond as security, and legal fees and disbursements on a full indemnity basis. If there is no amount owing by the *Owner* to the *Contractor*, then the *Contractor* shall reimburse the *Owner* for all of the said costs and expenses of so doing.”

30.0 **GC 5.11 – Records and Audit**

30.1 Add new paragraph 5.11 – RECORDS AND AUDIT as follows:

“GC 5.11 – Records and Audit

5.11.1 The *Owner* may inspect and audit the books, payrolls, accounts and records for the *Contractor* at any time as deemed necessary by the *Owner* prior to the date of Final Certificate for Payment and thereafter for a period of two (2) years to verify the *Contractor’s* estimates and valuation of changes in the *Work* and claims, and the *Contractor* shall

supply certified copies of books, payrolls, accounts and other records to the *Owner* or access to same as required by the *Owner*.

5.11.2 If the *Contractor* fails to keep adequate records to document the estimate or valuation of a change in the *Work* or claim or fails to provide certified copies or access to such records when requested, the *Contractor* shall forfeit all right to payment for the change in the *Work* or claim which it may otherwise have had. Any amount already paid by the *Owner* in respect of such change in *Work*, or claim, shall become immediately repayable to the *Owner* on demand for same."

31.0 GC 6.1 - Owner's Right To Make Changes

31.1 Add new paragraph 6.1.3 as follows:

"6.1.3 For the purpose of valuing cash allowances pursuant to paragraph 4.1.4, contingency allowances pursuant to paragraph 4.2.2, changes which result in an increase in the *Contract Price*, and any other items under the *Contract Documents* which provide for payment to the *Contractor* of overhead and profit, allowances for overhead and profit shall be included as follows:

.1 *Contractor's* mark-up on work and services completed by its own forces shall be 10% overhead and 10% profit, and on work and services completed by its *Subcontractors* shall be 5% for combined overhead and profit.

.2 *Subcontractors* mark-up on work and services completed by their own forces shall be 10% overhead and 10% profit and on work and services completed by their subcontractors shall be 5% for combined overhead and profit."

32.0 GC 6.2 – Change Order

32.1 Paragraph 6.2.1 is amended as follows:

Delete the words "promptly present," and substitute the words ", within five (5) *Working Days* of receiving the written description, present" in the second line of paragraph 6.2.1.

32.2 Add new paragraph 6.2.4 as follows:

"6.2.4 When the *Contractor* submits an invoice from a *Subcontractor* or *Supplier* as part of its detailed breakdown of the cost of a change, as

may be required by GC 6.2 CHANGE ORDER or GC 6.3 CHANGE DIRECTIVE, the *Contractor* is deemed to represent and warrant to the *Owner* that the amount shown on the invoice is the amount that the *Contractor* is liable to pay for the services and materials described in the invoice, net of all discounts, unless the *Contractor* indicates otherwise when submitting its detailed breakdown. When the *Contractor* submits an estimate or quotation from a *Subcontractor* or *Supplier* as part of its detailed breakdown of the estimated cost of a change, the *Contractor* is deemed to represent and warrant to the *Owner* that, subject to any qualifications on the face of the estimate or quotation and any qualifications made by the *Contractor* within the detailed breakdown, that the amount set out in the estimate or quotation is the amount the *Contractor* has agreed to pay should the *Contractor* be authorized to proceed with the change, net of all discounts. Notwithstanding the foregoing, the *Contractor* shall be entitled to take a commercially reasonable early payment discount (if offered) when the *Contractor* pays its *Subcontractor* or *Supplier* prior to receiving payment from the *Owner*."

33.0 GC 6.4 - Concealed Or Unknown Conditions

33.1 Add new paragraph 6.4.5 as follows:

"6.4.5 The *Contractor* confirms that, prior to bidding, it carefully investigated the character of the *Work*, the *Place of the Work*, and all local conditions which might affect its obligations and that it has satisfied itself as to the nature and extent of the *Work*, the *Contract Documents* and the *Contract* and as to the facilities and difficulties in attending and completing the execution of the *Work*. The *Owner* shall, upon written request, co-operate with, and provide reasonable assistance to, the *Contractor* during such investigations. The *Contractor* confirms that it has applied to its investigations as aforesaid the degree of care and skill described in paragraph 3.15.1, given the amount of time provided between the issuance of the bid documents and the actual closing of bids, and the degree of access provided to the *Contractor* prior to submission of bids. The *Contractor* is not entitled to compensation or to an extension of the *Contract Time* for conditions which could reasonably have been ascertained by the *Contractor* by such careful investigation undertaken prior to the submission of its bid."

33.2 Add new paragraph 6.4.6 as follows:

"6.4.6 To the extent the *Contractor* has not investigated as referenced in paragraph 6.4.5, the *Contractor* willingly assumes responsibility for all

losses, damages, costs, expenses (including all legal costs on a full indemnity basis), liabilities, claims, actions, and demands, whether arising under statute, contract or at common law, which such investigations might have avoided or reduced and shall indemnify and save harmless the *Owner* from all risk which might make it more onerous and more expensive to fulfill or perform the *Work* than was contemplated or known when the *Contract* was signed, and for any and all liability, responsibility and obligations which the *Owner* may have to any third parties resulting from any failure to investigate."

33.3 Add new paragraph 6.4.7 as follows:

"6.4.7 If the finding made pursuant to paragraph 6.4.2 is that the subsurface or otherwise concealed physical conditions differ materially and this would cause an increase or decrease in the *Contractor's* cost or time to perform the *Work*, and if the said conditions were otherwise discoverable by the *Contractor* in the proper performance of its duties and obligations under the *Contract*, all costs and expenses resulting from any delay (excluding, for clarity, the direct cost of remediating the said conditions) in the completion of the *Work* that is caused, or contributed to, as a result of the said conditions, will be borne by the *Contractor*."

34.0 GC 6.5 - Delays

34.1 Paragraph 6.5.1 is amended as follows:

Add the words "but excluding any consequential, incidental, indirect or special damages including, without limitation, loss of profits, loss of opportunity or loss of productivity resulting from such delay" after the word "delay" at the end of paragraph 6.5.1.

34.2 Add new paragraph 6.5.6 as follows:

"6.5.6 If the *Contractor* is delayed in the performance of the *Work* by an act or omission of the *Contractor*, any *Subcontractor*, or anyone employed or engaged by them, directly or indirectly, or by any cause within the *Contractor's* control, the *Contractor* shall devote such additional resources and take all steps necessary (all at the *Contractor's* own cost and expense), to ensure that the date for attaining *Substantial Performance of the Work* and *Total Performance of the Work* under the *Contract*, as may have been amended in accordance with the provisions of Part 6 of the General Conditions – Changes in the Work, is met."

35.0 **GC 6.7 – Quantity Variations**

35.1 Paragraph 6.7.2 is amended as follows:

Delete the words “or falls short of” in the second line of paragraph 6.7.2.

35.2 Delete paragraph 6.7.4 in its entirety and replace with new paragraph 6.7.4 as follows:

“6.7.4 In the case where the actual quantity is less than the estimated quantity by more than 15% the *Contractor* shall be compensated for the actual Work performed based on the original Contract Unit Price for that item. The *Contractor* will be entitled to a combined allowance equal to 20% of the Contract Unit Price, which shall be comprised of an allowance of 10% for profit and an allowance of 10% for overhead, on the amount of the underrun in excess of 15% of the estimated quantity. The underrun shall be defined as the difference between the estimated quantity and the actual work performed.”

36.0 **GC 7.1 - Owner’s Right To Perform The Work, Suspend the Work, Terminate The Contractor’s Right To Continue With The Work Or Terminate The Contract**

36.1 Add the words “Suspend” after the word “Work” in the first line of the heading for GC 7.1.

36.2 Add new paragraph 7.1.7 as follows:

“7.1.7 The *Owner* may, if conditions arise which make it necessary for reasons other than as provided in paragraphs 7.1.1 and 7.1.4, suspend performance of the *Work*, terminate the *Contractor’s* right to continue with the *Work* or terminate the *Contract*, in whole or in part, by giving *Notice in Writing* to that effect to the *Contractor*. Such suspension or termination shall be effective in the manner specified in said notice and shall be without prejudice to any claims which either party may have against the other. The *Owner’s* entitlement to so terminate or suspend shall be absolute and unconditional and exercisable by the *Owner* in its sole discretion.”

36.3 Add new paragraph 7.1.8 as follows:

“7.1.8 The *Contractor* upon receiving notice of suspension or termination from the *Owner* shall suspend all operations as soon as reasonably possible except for work which, in the *Contractor’s* opinion, is necessary for the safety of personnel and for the care and preservation of the *Work*, the materials and plant. Subject to any directions in the notice of

suspension or termination, the *Contractor* shall discontinue ordering materials, facilities, and supplies and make every reasonable effort to delay delivery of existing orders and, in the event of termination, to cancel existing orders on the best terms available."

36.4 Add new paragraph 7.1.9 as follows:

"7.1.9 During any period of suspension, the *Contractor* shall not remove from the site any part of the *Work*, or any *Product* or materials without the consent of the *Owner*."

36.5 Add new paragraph 7.1.10 as follows:

"7.1.10 If the *Work* should be suspended for a period of sixty (60) consecutive calendar days or less, the *Contractor*, upon the expiration of the period of suspension, shall resume the performance of the *Work* in accordance with the *Contract Documents*. If the suspension was not due to an act or omission of the *Contractor*, the *Contract Price* and *Contract Time* shall be adjusted as provided in paragraph 6.5.1 of GC 6.5 - Delays."

36.6 Add new paragraph 7.1.11 as follows:

"7.1.11 If after sixty (60) consecutive calendar days from the date of notice of suspension of the *Work*, the *Owner* and the *Contractor* agree to continue with and complete the *Work*, the *Contractor* shall resume operations and complete the *Work* in accordance with any terms and conditions agreed upon by the *Owner* and the *Contractor*. Failing such an agreement, the provisions of paragraph 7.2.2 shall become applicable."

36.7 Add new paragraph 7.1.12 as follows:

"7.1.12 If the *Owner* terminates the *Contract* pursuant to paragraph 7.1.7, the *Contractor* shall only be entitled to receive payment for all work performed up to the date of termination as certified by the *Consultant* and the direct costs associated with the termination incurred by the *Contractor*, including the costs of the demobilization, losses sustained on *Products* and *Construction Equipment* and *Subcontractor* and sub-subcontractor cancellation costs (which costs shall not include loss of profit claims) reasonably incurred by the *Contractor*. The *Contractor* shall not be entitled to any additional reimbursement on account of the termination including, without limitation, indirect, incidental, special, consequential or other damages, including loss of profits, notwithstanding any other provision of the *Contract Documents*."

37.0 GC 7.2 - Contractor's Right To Suspend The Work Or Terminate The Contract

37.1 Paragraph 7.2.2 is amended as follows:

Delete the words "*20 Working Days*" and substitute the words "sixty (60) consecutive calendar days" in the first line of paragraph 7.2.2.

37.2 Delete paragraph 7.2.3.1 in its entirety.

37.3 Paragraph 7.2.3.3 is amended as follows:

Add the words ", except where the *Owner* has a claim against the *Contractor* for set-off," after the word "*Consultant*" in paragraph 7.2.3.3.

37.4 Paragraph 7.2.3.4 is amended as follows:

Delete the words ", except for GC 5.1 – FINANCING INFORMATION REQUIRED OF THE OWNER," from the first and second lines of paragraph 7.2.3.4.

37.5 Paragraph 7.2.5:

Delete paragraph 7.2.5 in its entirety and replace with new paragraph 7.2.5 as follows:

"7.2.5 If the *Contractor* terminates the *Contract* under the conditions set out above, the *Contractor* shall be entitled to be paid for all work performed to the date of termination. The *Contractor* shall also be entitled to recover the direct costs associated with termination, including the costs of demobilization, and losses sustained on *Products* and *Construction Equipment*. The *Contractor* shall not be entitled to any additional reimbursement on account of any such termination including, without limitation, indirect, incidental, special, consequential or other damages, including loss of profits, notwithstanding any other provision of the *Contract Documents*."

37.6 Paragraph 7.2.6:

Add new paragraph 7.2.6 as follows:

"7.2.6 The *Owner's* withholding of a progress payment, holdback payment or final payment due to the *Contractor's* failure to pay a *Subcontractor* or *Supplier*, to protect the *Owner's* interest in the event of the registration of a lien or receipt of notice of lien, or otherwise pursuant to the terms of the *Contract*, shall not constitute a default under paragraph 7.2.3 which would permit the *Contractor* to stop the *Work* or terminate the

Contract. In such circumstances, the *Contractor* shall continue with the *Work.*"

37.7 Paragraph 7.2.7:

Add new paragraph 7.2.7 as follows:

"7.2.7 If the *Contractor* stops the *Work* or terminates the *Contract* in accordance with this GC 7.2 – Contractor's Right To Suspend The Work Or Terminate The Contract, the *Contractor* shall leave the *Place of the Work* and the *Work* in a secure condition."

38.0 **GC 9.1 - Protection Of Work And Property**

38.1 Paragraph 9.1.1 is amended as follows:

38.1.1 Add the words "shall be responsible for security at the *Place of the Work* and will take such other security measures as may be necessary in respect of the *Work* and the *Place of the Work*, as may be determined by the *Owner* in its sole discretion, and" after the word "*Contractor*" in the first line of paragraph 9.1.1.

38.1.2 Add the words ", *Railway* property," after the words "protect the *Work*" in the first line of paragraph 9.1.1.

38.2 Paragraph 9.1.1.1 is amended as follows:

Add the words "which the *Contractor* could not have discovered applying the standard of care described in paragraph 3.15.1" after the word "*Documents*" at the end of paragraph 9.1.1.1.

38.3 Paragraph 9.1.3 is amended as follows:

Add the words "*Railway* property," after the word "*Work*," in the first line of paragraph 9.1.3.

38.4 Paragraph 9.1.4 is amended as follows:

Add the words, "*Railway's* property," after the word "*Work*" in the first line of paragraph 9.1.4 and add the words "and *Railway's* property" after the word "property" in the second line of paragraph 9.1.4.

39.0 GC 9.2 - Toxic And Hazardous Substances

39.1 Paragraphs 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5, 9.2.6, 9.2.7 and 9.2.8 are amended as follows:

Delete the words "toxic and hazardous substances" from paragraphs 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5, 9.2.6, 9.2.7 and substitute the words "*Toxic and Hazardous Substances*" in their place.

39.2 Delete paragraph 9.2.7.4 in its entirety.

39.3 Paragraph 9.2.8.2 is amended as follows:

Add the words "*Railway's* property," after the words "damage to the *Work*," in the first line of paragraph 9.2.8.2.

40.0 GC 9.4 - Construction Safety

40.1 Paragraph 9.4.1 is amended as follows:

Delete the words "Subject to paragraph 3.2.2.2 of GC 3.2 – Construction By Owner Or Other Contractors, the" and substitute the word "The" at the beginning of paragraph 9.4.1.

40.2 Add new paragraph 9.4.2 as follows:

"9.4.2 The *Contractor* shall assume the role of contractor, constructor, prime contractor, or principal contractor as may apply in accordance with applicable Occupational Health and Safety Legislation at the *Place of the Work* and provide to the *Owner* copies of the related Health and Safety notices and documents."

40.3 Add new paragraph 9.4.3 as follows:

"9.4.3 The *Contractor* represents and warrants that it is familiar with the obligations imposed on an "employer" as defined in the *Occupational Health and Safety Act (Ontario)*, and that it has in place a health and safety program to ensure the health and safety of all workers for which it has responsibility under the said *Act*."

40.4 Add new paragraph 9.4.4 as follows:

"9.4.4 The *Contractor* shall comply in all respects with the requirements of the *Occupational Health and Safety Act (Ontario)* and its own health and safety program to take all steps reasonable in the circumstances to

ensure the health and safety of all workers for which it has responsibility under the said *Act*. The *Contractor* shall maintain and strictly enforce its health and safety program. The *Contractor* shall also provide such information within such timeframes as may be required in order to allow the *Owner* to fulfill its obligations pursuant to the *Occupational Health and Safety Act (Ontario)*, including, without limitation, the obligation to notify the Director under such *Act* in the event of an accident causing personal injury."

40.5 Add new paragraph 9.4.5 as follows:

"9.4.5 The *Contractor* shall comply with all requirements of the Workplace Hazardous Materials System (WHMIS) regarding the use, handling and storage of controlled products."

40.6 Add new paragraph 9.4.6 as follows:

"9.4.6 Prior to commencing the *Work* the *Contractor* shall:

- .1 ensure that all prescribed posting requirements are posted on site for all workers to view;
- .2 provide a copy of the *Contractor's* Health & Safety Policy to the *Owner*;
- .3 prepare and submit to the *Owner* a Site Specific Safety Plan (Job Safety Analysis);
- .4 review and comply with facility specific hazard, safety and orientation requirements as applicable; and
- .5 prepare and submit site-specific hazardous assessment plans as applicable pertaining to but not limited to: live power work, lock out/tag out/shut down/switch covers, confined space entry, cranes and crane lifts, and other hazardous assessment plans as required."

40.7 Add new paragraph 9.4.7 as follows:

"9.4.7 The *Contractor* shall indemnify and save harmless the *Owner*, its agents, officers, directors, employees, consultants, successors and assigns from and against the consequences of any and all safety infractions committed by the *Contractor* or any of its *Subcontractors* or their subcontractors under the construction health and safety legislation applicable to the *Place of the Work*, including but not limited to, payment of legal fees and disbursements on a full indemnity basis."

41.0 **GC 9.5 - Mould**

41.1 Paragraph 9.5.2.2 is amended as follows:

Add the words "*Railway's* property," after the words "damage to the *Work*," in the first line of paragraph 9.5.2.2.

41.2 Delete paragraph 9.5.3.4 in its entirety.

42.0 **GC 10.2 - Laws, Notices, Permits And Fees**

42.1 Paragraph 10.2.3 is amended as follows:

Add the words "The *Contractor* shall provide the *Owner* with copies of all such permits, licenses, inspections and certificates." at the end of paragraph 10.2.3.

42.2 Paragraph 10.2.4 is amended as follows:

Delete the words "or codes" and substitute the words "codes, and industry best practices and guidelines" after the word "regulations," in the first line of paragraph 10.2.4.

Add the words "to the environment," after the words "relate to the *Work*," in the second line of paragraph 10.2.4.

Add the words "The *Contractor* shall provide the *Owner* with copies of all such required notices and related health and safety documents." at the end of paragraph 10.2.4.

42.3 Paragraph 10.2.5 is amended as follows:

Delete the word "The" and substitute the words "Subject to paragraph 3.4.1, the" at the beginning of paragraph 10.2.5.

43.0 **GC 10.4 – Worker's Compensation**

43.1 Paragraph 10.4.1 is amended as follows:

Add the words "with each application for progress payment," after the word "*Work*," in the first line of paragraph 10.4.1.

Add the words "the Certificate of Clearance and" after the word "provide" in the third line of paragraph 10.4.1.

44.0 **GC 11.1 – Insurance**

11.1.1 Wrap-Up Liability Insurance (Owner Provided)

.1 The Owner shall, at its own expense, obtain and maintain project-specific Wrap-Up General Liability Insurance (the "Policy") with a combined single limit of liability of not less than One Hundred Million (\$100,000,000.00) dollars per occurrence and in the aggregate with respect to Products and Completed Operations Liability, against claims for bodily injury (including death), personal injury, property damage (including loss of use), and Products and Completed Operations for a period of not less than twenty-four (24) months from the date of Substantial Performance of the Work. Such policy shall include as additional insureds the Contractor and Subcontractors of any tier and including Suppliers who perform the Work at the Place of Work and also includes consultants, sub-consultants, engineers and architects (but not for Professional Liability purposes). The policy is subject to special limits, endorsements, extensions, restrictions and exclusions which shall include but not necessarily be limited to:

- (1) Products and Completed Operations liability for a period of twenty-four (24) months from the date of Substantial Performance of the Work);
- (2) Owners and Contractors Liability;
- (3) Contingent Employer's Liability;
- (4) Non-owned Automobile Liability including Legal Liability for Damage to Hired Autos (SEF #94) - \$50,000 Limit, \$1,000 deductible;
- (5) Cross Liability/Severability of Interests;
- (6) No XCU Exclusion (explosion, collapse and underground);
- (7) Contingent Medical Malpractice;
- (8) Broad Form Property Damage;
- (9) Property Damage to The Owner' existing property (but not any property which is subject to coverage under a Course of Construction/Builder's Risk Policy);

- (10) Silent on Terrorism;
 - (11) Sudden & Accidental Pollution;
 - (12) Tenants Legal Liability \$5,000,000;
 - (13) Medical Payments \$50,000 per person, \$100,000 each accident;
 - (14) Employees as Additional Insured;
 - (15) Defence Costs in Addition to Limits of Liability;
 - (16) Asbestos Exclusion;
 - (17) Employment Practices Exclusions;
 - (18) Automobile Exclusion:
 - (19) Security Firm Exclusion;
 - (20) Nuclear Exclusion;
 - (21) Fungus, Mildew and Mould Exclusion;
 - (22) Excludes Errors and Omissions (Professional Services);
 - (23) Excludes property damage to contractor and sub-contractor's plant and equipment;
 - (24) Excludes US Employers Liability;
 - (25) Excludes damage to property either forming part of, or to form part of the Work; and
- .2 If any Named Insured or other Insured under this insurance policy has any other insurance against loss covered by this Policy, except for insurance which is written specifically to cover in respect of the Project insured, this Policy shall be primary insurance and such other insurance shall be excess of the limits stated in this Policy. Where any Named Insured or other Insured has or places buy down insurance and/or any other insurance specifically covering work in respect of the Project insured or to provide coverage for the deductibles under this Policy, such insurance shall be primary and the insurance provided by this policy shall be excess of the limits stated in such purchased Policy.

- .3 Wrap-Up Liability Deductible: The Policy carries a deductible of One Hundred Thousand (\$100,000.00) dollars per occurrence inclusive of all legal fees and associated expenses incurred in the investigation, defence, settlement, arbitration or litigation of claims.
- .4 Contractor's Responsibility for Wrap-Up Liability Deductible: The Contractor shall, at its own expense, be responsible and liable for one hundred percent (100%) of the deductibles under the policy on each and every claim. Deductibles are inclusive of all legal fees, and associated expenses incurred in the investigation, defense, settlement arbitration or litigation of Claims.
- .5 Upon notification of a claim being made, The Owner shall, at its sole direction, be entitled to retain the amount of the deductible in whole or in part from payment to the Contractor. Such amount will be applied by The Owner in satisfaction of that claim and excess amounts, if any, will be paid to the Contractor in the event and at such time as the claim is settled, dismissed or withdrawn. Notwithstanding the foregoing, The Owner may, at its sole discretion, issue an invoice to the Contractor for the actual amount of the claim settlement up to the amount of the deductible, and if the invoice is not paid within thirty (30) days, The Owner shall deduct such amount from a future payment due to the Contractor.
- .6 Cooperation with Wrap-Up Insurer's Consultant: If an insurer or an insurer's appointed consultant, for underwriting purposes or as a term of the Wrap-Up Liability Policy, needs to review any part of the performance of this Contract, then the Contractor shall, cooperate with the insurer and its consultant, including providing them with such information and documentation as they may reasonably require.
- .7 Claims Reporting: The Contractor shall provide The Owner with written notice and all reasonable particulars and documents related to any damages, losses, incidents, claims and potential claims relating to the Policy as soon as possible after the damage, loss, incident or claim has been discovered. The Contractor shall also cooperate with The Owner's insurers in their investigation of any claim which is in excess of the deductible.
- .8 Wrap-Up Liability Policy Term: Owner Provided wrap-up liability insurance policy shall be effective from the date of the

Commencement of the Work until the Date of Substantial Performance of the Work as certified by the Consultant.

- .9 "All Risk" Property/Course of Construction Insurance (Owner Provided): The Owner shall, at its own expense, obtain and maintain "All Risks" Property/Course of Construction Insurance covering the Work for direct physical loss or damage to property in course of construction whilst at the location of the Work and forming part of or to form part of the Work. The limit shall be equal to the replacement value of the Work, or at the discretion of The Owner, a limit of loss equal to the estimated Maximum Foreseeable Loss calculation as promulgated by insurers or brokerage consultants. Such policy is subject to aggregates, sub-limits, endorsements, extensions, restrictions and exclusions, including but not necessarily limited to the following:
- (1) personal property excluded;
 - (2) construction tools, equipment and machinery excluded;
 - (3) asbestos contamination excluded;
 - (4) terrorism excluded;
 - (5) delay in start-up & soft costs excluded;
 - (6) faulty material, workmanship and design excluded;
 - (7) electronic data excluded,
 - (8) mold excluded;
 - (9) debris removal \$100,000– maximum 25% of the amount of loss;
 - (10) off site storage at an unnamed location \$2,000,000;
 - (11) inland transit \$250,000;
 - (12) ingress/egress \$250,000 – maximum 30 days;
 - (13) DE4 approved;
 - (14) testing & commissioning – 4 weeks – restricted to new equipment only;

- (15) fire fighting charges \$100,000;
 - (16) pollution clean-up \$50,000;
 - (17) arson/crime reward \$50,000;
 - (18) dewatering \$100,000;
 - (19) professional fees (excluding public adjuster); and
 - (20) testing & commissioning – 4 weeks – restricted to new equipment only.
- .10 "All Risk" Property/Course of Construction Insurance Deductible: The Contractor shall, at its own expense be responsible and liable for one hundred percent (100%) of the following deductibles under this policy for each and every loss:
- (1) \$50,000 all losses except
 - (2) \$100,000 Flood
 - (3) \$250,000 collapse and subsidence to construction of tunnels and sub-surface structures and installations
 - (4) 3% of Total Insurable Values (Subject to a minimum of \$100,000 per occurrence) Earthquake
 - (5) 48 Hours Waiting Period – Off Premises Service Interruption – property damage.
- .11 Upon notification of a claim being made The Owner shall, at its sole direction, be entitled to retain the amount of the deductible in whole or in part from payment to the Contractor. Such amount will be applied by The Owner in satisfaction of that claim and excess amounts, if any, will be paid to the Contractor in the event and at such time as the claim is settled, dismissed or withdrawn. Notwithstanding the foregoing, The Owner may, at its sole discretion, issue an invoice to the Contractor for the actual amount of the claim settlement up to the amount of the deductible, and if the invoice is not paid within thirty (30) days, The Owner shall deduct such amount from a future payment due to the Contractor.
- .12 Cooperation with "All Risk" Course of Construction Consultant: If an insurer or an insurer's appointed consultant, for underwriting

- purposes or as a term of the Builders' "All Risk" Course of Construction Policy, needs to review any part of the performance of this Contract, then the Contractor shall, cooperate with the insurer and its consultant, including providing them with such information and documentation as they may reasonably require.
- .13 Claims Reporting: The Contractor shall provide The Owner with written notice and all reasonable particulars and documents related to any damages, losses, incidents, claims and potential claims relating to the Policy as soon as possible after the damage, loss, incident or claim has been discovered. The Contractor shall also cooperate with The Owner's insurers in their investigation of any claim which is in excess of the deductible.
- .14 "All Risk" Property/Course of Construction Policy Term: Owner Provided Builders' "All Risk" Course of Construction insurance policy shall be effective from the date of the Commencement of the Work until the Date of Substantial Performance of the Work as certified by the Consultant.
- .15 Contractors' Pollution Liability (Owner Provided): The Owner shall, at its own expense, obtain and maintain project-specific Contractors' Pollution Liability Insurance with a limit of liability of not less than ten million (\$10,000,000) per pollution condition and in the aggregate, including 24 months completed operations coverage, against claims for on-site clean-up of new pollutant conditions, third party claims for on-site bodily injury and property damage, and off-site clean up caused by a pollution or contamination incident resulting from covered operations. Emergency remediation expense limit five hundred thousand (\$500,000) and in the aggregate. Such policy is subject to aggregates, sub-limits, endorsements, extensions, restrictions and exclusions.
- .16 Contractors' Pollution Liability Insurance Deductible: The Contractor shall, at its own expense be responsible and liable for one hundred percent (100%) of the one hundred thousand (\$50,000) dollar deductible under this policy for each and every loss.
- .17 Upon notification of a claim being made The Owner shall, at its sole direction, be entitled to retain the amount of the deductible in whole or in part from payment to the Contractor. Such amount will be applied by The Owner in satisfaction of that claim and excess amounts, if any, will be paid to the Contractor in the event

and at such time as the claim is settled, dismissed or withdrawn. Notwithstanding the foregoing, The Owner may, at its sole discretion, issue an invoice to the Contractor for the actual amount of the claim settlement up to the amount of the deductible, and if the invoice is not paid within thirty (30) days, The Owner shall deduct such amount from a future payment due to the Contractor.

- .18 Cooperation with Contractors' Pollution Liability Insurance Consultant: If an insurer or an insurer's appointed consultant, for underwriting purposes or as a term of the Contractors' Pollution Liability Policy, needs to review any part of the performance of this Contract, then the Contractor shall, cooperate with the insurer and its consultant, including providing them with such information and documentation as they may reasonably require.
- .19 Claims Reporting: The Contractor shall provide The Owner with written notice and all reasonable particulars and documents related to any damages, losses, incidents, claims and potential claims relating to the Policy as soon as possible after the damage, loss, incident or claim has been discovered. The Contractor shall also cooperate with The Owner's insurers in their investigation of any claim which is in excess of the deductible.
- .20 Contractors' Pollution Liability Policy Term: Owner Provided Contractors' Pollution Liability insurance policy shall be effective from the date of the Commencement of the Work until the date of Substantial Performance of the Work as certified by the Consultant.

11.1.2 Contractor Provided Insurance:

- .1 General Liability Insurance (Contractor Provided): The Contractor shall, at its own expense, obtain and maintain General Liability Insurance for all off-site activities from commencement of the contract and any on-site activities following substantial completion when such on-site activities are not covered under The Owner's Wrap-Up Liability completed operations. Such General Liability Insurance shall have a combined single liability limit of not less than Five Million (\$5,000,000) dollars per occurrence and in the aggregate, against claims for bodily injury (including death), personal injury, property damage (including loss of use), and Products and Completed Operations. Such policy shall be endorsed to include The Owner as an Additional Insured. The policy shall include but not necessarily be limited to:

- (1) Extended products and completed operations liability for a period of not less than 24 months beyond The Owner Wrap-Up Liability completed operations expiry date;
 - (2) Blanket written contractual liability;
 - (3) Contingent Employer's Liability;
 - (4) Employer's liability (as applicable);
 - (5) Non-owned Automobile Liability including Legal Liability for Damage to Hired Autos (SEF #94);
 - (6) Contractual Liability (SEF #96);
 - (7) Cross Liability/Severability of Interests;
 - (8) No XCU Exclusion (explosion, collapse and underground);
 - (9) Incidental Medical Malpractice;
 - (10) Broad Form Property Damage;
 - (11) Sudden & Accidental Pollution subject to a minimum scope equal to IBC 2313,
 - (12) Time Element Pollution;
 - (13) Tenants Legal Liability;
 - (14) Medical Payments;
 - (15) Employees as Insureds;
 - (16) Defence Costs in Addition to Limits of Liability
 - (17) Waiver of Subrogation in favour of The Owner;
- .2 Automobile Liability Insurance (Contractor Provided): The Contractor shall, at its own expense, obtain and maintain at all times during the term of the contract insurance covering for bodily injury, death, damage to property and statutory accident benefits coverage with respect to all vehicles owned, licensed or leased by the Contractor. The policy shall have limits of not less than Five Million (\$5,000,000) dollars inclusive per occurrence. If the policy is issued pursuant to a government-operated automobile insurance system, the Contractor

shall provide The Owner with confirmation of automobile insurance coverage for all automobiles registered in the name of the Contractor.

- .3 Equipment Insurance (Contractor Provided): The Contractor shall, at its own expense, obtain and maintain at all times during the term of the contract insurance covering construction machinery and equipment used by the Contractor for the performance of the Work, including boiler insurance on temporary boilers and pressure vessels. The policy shall be in a form acceptable to The Owner and shall not allow subrogation claims by the insurer against The Owner.
- .4 Subject to satisfactory proof of financial capability by the Contractor for self-insurance, The Owner agrees to waive the equipment insurance requirement. In so doing, the Contractor waives all right of claim against The Owner in respect to loss or damage to such equipment as if it was otherwise insured and subject to a Waiver of Subrogation rights from the insurer.

11.1.3 Proof of Insurance Coverage:

- .1 Prior to commencement of the Work and upon the placement, renewal, amendment, or extension of all or any part of the insurance, the Contractor shall promptly provide the Owner with confirmation of coverage and, if required, a certified true copy of the policies certified by an authorized representative of the insurer together with copies of any amending endorsements.
- .2 Certificates for General Liability Insurance shall include, in addition to the Contractor, Owner, and Consultant, the following as additional insureds:
- (1) Canadian National Railway
 - (2) VIA Rail Canada
 - (3) City of Mississauga
 - (4) City of Toronto
 - (5) Lovsuns Tunneling Canada Ltd.
 - (6) Ministry of the Environment and Climate Change

- .3 Certificates of All Risks Property Insurance and Boiler and Machinery Insurance shall include the Contractor, Owner, Consultant and all Subcontractors as additional insureds.
- .4 All Certificates of Insurance shall also include the Contract name and number.
- 11.1.4 Where the full insurable value of the Work is substantially less than the Contract Price, the Owner may reduce the amount of insurance required or waive one or more of the types of insurance requirement.
- 11.1.5 If the Contractor fails to provide or maintain insurance as required by the Contract Documents, then the Owner shall have the right to provide and maintain such insurance and give evidence to the Contractor and the Consultant. The Contractor shall pay the cost thereof to the Owner on demand or the Owner may deduct the amount which is due or may become due to the Contractor.
- 11.1.6 All required insurance policies shall be placed with insurers licensed to underwrite insurance in the jurisdiction of the Place of the Work.
- 11.1.7 All required insurance policies shall be endorsed to provide the Owner with not less than thirty (30) days notice in writing in advance of any cancellation and material amendment or change restricting coverage.
- 11.1.8 All insureds shall cooperate with the Contractor to comply with any reporting requirements of the insurance policies in order to maintain the policies in good standing, to give notice in writing of any incidents which may result in a claim or loss covered by the policies and to provide documentation necessary in the defence or settlement of claims."

45.0 GC 12.1 - Indemnification

45.1 Paragraph 12.1.1:

Delete paragraph 12.1.1 in its entirety and replace with new paragraph 12.1.1 as follows:

"12.1.1 Without restricting the *Contractor's* obligation to indemnify as described in paragraph 12.1.4, the *Contractor* shall indemnify and hold harmless the *Owner* from and against all claims, demands, losses, costs, damages, actions, suits or proceedings whether in respect to losses suffered by the *Owner* or in respect to claims by third parties that arise

out of, or are attributable in any respect to the *Contractor's* involvement as a party to this *Contract*, provided such claims are:

- .1 caused by:
 - .1 the negligent acts or omissions of the *Contractor* or anyone for whose acts or omissions the *Contractor* is liable, or
 - .2 a failure of the *Contractor* to fulfil the terms or conditions of the *Contract*; and
- .2 made by *Notice in Writing* within a period of six years from the date of *Substantial Performance of the Work* as set out in the certificate of *Substantial Performance of the Work* issued pursuant to paragraph 5.4.2.2 of GC 5.4 – SUBSTANTIAL PERFORMANCE THE WORK or within such shorter period as may be prescribed by any limitation statute of the Province of Ontario.

The Owner expressly waives the right to indemnity for claims other than those provided for in this *Contract*."

45.2 Delete the paragraph 12.1.12 in its entirety.

45.3 Paragraph 12.1.3 is amended as follows:

Delete the words "either party to indemnify the other" and substitute the words "the *Contractor* to indemnify the *Owner*" in the first line of paragraph 12.1.3.

45.4 Paragraph 12.1.4 is amended as follows:

Delete the words "The *Owner* and the *Contractor* shall indemnify and hold harmless the other" and substitute the words "The *Contractor* shall indemnify and hold harmless the *Owner*" in the first line of paragraph 12.1.4.

Delete the word "their" and substitute the words "the *Contractor's*" in the second line of paragraph 12.1.4.

45.5 Delete paragraph 12.1.5 in its entirety.

45.6 Paragraph 12.1.6 is amended as follows:

Delete words "or the *Contractor*" from the first line of paragraph 12.1.6.

45.7 Delete paragraph 12.1.6.2 in its entirety and replace with new paragraph 12.1.6.2 as follows:

“12.1.6.2 Should the *Contractor* be required as a result of its obligation to indemnify the *Owner* to pay or satisfy a final order, judgment or award made against the *Owner*, then the *Contractor* upon assuming all liability for any costs that might result shall have the right to appeal in the name of the *Owner* until such rights of appeal have been exhausted.”

45.8 Add new paragraph 12.1.7 as follows:

“12.1.7 Notwithstanding anything contained in the *Contract Documents* to the contrary, the *Owner* shall have the right to set-off the amount of any claims for which *Notice in Writing* has been given by the *Owner* to the *Contractor* in accordance with GC 6.6 CLAIMS FOR A CHANGE TO CONTRACT PRICE or GC 12.1 INDEMNIFICATION against any amounts which may be otherwise owing or payable to the *Contractor* pursuant to the terms of the *Contract*.”

46.0 **GC 12.2 – Waiver of Claims**

- 46.1 Delete paragraph 12.2.1.2 in its entirety.
- 46.2 Delete paragraph 12.2.1.3 in its entirety.
- 46.3 Paragraph 12.2.2 is amended as follows:

Delete the words “those referred in paragraphs 12.2.1.2 and 12.2.1.3 and” from paragraph 12.2.2.

47.0 **GC 12.3 - Warranty**

47.1 Paragraph 12.3.1 is amended as follows:

Delete the words “one year” and substitute the words “two years” in the first line of paragraph 12.3.1.

Add the words “The warranty on replaced or rectified parts and workmanship shall be extended for a period of two (2) years from the date of acceptance by the *Owner* of the replacement or rectification of the parts and workmanship” at the end of paragraph 12.3.1.

47.2 Paragraph 12.3.2 is amended as follows:

Delete the word “The” and substitute the words “Subject to paragraph 3.4.1, the” at the beginning of paragraph 12.3.2.

47.3 Paragraph 12.3.4 is amended as follows:

Delete the words "one year" from the second line of paragraph 12.3.4.

47.4 Paragraph 12.3.6 is amended as follows:

Add the words "in a form acceptable to the *Consultant*, and to submit said warranties to the *Consultant* upon *Substantial Performance of the Work* or at such earlier date as may be required by the *Consultant*, acting reasonably" after the words "from the warrantor" in the fourth line of paragraph 12.3.6.

48.0 French Language Services

48.1 ADD new GC 13 – French Language Services, as follows:

"13.1 GC 13 - French Language Services

13.1.1 Definitions

13.1.1.1 "French Language Services Act" means the French Language Services Act, R.S.O. 1990, c.F. 32, as amended.

13.1.1.2 "French-designated Area" means an area designated from time to time in the Schedule to the French Language Services Act (Ontario). A map and complete listing of French-designated areas is available at <http://www.ofa.gov.on.ca/en/flsa-mapdesig.html>.

13.1.2 French Language Services

13.1.2.1 Insofar as this Contract relates to the provision of Services directly to the public on behalf of Metrolinx, the French Language Services Act, R.S.O. 1990, c. F. 32 and any amendments thereto (hereinafter referred to as "the FLSA") shall be applicable.

13.1.2.2 A person has the right in accordance with the FLSA to communicate in French with, and to receive available services in French where the Consultant's work is located in or serves an area designated in the FLSA Schedule. It shall be the Consultant's responsibility to provide translation services to any person making such a request as per R.S.O. 1990, c. F.32, s. 5(1).

- 13.1.2.3 A service refers to any service or procedure provided to the public, including communications.
- 13.1.2.4 Services being provided in French must be equivalent to those offered in English, available within the same timeframe and of the same quality.
- 13.1.2.5 Services and communications in designated areas include, but are not limited to:
 - 13.1.2.5.1 Consultations/Public Meetings
 - 13.1.2.5.2 Presentation materials, displays, comment cards/feedback mechanism or other materials are available in French. Consultant has at least one bilingual staff or interpreter on hand able to answer questions and discuss technical drawings/documents in French. When relevant, the consultant will compile and analyze the views of Francophones separately, because they may have different concerns.
 - 13.1.2.5.3 Signage

Construction contracts may from time to time involve erecting temporary signage to redirect or warn the public of hazards. Such signage will be bilingual.
 - 13.1.2.5.4 Communications

Communication plans, customer impact documents, information bulletins, notices of service disruption and public relations information will be bilingual.
 - 13.1.2.5.5 Marketing/Advertising

Advertising, promotion, publicity will be undertaken in English and French. A list of Francophone media is available at:
<http://www.ofa.gov.on.ca/en/franco-media.html>.
 - 13.1.2.5.5 Contractor's Team

The Contractor will have a bilingual staff available to attend consultations or public meetings.

13.1.2.5.6 Translation Services

The Contractor will have a staff or procure the services of a professional translator or interpreter, accredited by the Association of Translators and Interpreters of Ontario.
<http://www.atio.on.ca/>

49.0 **GC 14 – Contractor Work Performance Rating**

49.1 Add New GC 14 – Contractor Work Performance Rating, as follows:

GC 14 – Contractor Work Performance Rating

- 14.1 Metrolinx shall during the term of the Contract, maintain a record of the performance of the Contractor completing Work for Metrolinx. This information shall be used to complete a "Contract Performance Appraisal" report, a copy of which will be forwarded to the Contractor upon completion of Total Performance of the Work. Refer to Attachments for a sample Contractor Performance Review report. Interim "Contract Performance Appraisal" reports may be issued, as deemed appropriate by the Owner's Representative, at any time during the term of the Contract.
- 14.2 The overall history of the Contractor in performing work for Metrolinx will be considered in the evaluation of future bids from the Contractor.
- 14.3 Metrolinx reserves the right in future tenders to reject any bid submitted by a company with an unsatisfactory performance history with the Owner.
- 14.4 Non-compliance with Contract requirements will be identified to the Contractor.
- 14.5 The information contained in the "Contract Performance Appraisal" may be provided to the Ministry of Transportation and other government agencies, and such performance reviews may be relied upon to disqualify a company from providing a bid on future tenders.

GENERAL CONDITIONS OF THE CONTRACT

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

PAGE 1 OF 1

1.0 General Conditions of the Contract

- 1.1 The "General Conditions of the Unit Price Contract" of CCDC 4 2011 Unit Price Contract are herein called the General Conditions of the Contract and shall constitute the General Conditions of this Contract in their entirety as amended by the Supplementary General Conditions of the Contract herein. CCDC 4 2011 is available for purchase on www.ccdc.org.

END OF SECTION

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 1 OF 9**

1.0 Documents Required

- 1.1 Maintain at the Place of Work, one (1) copy of following:
 - 1.1.1 Contract Drawings;
 - 1.1.2 Specifications;
 - 1.1.3 addenda;
 - 1.1.4 reviewed Shop Drawings;
 - 1.1.5 Change Orders;
 - 1.1.6 other modifications to Contract;
 - 1.1.7 field test reports; and
 - 1.1.8 Contractor's Occupational Health and Safety Policy, the program to implement the Occupational Health and Safety Policy and the Site Safety Plan.

2.0 Work Schedule

- 2.1 Interim reviews of Work progress based on schedule submitted by the Contractor will be conducted. Update Contractor's schedule and cash flow chart when requested by Consultant.

3.0 Hours of Work

- 3.1 The Contractor's hours of work for this Contract should be based on the following specifications:
 - 3.1.1 Section 02000 - Special Requirements – Sewer.
 - 3.1.2 Section 02001 - Special Requirements – Natural Gas.

4.0 Subcontractors and Suppliers

- 4.1 The Contractor shall submit within five (5) Working Days of execution of the Contract a complete list of Subcontractors and Suppliers that shall include the

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 2 OF 9**

names of all Subcontractors and Suppliers that will be employed to perform or supply the following Divisions or Sections of the Work:

4.1.1 Natural Gas Line Work

4.1.2 Track Work

4.1.3 Signal Work

4.2 Pre-qualified Subcontractors and Suppliers

4.2.1 Contractors shall note that for some Sections or Divisions of the Work specific Subcontractors or Suppliers may be named in the Contract Documents as having been pre-qualified to perform or supply that Section or Division of Work. In such instances only those Subcontractors or Suppliers are to be named as performing or supplying, and shall perform or supply, those Sections or Divisions of the Work. The Contractor shall not use "Own Forces" for such Sections or Divisions of the Work unless the Contractor is named in the Contract Documents as having been pre-qualified for the Section or Division of the Work.

4.2.2 Where more than one Subcontractor or Supplier is named as having been pre-qualified to supply a Section or Division of the Work, the Contractor shall select one of its own choice from those so named.

4.2.3 Only the following pre-qualified Subcontractors below, are permitted to perform the Work of this section of this Contract. No other Subcontractor will be permitted to perform this Work. The Contractor shall not use its "Own Forces" for this section of the Work unless its name appears on the list below:

(a) Track Work Contractors

(i) A & B Rail Services Ltd.

12623 Coleraine Drive
Bolton, Ont L7E 3B5
Office: 905-951-6363
Fax: 905-951-1681
Contact: Jamie Black
Regional Operations Manager – Ontario
Cell: 416-899-3548
jamieblack@abrail.com

(ii) Herzog Contracting of Canada Ltd.

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 3 OF 9**

600 S. Riverside Rd.
St. Joseph MO 64507
Contact: Mr. Scott Norman
Phone: 816-233-9001
email: snorman@herzog.com

(iii) OWS Railroad and Construction Maintenance Inc.

4320 Discovery Line, P.O. Box 1240
Petrolia, Ontario NON 1R0
Contact: Mr. Pat Gladwish
Phone: 519-882-4996

(iv) Peter Kiewit Infrastructure Co.

1425 North Service Road East, Unit 1
Oakville, ON L6H 1A7
Contact: Mike Tracey
Phone: 905-337-4165
email: michael.tracey@kiewit.com

(v) PNR Railworks Inc.

455 Silvercreek Parkway N.
Guelph, Ontario N1H 8M7
Contact: Mr. David Landreth
Phone: 519-763-2960

(vi) Rail Cantech Inc.

650 Lionel-Boulet Blvd.
Varenes, Quebec J3X 1P7
Contact: Martial Major
Email: info@railcantech.com
Phone: 450-652-3010

(vii) VIAS Canada Inc.

20 Bay Street, 11th Floor
Toronto, ON M5J 2N8
Contact: Patricia Boivin
Phone: 416-559-4723
email: patricia.boivin@vias-canada.com

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 4 OF 9**

(b) Railway Signal Contractors

(i) Black & McDonald Limited

31 Pullman Court
Scarborough, Ontario M1X 1E4
David Maniaci
Tel: 416-991-4967
email: dmaniaci@blackandmcdonald.com

(ii) Condor Signal & Communications Inc.

2388 Speers Road
Oakville, Ontario L6L 5M2
John Di Donato
Tel: 905-469-0226
email: jdidonato@condorsignal.com

(iii) CYMI-SICE Canada Joint Venture

55 Eglinton Avenue East Suite 803
Toronto, Ontario M4P 1G8
Luis Carrera
Tel: 647-483-4026
email: LCarrera@sice.com

(iv) Mass. Electric Construction Canada Co.

1405 North Service Road East, Unit 4
Oakville, Ontario L6H 1A7
Troy Grill
Tel: 905-337-4015
email: TGrill@MassElec.com

(v) PNR Railworks Inc.

65 Massey Road, Unit C
Guelph, Ontario N1H 7M6
Wayne Barnard
Tel: 519-780-3151 email:
wbarnard@pnrrailworks.com

(vi) The Toronto Terminals Railway Company Limited

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 5 OF 9**

50 Bay Street, Suite 1400N
Toronto, Ontario M5J 3A5
George Huggins
Tel: 416-771-2598
email: george.huggins@ttrly.com

4.2.4 Only the following pre-qualified Subcontractors below, are permitted to perform the Work of this section of this Contract. No other Subcontractor will be permitted to perform this Work. The Contractor shall not use its "Own Forces" for this section of the Work unless its name appears on the list below.

(a) Authorized Utility Contractors

(i) Bell / 360, Rogers Fibre Allstream

4.3 The Contractor shall not change the identified Subcontractors or Suppliers listed without written consent of Owner.

5.0 Certificate of Recognition

5.1 Metrolinx has implemented a phased-in approach for the Certificate of Recognition (COR™) safety program for its construction projects. If the Work of this Contract extends beyond the Date of Total Performance of the Work stated in the Supplementary Agreement Between Owner and Contractor, the Contractor must demonstrate it has achieved the following as of the following milestones related to COR™ certification:

5.1.1 COR™ "Registered" status with IHSA by January 1, 2018.

5.2 At each of the dates specified above, the Contractor shall provide Metrolinx with documentation to substantiate that the above status has been achieved.

5.3 For more information about COR™ and the registration/certification process, please contact:

5.4 Centre for Health and Safety Innovation (CHSI)
5110 Creekbank Road, Suite 400
Mississauga, Ontario
L4W 0A1
Email: cor@ihsa.ca
Website: www.ihsa.ca/cor
Telephone: 1-800-263-5024

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 6 OF 9**

6.0 Contractor's Use of Site

- 6.1 Perform Work in a manner that will interfere as little as possible with the Owner's operations.
- 6.2 Storage of materials and equipment and Contractor's temporary office must be contained within designated Contractor's area(s).
- 6.3 Schedule deliveries to interfere as little as possible with the Owner's operations.
- 6.4 Park on site only within the designated Contractor's area.

7.0 Codes and Standards

- 7.1 Perform Work in accordance with Ontario Building Code, Ontario Hydro Electrical Safety Code, Ontario Regulations and CSA guidelines for performing work with Natural Gas Piping Systems and applicable acts administered by other authorities having jurisdiction.
- 7.2 Work to meet or exceed requirements of specified standards, codes and referenced documents.
- 7.3 Codes, specification standards, manuals and installation, application and maintenance instructions, referred to in the Contract Documents shall be of latest published editions at date of closing of Tender.

8.0 Contract Management

- 8.1 The Contractor shall utilise the Metrolinx nominated web based contract management system (CMS) for the administration of project related matters. This CMS will be administered by Metrolinx with specific training and licenses provided by Metrolinx to the Contractor. The CMS will be utilized for formal project correspondence, submissions & comment tracking, Contractor invoicing & purchase orders, contract variations, progress reporting and collaboration for document development. Documents uploaded to the CMS by the Contractor are to meet the requirements of the Metrolinx electronic document management system (EDMS).

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 7 OF 9**

9.0 Project Meetings

- 9.1 Hold project meetings at times and locations approved by Consultant.
- 9.2 Notify parties concerned of meetings, to ensure proper co-ordination of Work.
- 9.3 Designated parties shall take required action on decisions made at meeting. Consultant will record minutes of meetings and distribute to parties prior to next meeting.

10.0 Sublet of Work

- 10.1 Administration, supply and installation of Work specified is the sole responsibility of Contractor.

11.0 Examination

- 11.1 Examine site of Work, and investigate all matters relating to nature of Work to be undertaken.
- 11.2 Examine areas to receive specific Work and ensure that conditions are satisfactory to receive subsequent Work. Do not proceed with subsequent work, until unsatisfactory conditions are corrected.

12.0 Setting Out of Work

- 12.1 Setting out of Work is sole responsibility of the Contractor.
- 12.2 Lay out Work in accordance with Contract Drawings.
- 12.3 Verify all grades, lines, and levels and dimensions indicated, and report errors or inconsistencies to the Consultant before commencing Work or as soon as discovered.

13.0 Location of Equipment and Fixtures

- 13.1 Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate. Final actual placement location within a reasonable distance from that shown on Drawings shall be carried out at no additional cost to the Owner.

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 8 OF 9**

- 13.2 Locate equipment, fixtures and outlets to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- 13.3 Obtain manufacturer's literature for roughing in and hook-up of equipment and fixtures.
- 13.4 Inform the Consultant of impending installation and obtain his approval for final actual location.
- 13.5 Submit field drawings to indicate relative position of various services and equipment when requested by Consultant.

14.0 Concealment

- 14.1 Conceal wiring in wall and ceiling construction of finished areas except where indicated otherwise.

15.0 Cutting, Fitting and Patching

- 15.1 Execute cutting, fitting and patching required to make Work fit properly together.
- 15.2 Where new Work connects with existing and where existing Work is altered, cut, patch and make good to match existing Work.
- 15.3 Obtain Consultant's approval before cutting, boring or sleeving load-bearing members.
- 15.4 Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.

16.0 Existing Services

- 16.1 Before commencing Work, establish location and extent of service lines in area of Work and notify the Owner of findings.
- 16.2 Where unknown services are encountered, immediately advise authorities having jurisdiction and Consultant and confirm findings in writing.
- 16.3 Record locations of maintained, re-routed and abandoned service lines.

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01000
PAGE 9 OF 9**

17.0 Protection

17.1 Contractor is cautioned to use appropriate construction methods in order to fully protect existing building(s) or plant from any damage. These facilities shall be inspected prior to construction and existing defects noted in a written report, witnessed by Consultant. Repair or restore defects resulting from construction under this Contract to the satisfaction of the Owner, at no additional expense to the Owner.

18.0 Trades Qualification

18.1 The Contractor shall ensure that persons (trades workers) performing work that the *Trades Qualification and Apprenticeship Act* (TQAA) sets out certification requirements for, are properly qualified under the TQAA.

18.2 The Contractor shall further ensure these trades workers can, upon request, provide written proof of TQAA trades qualification, such as a certificate of qualification or apprenticeship contract, to the Owner, the Consultant or other authority having jurisdiction.

19.0 Additional Drawings

19.1 Consultant may furnish additional Drawings to assist proper execution of Work. These Drawings will be issued for clarification only. Such Drawings shall have the same meaning and intent as if they were included with Contract Documents referred to in Article A-3 of the Articles of Agreement.

GENERAL REQUIREMENTS WORK RESTRICTIONS

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01140
PAGE 1 OF 2**

1. Working Around Railways – General

1.1 Undertake all Work only as permitted herein and in accordance with Section 01545 – Railway Safety Requirements and Reference Appendices.

2. Hours of Work

2.1 The available hours of work for this Contract shall be in accordance with Section 01000 – General Instructions.

3. Contractor Compounds and Material & Equipment Storage/Removal

3.1 The Contractor compounds and material & equipment storage areas shall only be permitted if approval is granted in writing by the Consultant.

3.2 The Contractor shall be aware that space onsite is very limited. The Contractor may make its own arrangements with adjacent property owners for storage or Contractor facilities, however all costs, requirements, or legal terms or conditions associated with lease arrangements are to be covered under an agreement between the property owners and the Contractor only.

3.3 Contractor shall not place or store material on non-Metrolinx property, within or outside of the site, without express written consent by the adjacent property owner. If consent is granted to place or store materials on an adjacent property, the Contractor is required to provide evidence of consent satisfactory to the Consultant.

4. Restricted Use of Roadways & Site Access

4.1 Work shall be performed in accordance with City of Toronto – T.S. 1.00 – Construction Specification for Maintenance of Traffic (Attachment # 5).

5. 441 Carlingview Drive Work Restrictions

5.1 Metrolinx will secure a permit to enter and construct on the south entrance of 441 Carlingview.

5.2 Permit to Enter will require Contractor to provide a four week notice before construction can begin on this Property.

5.3 Should Owner of 441 Carlingview requires a different start date, Contractor will require to shift start date to accommodate this property.

**GENERAL REQUIREMENTS
WORK RESTRICTIONS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01140
PAGE 2 OF 2**

- 5.4 Contractor is limited to the area specified on the contact drawings under temporary easement within this property.
- 5.5 Rehabilitation to the parking area shall be completed immediately following the completion of the watermain and sewer work (weather permitting).

END OF SECTION

**GENERAL REQUIREMENTS
MOBILIZATION AND DEMOBILIZATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01200
PAGE 1 OF 3**

1.0 General

- 1.1 Be responsible for familiarization with the Place of the Work, the location of the Work and any limitations and constraints.
- 1.2 Before commencing Mobilization, where required by the Contract Documents, obtain all required Access Permits before entering onto land impacted by the Work.
- 1.3 Commence Mobilization at the Notice to Proceed date unless otherwise required by the Contract Documents and directed by Consultant.
- 1.4 Transport personnel, equipment and supplies and materials to the Place of the Work, including Contractor's offices, buildings, and other necessary facilities, Consultant's Work Trailer and portable toilet for the Consultant's use at the Place of Work.
- 1.5 Be responsible for all required permits for transportation of the Contractor's equipment.
- 1.6 Check on any roadway and bridge loading and restricted height clearances.
- 1.7 Equipment and materials shall be mobilized and demobilized in accordance with all local, provincial and federal regulations and acts related to transportation and safety.
- 1.8 Mobilize and demobilize equipment by means of access routes shown on the Drawings.
- 1.9 Upon completion of the Work, restore all access areas to the same condition as prior to the start of the Work.
- 1.10 Be responsible for security of Contractor's equipment and materials at the place of the Work.

2.0 Definitions

- 2.1 **Mobilization and Demobilization:** means the mobilization and demobilization of the Contractor's forces and equipment, supplies, appurtenances and the like, manned and ready for prosecuting the Work required under the Contract, and the subsequent demobilization and removal from the Place of the Work of said equipment, materials appurtenances and the like upon completion of the Work.

**GENERAL REQUIREMENTS
MOBILIZATION AND DEMOBILIZATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01200
PAGE 2 OF 3**

Mobilization will not be considered as work in fulfilling the Contract requirements for commencement of the Work.

3.0 Mobilization

- 3.1 Mobilization is deemed to include the provision of the following:
 - 3.1.1 Construction permits not obtained by the Owner;
 - 3.1.2 Initial Construction Schedule;
 - 3.1.3 Initial Work Block Schedule;
 - 3.1.4 Initial Shop Drawings and other submittal Schedules;
 - 3.1.5 Initial Contractor's Cash Flow Schedule; and
 - 3.1.6 Site Specific Safety Plan.
- 3.2 Mobilization includes assembly and delivery to the Place of the Work plant equipment, materials and supplies, necessary for the prosecution of the Work that are not intended to be incorporated into the Work; the clearing of and preparation of the Contractor's work area ,the complete assembly, in working order, of all equipment necessary to perform the required work; personnel services, and all other preparatory work required to allow commencement of the actual Work on the construction items for which payment is provided under the Contract.
- 3.3 Mobilization is deemed not to include the provision of the following, which are deemed to be elements of the Contractor's overhead, profit and contract administration costs included and incidental to the Work and included in and incidental to the Unit Prices and Lump Sum Prices as quoted in the Schedule of Contract Prices for each Work Item:
 - 3.3.1 Overhead and Profit;
 - 3.3.2 Bond and insurances; and
 - 3.3.3 Labour and costs.

**GENERAL REQUIREMENTS
MOBILIZATION AND DEMOBILIZATION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01200
PAGE 3 OF 3**

4.0 Demobilization

- 4.1 Demobilization includes all activities and costs for transportation of personnel, equipment and supplies and materials not used in the Contract, including disassembly, removal from the Place of the Work, the Contractor's offices, buildings, and other facilities including the Consultant's Work Trailer and portable toilet for the Consultant's use, removal and site cleanup of any offices, buildings or other facilities assembled at the Place of Work for the Contract.
- 4.2 Demobilization included submission and acceptance of final documentation required to meet the requirements of the Contract.

5.0 Changes to the Work

- 5.1 If additional mobilization and demobilization are required during the performance of the Contract because of changes to the Work, deleted or added items of Work, the Contractor is entitled to an adjustment in the Contract Price, compensation for such costs will be included in the Price of the approved Change Order or Orders for the item or items of Work changed or added.

6.0 Management and Disposal of Mobilization and Demobilization Materials

- 6.1 Dispose of materials resulting from Mobilization and Demobilization activities from the Place of the Work within forty-eight (48) hours of Total Performance of the Work.

END OF SECTION

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01300
PAGE 1 OF 4**

1.0 General

- 1.1 Submit to Consultant for review, product data specified.
- 1.2 Conform to General Condition No. GC 3.10 Shop Drawings.
- 1.3 Until submission is reviewed, work involving relevant product may not proceed.

2.0 Product Data

- 2.1 Manufacturer's standard schematic drawings, catalogue sheets, diagrams, schedules, performance charts, illustrations and other standard descriptive data will only be accepted in lieu of Shop Drawings when authorized by Consultant.
- 2.2 Above will only be accepted if it conforms to the following:
 - 2.2.1 delete information which is not applicable to project;
 - 2.2.2 supplement standard information to provide additional information applicable to project;
 - 2.2.3 show dimensions and clearances required;
 - 2.2.4 show performance characteristics and capacities; and
 - 2.2.5 show wiring diagrams and controls.

3.0 Shop Drawings

- 3.1 Within five (5) Working Days of execution of the Contract, submit for review by the Consultant, a schedule of Shop Drawings indicating dates, review dates, fabrication and lead times.
- 3.2 Drawings to be originals prepared by Contractor, Subcontractor, Supplier or Distributor, which illustrate appropriate portion of Work, showing fabrication, layout, setting or erection details as specified in appropriate Sections.
- 3.3 Identify details by reference to sheet and detail numbers shown on Contract Drawings.
- 3.4 Maximum sheet size 48" x 36" (1220mm x 915mm).

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01300
PAGE 2 OF 4**

-
- 3.5 All Shop Drawings of structural components shall show all pieces, dimensions, materials, weld types and sizes, material treatments and finish to a large scale (metric) suitable to the Product.

4.0 Samples & Mock-Ups

- 4.1 Submit samples in sizes and quantities specified.
- 4.2 Where specified, shown or considered necessary, submit duplicate samples for Consultant's approval.
- 4.3 Where colour, pattern or texture is criterion, submit full range of samples.
- 4.4 Samples must correspond in every aspect to materials supplied for the project.
- 4.5 Construct field samples and mock-ups at locations acceptable to Consultant.
- 4.6 Construct each sample of mock-up completely, including work of all trades required to finish.
- 4.7 Do not proceed with fabrication or delivery of materials until samples are approved.
- 4.8 Reviewed samples or mock-ups will become standards of workmanship and material against which installed work will be checked on project.
- 4.9 Approval of samples does not imply acceptance of finished work.

5.0 Coordination of Submissions

- 5.1 Review Shop Drawings, Product data and samples prior to submission. Any Shop Drawing not bearing evidence of having been checked by the Contractor will not be accepted by the Consultant.
- 5.2 Indicate on Shop Drawings that they have been checked by applying stamp "checked and certified for construction", including date and Contractor's signature.
- 5.3 No claim for delay will be considered as a result of time lost for Drawings returned because the Contractor has failed to check the Drawings as stated above.
- 5.4 Check Shop Drawings and Product data sheets before submission as follows:

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01300
PAGE 3 OF 4**

-
- 5.4.1 Against Contract Documents and other applicable Shop Drawings to ensure that work adjacent to and affecting other work is accurately detailed.
 - 5.4.2 To ensure work conforms to requirements of Contract Documents.
 - 5.4.3 Verify field measurements, field construction criteria, catalogue number and similar data.
 - 5.5 Coordinate each submission with requirements of Work and Contract Documents. Individual Shop Drawings will not be reviewed until all related drawings are available.
 - 5.6 Consultant's review of Shop Drawings and data sheets pertain to general design only. Errors in dimensions, quantities or interference will be marked if noticed, but this will not in any way relieve the Contractor from his responsibility to complete the Work as shown and specified.
 - 5.7 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by the Consultant's review of submission, unless Consultant gives written acceptance of specified deviations.
 - 5.8 Notify Consultant, in writing at time of submission, of deviations from requirements of Contract Documents.
 - 5.9 Do not proceed with Work covered by Shop Drawings and data sheets until reviewed by Consultant. Any such installation will not be considered for payment until Shop Drawings are approved.
 - 5.10 After Consultant's review, distribute copies to all trades affected.

6.0 Submission Requirements

- 6.1 Schedule submissions at least ten (10) Working Days before dates reviewed submissions will be needed.
- 6.2 Submissions shall be as follows:
 - 6.2.1 Four (4) white prints of Shop Drawings and Product data bearing the review stamp of the Contractor, three (3) of which will be retained by the Consultant;

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01300
PAGE 4 OF 4**

- 6.2.2 The fourth set will be returned to the Contractor, who is responsible for preparing all additional copies for distribution, and distributing to all required parties; and
- 6.2.3 Submit final Shop Drawings as noted in Section 01800 Project Closeout.
- 6.3 Additional copies of Shop Drawings, Product data, reports, procedures, plans and certificates shall be required for distribution by the Contractor.

END OF SECTION

**GENERAL REQUIREMENTS
QUALITY CONTROL**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01400
PAGE 1 OF 3**

1.0 Inspection

- 1.1 Refer to GC 2.3 – REVIEW AND INSPECTION OF THE WORK.
- 1.2 The materials furnished by the Contractor shall be inspected by the Consultant at the time of delivery and at such other times as the Consultant may elect.
- 1.3 The Owner and the Consultant shall have access to the work. If parts of the work are in preparation at locations other than the Place of the Work, access shall be given to such work whenever it is in progress.
- 1.4 The Consultant may order any part of the work to be examined if such work is suspected to be not in accordance with the Contract. If, upon examination such work is found not in accordance with the Contract, correct such work and pay the cost of examination and correction. If such Work is found in accordance with the Contract, the Owner will pay the cost of examination and replacement.
- 1.5 The review of the information covering materials and equipment by the Consultant shall in no release the Contractor from his responsibility for the proper design, installation and performance of any material, equipment or arrangement or from the liability to replace same should it prove defective or deficient.

2.0 Independent Inspection Agencies

- 2.1 Independent Inspection/Testing Agencies will be engaged by the Consultant for inspecting and/or testing portions of work.
- 2.2 Cost of such services will be borne by the Contractor under the appropriate Cash Allowance item in the Form of Tender.
- 2.3 Provide samples and/or assistance required for inspection and testing by the appointed agencies.
- 2.4 Employment of Inspection/Testing Agencies does not remove the responsibility to perform Work in accordance with the Contract Documents.
- 2.5 If defects are revealed during inspection and/or testing, the appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defects and irregularities as advised by the Consultant at no cost to the Owner. Pay costs for retesting and re-inspection.

GENERAL REQUIREMENTS QUALITY CONTROL

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

SECTION 01400
PAGE 2 OF 3

3.0 Procedures

- 3.1 Notify the appropriate agency and Consultant a minimum of two (2) working days in advance of the requirement for tests, in order that arrangements can be made with the testing company.
- 3.2 Submit samples and/or materials required for testing, as specifically requested in Specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in the Work.
- 3.3 Provide labour and equipment to obtain and handle samples and materials on site.

4.0 Rejected Work

- 4.1 Refer to GC 2.4 – DEFECTIVE WORK.
- 4.2 If, in the opinion of the Consultant, it is not expedient to correct defective work, or work not performed in accordance with the Contract Documents, the Owner may deduct from the Contract Price the difference in value between the work performed and that called for by the Contract Documents, the amount of which shall be determined by the Consultant.

5.0 Reports

- 5.1 Reports on materials testing as arranged by the Consultant shall contain the following information:
 - 5.1.1 Date and time of inspection or test.
 - 5.1.2 Weather conditions and ambient air temperatures during the inspection.
 - 5.1.3 Testing method employed by proper standard reference and specific paragraph or other detailed information as applicable.
 - 5.1.4 Inspection description and detailed and other relevant information.
 - 5.1.5 Test results in detail, complete with applicable graphs and other clarifying documents and information.
 - 5.1.6 Printed name and signature of person having conducted inspection or test, and name, title and signature of Supervisor having verified the report.

**GENERAL REQUIREMENTS
QUALITY CONTROL**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01400
PAGE 3 OF 3**

- 5.2 Inspection and Testing Agency shall provide a written report for each inspection and test made, three copies to the Consultant; three copies to the Contractor direct, who shall forward one copy to the Subcontractor, supplier or manufacturer concerned.

END OF SECTION

GENERAL REQUIREMENTS

TEMPORARY FACILITIES

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01500
PAGE 1 OF 1**

1.0 Access

1.1 Contractor shall be limited to using access onto the site as further directed.

2.0 Sanitary Facilities

2.1 Contractor shall provide a portable toilet/washroom for use by Contractor and his work force.

3.0 Provision For Traffic

3.1 The Contractor shall at all times carry on the Work in a manner that will create the least interference with traffic consistent with the performance of the Work.

4.0 Parking

4.1 Parking on site is minimal. Contractor to confirm with Consultant actual location and number of spaces available. The Owner is not required to provide parking to the Contractor and their forces.

5.0 Power

5.1 Contractor to supply their own power, if needed.

END OF SECTION

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01545
PAGE 1 OF 7**

1.0 Railway Safety, Orientation and Permits

1.1 The Contractor shall ensure that all persons employed or hired by the Contractor who are granted access to CN/Metrolinx right-of-way are trained and current in one of the following railway safety training courses:

1.1.1 GO-Safe Railway Orientation (available at www.gotransitcontractor.com);

(a) Effective July 2, 2014 the Owner will continue to allow access to Contractors previously trained in CN Contractor Orientation or CN eRail Safe prior to July 1, 2014. All personnel whose CN training expires after July 2, 2014 must take the GO-Safe Railway Orientation to maintain access to Metrolinx rail corridors.

or

1.1.2 Canadian Railway Operating Rules and GO-Safe Railway Orientation

(b) The addition of GO-Safe Railway Orientation to Canadian Railway Operating Rules takes effect November 1, 2014

1.2 The Contractor shall maintain an up-to-date list of all such trained employees on site and ensure all such trained employees wear the sticker, issued upon successful completion of the course on a readily visible location on their hardhats, or carry the wallet card issued upon successful completion of the course, at all times when within the railway right-of-way. Authority to commence construction will only be given when this requirement has been fulfilled.

1.3 The Contractor shall ensure that appropriate railway entry permits are completed and on site prior to starting Work in the railway corridor.

2.0 Alcohol and Drug Abuse Prevention

2.1 The following rules shall apply to all persons while at the Place of Work and/or on the Owner's property:

2.1.1 The use, possession, distribution and/or sale of illegal drugs or drug paraphernalia is prohibited;

2.1.2 The use, possession, distribution and/or sale of any any form of alcohol, including alcoholic beverages;

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01545
PAGE 2 OF 7**

- 2.1.3 Workers must know and understand the possible effects of drugs, medication or mood altering agents, including those prescribed by a doctor, which will adversely affect, in any way and to any extent, their ability to work safely;
 - 2.1.4 Individuals shall ensure that prescribed or over-the-counter medications are used responsibly and in accordance with the applicable instructions. Persons taking prescription drugs shall advise their supervisor if there is potential for performance to be negatively affected;
 - 2.1.5 No distribution, offering or sale of prescription medications is permitted; and
 - 2.1.6 Individuals must report for duty, free of the negative effects of alcohol and other drugs, including the effects of such use, and remain so during the entire period of duty.
- 2.2 Where a worker is suspected of being intoxicated, the following procedures must be followed:
- 2.2.1 The worker will be escorted to a safe location away from the work area, and asked to remain there pending further action;
 - 2.2.2 The worker's supervision, worker health and safety representative (if applicable), union steward (if applicable) and the designated Owner Contract representative will be requested to attend;
 - 2.2.3 The group present will determine an appropriate course of action and a means of transport to a suitable safe location;
 - 2.2.4 Where there are differences of opinion with respect to the worker's fitness for duty, the dispute will be resolved with a view to ensuring safety, and the worker will be transported home, or required to remain in a safe location until this can be arranged; and
 - 2.2.5 The local police may be called if the worker was operating any motorized vehicle requiring a valid driver's license.
- 2.3 The Owner will maintain a position of zero tolerance to any violations of these rules. At the sole discretion of the Owner, rule contraventions may result in:
- 2.3.1 Verbal and written reporting to the person's supervisor/employer;
 - 2.3.2 Issuance of a written warning, and recording of same;

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01545
PAGE 3 OF 7**

- 2.3.3 Reporting to the appropriate police department for investigation and subject to criminal prosecution;
- 2.3.4 An order to leave the project site temporarily or permanently; or
- 2.3.5 Remedies as may be specified in the Contract Documents.

3.0 Track Protection

- 3.1 Work within the Rail Corridor will be subject to Canadian Rail Operating Rules (CROR) including Track Occupancy Permit (TOP) and Rule 842. Track Protection by means of flagging protection will be provided in accordance with CROR and Metrolinx Track Worker Safety Instructions.
- 3.2 Flag persons/flag persons in training will be furnished by A&B at no cost to the Contractor, up to the date specified for the Total Performance of the Work. After this date, the Contractor will be required to pay all additional flagging costs, which will be automatically deducted from the amounts due to the Contractor in the progress payments.
- 3.3 Installation of railway-approved temporary barriers, enclosures or platforms to separate off track equipment and workers from live track, eliminate equipment from entering the track clearance envelope or debris from falling to the track, will be require a task specific risk assessment subject to approved by Metrolinx, and may reduce or eliminate the need for a flag person, or reduce the type of flagging protection required.
- 3.4 The Contractor will be responsible for ensuring that construction operations are carried out without interfering with the continued safe movement of rail traffic. The Contractor will be liable for the cost of train delays and for the cost of repairs to any rail, ties and ballast required as a result of damage caused by his/her operation.
- 3.5 The Contractor shall ensure that a flag person is present at all times when work is executed within the Rail Corridor or within 10 metres of the nearest rail or above the track(s) where the work, in the opinion of Metrolinx, may be exposed to or interfere with the operation of trains. The Contractor shall arrange for a site meeting with Metrolinx no earlier than four weeks prior to flagging to confirm flagging protection requirements.
- 3.6 The Contractor shall submit the requests for flagging protection weekly with three (3) week forecast to ensure the most up-to-date information is being relayed for the scheduling of track protection. A minimum of 48 hours notice

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01545
PAGE 4 OF 7**

shall be given for any cancellations of the scheduled or approved flagging protections.

- 3.7 The Contractor shall advise Metrolinx of work to be performed, using task specific method statements, in order to schedule flagging protection. Subject to Metrolinx approval of Project Co's method statement, Project Co shall advise Metrolinx of the scheduled flagging times on the corridor at least three weeks in advance for Metrolinx's planning and coordination purposes. Metrolinx reserves the right to make adjustments to flagging as required.
- 3.8 Ensure that a responsible person is present at all times to whom the Railway personnel will issue orders regarding work near the tracks. Comply immediately with such orders and instructions.
- 3.9 The colour red shall not be used for safety helmets, safety vests or survey markers on railway right-of-way in order to avoid conflict with Railway Operational Practice. Other highly visible colours such as orange are acceptable.
- 3.10 At no time shall idling equipment be left unattended by the operator.
- 3.11 The Contractor shall ensure that both rails of the same track are never connected with any conductor of electricity such as steel measuring tapes or metal traction equipment.

4.0 Protection of Infrastructure

- 4.1 Ensure protection of the rails, ties and ballast from falling materials (i.e. trees, rocks, debris, etc.) by use of timber mats or equivalent material. Prevent excavated material from contaminating ballast and sub-ballast.
- 4.2 The Contractor shall restore any track structure that is disturbed during construction activities as follows:
 - 4.2.1 the track shall be mechanically lined, tamped, surfaced, compacted and stabilized with the appropriate equipment to ensure that the track structure is safe for train traffic at a minimum speed of 30 mph prior to the end of the closure;
 - 4.2.2 after the required tonnage has travelled over the affected area, the track shall be in such a state so as to allow for the authorized track speed as per GO Track Standards

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01545
PAGE 5 OF 7**

5.0 Restrictions on Construction Operations

In order to ensure the continued safe movement of rail traffic, certain restrictions shall be imposed on the construction operations. Without in any way limiting the generality of the foregoing statement, the following are some of the limitations or restrictions that shall be imposed.

- 5.1 The Contractor shall acknowledge that the Works within the Rail Corridor will be carried out on or adjacent to operating railway tracks and that the productive hours of work are affected by the passage of trains and associated stoppages of work are required to ensure railway safety. The safe uninterrupted passage of trains shall take priority over the construction of the Works.
- 5.2 The Contractor shall comply fully with Metrolinx in planning, scheduling and control of the work within the Rail Corridor.
- 5.3 When working on or adjacent to the Rail Corridor, the Contractor shall obtain permission to enter and construct within or adjacent to the Rail Corridor.
- 5.4 The Contractor shall acknowledge and agree to provide continued safe movement of rail traffic by following the restrictions that shall be imposed on the construction operations including the following limitations or restrictions:
 - 5.4.1 When mucking, clearing or other operations are being carried out which may endanger the existing track or impede the safe passage of trains, perform such work only during such times as there is protection on the rail traffic.
 - 5.4.2 Proper erosion and sedimentation control is implemented on and adjacent to the Rail Corridor during construction. Any silt and debris accumulation in the railway roadbed, ditches and other railway facilities shall not be permitted.
 - 5.4.3 Direct all construction drainage away from Metrolinx drainage ditches and Rail Corridor and shall have no adverse effects on the existing Metrolinx drainage facilities, ditches or the environment. Any dewatering requires prior approval by Metrolinx.
- 5.5 All workers and equipment within ten (10) metres or thirty (30) feet from the nearest rail must stop working on the approach of a train and remain stopped until permission has been given to resume work by the flag person.
- 5.6 Do not work closer than four (4) metres or thirteen (13) feet from the nearest rail without the prior consent of Metrolinx and only during such times as there is track protection provided by the Railway.

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01545
PAGE 6 OF 7**

-
- 5.7 The Contractor shall secure all scaffolding, formwork and other protective coverings to be used on the project in such a manner that they will not come loose by the movement of passing trains.
 - 5.8 Prior to undertaking any work, the Contractor shall delineate the work outside of the Rail Corridor from work within the Rail Corridor with construction fences. The Contractor shall coordinate the exact location and placement of the fencing with Metrolinx.
 - 5.9 In the event of an incident that may impact rail operations, the Contractor shall notify the flag person immediately for an assessment and action.

6.0 Crossing Tracks

- 6.1 Do not cross tracks of the Railway Company with scrapers, bulldozers, trucks, barrows or other mechanical equipment at grade nor place crossing planks except by authority of Metrolinx, at locations designated by him.
- 6.2 The Contractor shall not cross the track with any equipment or vehicles without prior approval from Metrolinx. If the Contractor's schedule of operations requires construction equipment to cross the track, the Contractor shall make a request to Metrolinx for a Temporary Construction Crossing.
- 6.3 Construction equipment shall not cross the track except at an approved Construction Crossing designated by the Metrolinx. Crossings shall only be used by equipment when flagging protection has been provided.
- 6.4 If necessary, CN/PNR will install and remove temporary construction crossings. The Contractor shall supply the required 7" x 10" planking of length to suit their needs (seven planks per track), shim stock and filter fabric. The Contractor shall be responsible for constructing and maintaining the approaches to the crossing to a standard acceptable to GO Transit Track Standards.
- 6.5 The crossing shall:
 - 6.5.1 have a level gradient on either side for a distance of eight (8) metres or not less than the maximum length of vehicle using it.
 - 6.5.2 have approach grades not greater than five percent (5%).
- 6.6 To minimize contaminating the ballast, install filter fabric over the entire ballast section under the crossing planks and approaches.

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01545
PAGE 7 OF 7**

- 6.7 Each rail of the track shall be protected by use of rubber mats or tires, before any crawler mounted equipment is allowed to cross the track affected.
- 6.8 Upon completion of all construction requiring use of the temporary crossings, the Contractor shall remove the approaches and restore the track ballast section in accordance with the GO Transit Track Standards.
- 6.9 The Contractor shall install temporary gates, approved by Metrolinx and the Consultant, to prevent use of the crossings by unauthorized personnel and keep gates locked when crossings are not in use. Metrolinx reserves the right to open the locks and use the gates at any time in order to access Metrolinx Lands.

7.0 Site Material Storage

- 7.1 Due to the area of the work and the possibility of vandalism, all materials must be physically removed from the site or placed in secure bins or areas on a daily basis. No loose material will be allowed on site.
- 7.2 The Contractor shall be held accountable for all damages to Owner operations or property, railway operations or property, and all persons or their property, that is found to be a result of improper materials storage practices by the Contractor or their Subcontractors.
- 7.3 The Contractor shall not store materials or equipment on the Rail Corridor. The Rail Corridor must remain clear for railway use at all times. Equipment shall not be positioned to block the railway access road, track area or any part of the Rail Corridor without prior Metrolinx approval.

END OF SECTION

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 1 OF 13**

PART 1-GENERAL

1.0 General

- 1.1 Comply with the Contract Documents which include, but are not necessarily limited to, the General Conditions, the Supplementary General Conditions, the General Requirements, Specifications, Drawings, all Addenda and any Change Orders.

2.0 Description

- 2.1 This section covers work providing compliance with Environmental Protection measures during construction.
- 2.2 Provisions of this section are in addition to requirements of other sections of the Contract Documents.

3.0 Compliance With Laws, Regulation, Guidelines and Policy

- 3.1 The Contractor shall comply with any applicable laws, rules or regulation of any public authority, orders of a Court of competent jurisdiction or Metrolinx environmental directive with respect to the contracted work. The Contractor shall also indemnify and hold harmless Metrolinx from all damages and liabilities assessed against Metrolinx as a result of Contractor non-compliance therewith.
- 3.2 The Contractor shall ensure and warrant that all employees possess and will maintain in effect all licenses, permits, authorizations, insurance and any other documents that the acts and/or regulations pertaining to environmental protection require it to have for the performance of contracted works.
- 3.3 The Contractor shall be solely responsible for the cost of all work carried out to correct any environmental contamination caused by the Contractor, their subcontractors or employees on Metrolinx location or otherwise
- 3.4 Failure by the Contractor, subcontractors or employees to respect the established environmental protection program may lead to temporary stoppage of work, suspension of an employee from working on Metrolinx property, closure of the site until the situation is corrected or removal of the Contractor from the job site. Delays resulting from such closings and any resulting penalties shall be charged to the Contractor. The Contractor will not issue any claims against Metrolinx for these delays. No extension of contractual work completion date will be granted

GENERAL REQUIREMENTS ENVIRONMENTAL PROTECTION

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 2 OF 13**

as a result of any work stoppage associated with environmental spills and/or incidents.

4.0 Contractor Environmental Protection Program

- 4.1 An Environmental Protection Program shall be drawn up by the Contractor and submitted to the Consultant for approval. This program should address all potential environmental hazards associated with the use of materials, equipment and/or operations and establish appropriate environmental protection practice including preventative measures and spill response to achieve compliance with the above noted laws, regulation, guidelines and policy.
- 4.2 The Contractor shall designate an environmental protection officer with the proper training responsible for enforcing the environmental protection program and shall indicate to Metrolinx in writing the name of that person as well as his/her alternate.
- 4.3 The Contractor shall keep on site a list of hazardous materials, toxic products, work procedures and contaminants used in the work, and clearly display at the site the lists and material safety data sheets.

5.0 References

- 5.1 The Contractor shall be fully familiar and comply with all applicable environmental acts, regulations, and municipal by-laws for environmental requirements amended from time to time that include without being limited to:
 - 5.1.1 Federal Legislation
 - (a) Canadian Environmental Protection Act (CEPA).
 - (b) Canadian Fisheries Act.
 - 5.1.2 Ontario Legislation
 - (a) Environmental Protection Act (EPA).
 - (b) Ontario Water Resources Act (OWRA).
 - (c) Lakes and Rivers Improvements Act (LRIA).
 - (d) Technical Standards and Safety Act (TSSA).

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 3 OF 13**

5.1.3 MOECC Policies and Guidelines

- (a) "Guidelines for Evaluating Construction Activities Impacting on
- (b) Water Resources", MOE, 1995.
- (c) "Guidelines for Use at Contaminated Sites", MOE, May 1996
(revised February 1997), as amended by O.Reg. 511/09
- (d) "Fill Quality Guidelines for Lakefilling in Ontario", MOE, March
2003.

5.1.4 MTO "Drainage Design Manual", 1997

5.1.5 Municipal By-laws pertaining to sewer use

5.1.6 Municipal By-laws pertaining to noise control

5.1.7 Municipal requirements related to Tree Protection

6.0 Related Sections

Related Sections may include without being limited to:

- (a) Dewatering Section 02140
- (b) Construction Noise and Vibration Control Section 02202
- (c) Erosion Control Section 02270
- (d) Excavating, Trenching and Backfilling Section 02315
- (e) Water for Compaction, Mud and Dust Control Section 02362
- (f) Other Sections that may require Environmental Protection

PART 2 - EXECUTION

1.0 Vegetation

- 1.1 The Contractor must protect trees and plants on site and adjacent properties where indicated.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 4 OF 13**

-
- 1.2 The Contractor must restrict tree removal to areas indicated or designated by the Consultant.
 - 1.3 Barriers for tree protection shall be erected prior to commencement, to delineate and separate the construction area from trees adjacent to the construction zones, which may be affected. Unless specified, construction activities shall not be carried out within the drip line of all trees that will remain after construction. When the Contract requires work within the drip line of trees not designated for removal, operation of equipment within the drip line shall be kept to a minimum necessary to perform the work as directed by the Consultant.
 - 1.4 The Contractor must protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.
 - 1.5 Tree protection shall conform to City of Toronto Tree Protection Policy and Specification for Construction – Attachment #18.
 - 1.6 Any areas accidentally or temporarily disturbed will be rehabilitated, re-stabilized and re-vegetated immediately upon completion of the construction works to satisfactorily restore the project site area to its pre-construction condition. Minimize the duration soils are left exposed. Restoration of the project site area would involve use of native materials such as non-invasive tree/shrub species indigenous to southern Ontario.
 - 1.7 When vegetation removal occurs outside of the railway right-of-way maintenance zone, disturbed areas will be re-vegetated after construction with an appropriate mix of native grasses, shrubs or trees.
 - 1.8 Vegetation removal, other than standard maintenance, to be avoided between May 1 and July 31 unless a nesting survey is completed by a qualified avian biologist prior to construction and no active nests are observed in the work area.

2.0 Wildlife

- 2.1 If migratory bird breeding activity is observed in the work area then mitigation measures, such as a prohibition on clearing or establishment appropriate buffers around active nests, will be implemented to avoid any adverse impacts based on consultation with a qualified avian biologist.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 5 OF 13**

3.0 Fish & Aquatic Habitat

- 3.1 Prevent the discharge of deleterious substances from entering watercourses or drainage structures that lead to watercourses.

4.0 Noise and Vibration

- 4.1 Noise generated by construction activities will comply with applicable municipal by-laws.
- 4.2 Contractor will be required to maintain noise-arresting devices and exhibit good construction practice to minimize the generation of machinery noise. All construction equipment will conform to Noise Pollution Control (NPC) publications NPC- 115 Construction Equipment and NPC- 118 Motorized Conveyances.
- 4.3 All equipment and vehicles shall be compliant with quiet zone and residential area sound emission standards where necessary.

5.0 Heritage & Archaeology

- 5.1 The Contractor shall cease operations if any archaeological resources are encountered. The Consultant and the Ministry of Culture will be notified immediately in this event and appropriate mitigation measures assessed and implemented at that time.
- 5.2 The Contractor shall cease operations if any human remains are discovered. The Consultant, the Ministry of Culture, and the Registrar of Cemeteries Regulation Unit will be notified immediately in this event.

6.0 Soils & Sediment

- 6.1 Strip and stockpile topsoil from the area of construction for reuse during restoration.
- 6.2 During construction, contamination which was not identified in previous site investigations may become evident. This contamination may include: visibly contaminated soils (e.g., oil staining, organics); soils containing methane gas (e.g., organic materials); contamination in soil identified after testing; and, buried storage tank, fuel lines, etc.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 6 OF 13**

- 6.3 If unexpected contaminated materials are encountered, the Contractor shall immediately stop work in the affected area, inform the Consultant and request direction on how to proceed.
- 6.4 Contaminated soils shall be disposed of at facilities approved to receive such waste.
- 6.5 Excess soil will be managed in accordance with the Environmental Protection Act and OPSS 180.
- 6.6 Do not bury rubbish and waste materials on site.
- 6.7 Use established BMPs in the stockpiling, installation, and disposal of creosote rail ties.

7.0 Drainage

7.1 General

- 7.1.1 The Contractor must provide temporary drainage and pumping as necessary to keep excavations and site free from water. Outfall from pumping operations must be directed away from creeks onto approved splash pads or retention areas.
- 7.1.2 The Contractor must not pump water containing suspended materials into waterways, sewer or drainage systems.
- 7.1.3 The Contractor must control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.
- 7.1.4 The Contractor must make provisions to contain any oil or chemical spill that may occur on site.
- 7.1.5 Dewatering of excavations shall conform to Section 02140.

7.2 Surface Water

GENERAL REQUIREMENTS ENVIRONMENTAL PROTECTION

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

SECTION 01560
PAGE 7 OF 13

Contractor to prepare and submit Environmental Management plan to the Consultant prior to mobilization to the site outlining compliance with contract specifications and constraints, and provisions to deal with emergency situations. This document will include a sediment and erosion control plan, a methane gas and leachate management plan, a spill control plan, and an equipment fuelling, maintenance, and storage plan.

7.2.1 Sediment and Erosion Control Plan

Prepare a sediment and erosion control plan; ensure that Contractor staff are trained on the provision contained in the plan. The plan should include the following, at a minimum:

- (a) Place silt fences, straw bales, and check dams to contain sediment as per Contract Documents. Regularly inspect and maintain sediment control structures.
- (b) Slopes that are cleared or modified during construction must be stabilized and seeded.
- (c) Minimize the duration soils are left exposed.
- (d) Avoid or minimize movement of heavy machinery on slopes that are prone to erosion.
- (e) Create interceptor swales to divert runoff from the top of slopes that are susceptible to erosion and away from areas of exposed soils.
- (f) Comply with Ontario Water Resources Act and any MOECC approvals required with respect to the source, quantity, and quality of water discharging to natural receivers.
- (g) Comply with applicable municipal sewer use bylaws when discharging to sewers.
- (h) If necessary to dewater any excavation, discharge the pumped water to a settling pond, filter bag, or vegetated buffer strip of adequate size, to filter out suspended sediments for the discharge of water prior to its entry into a drainage system connecting to a watercourse.
- (i) Apply wet weather restrictions during site preparation and excavation.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 8 OF 13**

7.2.2 Spill Control Plan

Prior to commencing construction, prepare a spill plan, which at a minimum will include the following information and mitigation measures:

- (a) Names and telephone numbers of the following persons:
- (b) Local municipalities and MOECC to be notified forthwith of a reportable spill.
- (c) Representatives of fire, police and health departments of local municipalities who are responsible to respond to emergency situation.
- (d) Names and telephone numbers of companies experienced in control and clean-up of hazardous materials that would be called upon in emergency involving spill.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 9 OF 13**

Spill plan shall include but not be limited to provisions for spills of hazardous or unknown materials (i.e. puncturing an unmarked drain during excavation).

Proposal for immediate containment and control of spill, clean up procedures to be initiated immediately and any other action to be taken to mitigate potential environmental damage while awaiting additional assistance.

Contractor will be responsible for preparing, implementing, directing and supervision of spill plan.

All Contractor employees will be trained in appropriate spill response procedures. Copies of training records will be provided to the Consultant.

Maintain an adequate supply of clean up materials at the work site. Spill containment kit for petrochemical fuels and any other deleterious substances in use will be kept onsite and will be immediately available at all times. At a minimum, the kit will consist of adsorbent booms and swabbing material to contain a spill and personal protective equipment to allow handling of hazardous materials.

Store all fuels, oils, lubricants, and other chemicals in suitable containers in secure enclosures to prevent leaks and spills into the environment, and to minimize vandalism.

Excess fuels, lubricants, and other potentially deleterious substances will be removed from the site and disposed of in an approved manner.

In event of a spill the Contractor shall capture, contain and cleanup spills and leaks immediately. Immediately notify local authorities, MOECC Spill Action Centre, and the Consultant of all spills. Contaminated materials shall be disposed of in accordance with MOECC policies and provincial regulations.

All spills shall be immediately reported to the GO Rail Operations Control Centre (ROCC) at 416 601-2174. Metrolinx Spill Report form 0243 (2) — 02 shall be completed and submitted to the ROCC.

7.2.3 Spill Response Procedure

The Spill Response Procedure shall include but may not be limited to:

- (a) Quickly locate the source of contamination and, if possible, neutralize it.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 10 OF 13**

- (b) Cut the supply of electrical current and turn off all sources of ignition. Extinguish any flame.
- (c) Restrict access to the spill area and set up a secure zone.
- (d) Use a spill kit or any other barrier (sand, peat, moss, snow) to contain the spill.
- (e) Prevent seepage into watercourse, storm drains, sewer systems etc. Use plastic tarps or other materials to build a retention pond.
- (f) The recovered products and contaminated natural soil must be stored, treated recycled or disposed only by authorized carriers.

7.2.4 Equipment Fuelling, Maintenance and Storage Plan

- (a) Obtain the acceptance from the Consultant for refuelling areas.
- (b) Contractor shall submit procedures for interception and rapid clean-up and disposal of fuel spillage to the Consultant for review prior to starting Work.
- (c) All equipment to be well maintained and monitored daily to ensure that there are no leaks of deleterious substances.
- (d) Ensure that materials required for clean-up of fuel spillages are readily accessible on Site at all times.
- (e) All refuelling and maintenance activities will be conducted in designated areas well away from watercourses/drainage ditches (5m minimum).
- (f) Ensure that water used for cleaning of equipment does not drain into streams, lakes or watercourses. Do not empty fuel, lubricants and/or pesticides into any watercourse, or on ground.
- (g) Clean construction equipment prior to entering public roadways to prevent littering. Debris from cleaning equipment shall not be permitted into storm sewers or watercourses.
- (h) Store equipment and materials in orderly manner and in location acceptable to the Consultant.

7.3 Ground Water

GENERAL REQUIREMENTS ENVIRONMENTAL PROTECTION

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 11 OF 13**

- 7.3.1 Temporary dewatering during construction will be required for all excavations below the groundwater table. A Permit to Take Water (PTTW) will be required from the MOE under the OWRA.
- 7.3.2 Discharge of groundwater to sanitary storm sewers must comply with applicable municipal sewer use bylaws.
- 7.3.3 Discharge of groundwater to a natural receiver must comply with OWRA requirements.
- 7.3.4 If groundwater does not meet municipal sewer use bylaws or OWRA requirements then it will require collection, treatment, and/or off-site disposal at a suitable approved location.
- 7.3.5 Discharge of groundwater must follow sediment and erosion control plan measures, where applicable.

8.0 Air Quality

- 8.1 Implement dust suppression measures as specified in Section 02362.
- 8.2 Sweep roads clean at the end of each work day if mud has been tracked onto the road.
- 8.3 Maintain all emission control devices on machinery in good working condition.
- 8.4 Minimize vehicle traffic on exposed soils
- 8.5 Avoid site preparation, excavation and construction during windy and prolonged dry periods.
- 8.6 Stabilize soils and other material storage piles against wind erosion.
- 8.7 Cover and contain fine particulate materials during transportation to and from the site. Install a tarpaulin on materials stockpiles and haulage trucks, as appropriate.
- 8.8 Contractor to regularly inspect and maintain all equipment emission control devices to ensure air emissions are within manufacturer and legislative limits.
- 8.9 Fires and burning of rubbish onsite will not be permitted.

9.0 Disposal of Wastes

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 12 OF 13**

-
- 9.1 The Contractor must not bury rubbish and waste materials on site unless approved by the Consultant.
 - 9.2 The Contractor must not dispose of waste or volatile materials; such as, mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
 - 9.3 Any contaminated soils or materials must be handled in accordance with the Environmental Protection Act.

10.0 Work Adjacent to Waterways

- 10.1 The Contractor must not operate construction equipment in waterways.
- 10.2 The Contractor must not use waterway beds for borrow material without the Consultant's approval.
- 10.3 The Contractor must not dump excavated fill, waste material or debris in waterways.
- 10.4 All material storage and fuelling areas must be away from creeks in locations approved by the Consultant.

11.0 Pollution Control

- 11.1 The Contractor must maintain temporary erosion and pollution control features installed under this contract.
- 11.2 The Contractor must control emissions from equipment and plant to local authority's emission requirements.
- 11.3 The Contractor must prevent extraneous materials from contaminating air beyond application area by providing temporary enclosures.
- 11.4 The Contractor must provide dust control measures as specified in Section 02362.
- 11.5 The Contractor must notify the Consultant of any suspected hazardous materials in excavation. Do not remove or bury such material without written permission from the Consultant.
- 11.6 The Contractor must supply, place and maintain rock check dams as required.
- 11.7 The stockpiling of topsoil must be restricted to outside the limits of flood plains.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01560
PAGE 13 OF 13**

12.0 Restoration

- 12.1 The site must be restored to as near pre-construction conditions as soon as possible after completion of construction.

13.0 Erosion and Sediment Control Program

- 13.1 Prior to the commencement of any work on this project that might cause erosion and/or sedimentation, the Contractor must receive approval from the Consultant for an erosion and sedimentation control program that the Contractor proposes to use. This program must be in accordance with Ontario Guidelines on Erosion and Sediment Control for Urban Construction Sites (May 1987 or latest version) and Section 02270 of this contract.

14.0 Statutory Approvals

- 14.1 The Contractor will ensure that all statutory approvals are obtained to commence construction. Such approvals, agreements, forms, etc. if not obtained by the owner prior to construction are to be obtained by the Contractor as advised by the Consultant, Owner or otherwise.=

15.0 Construction Operations

- 15.1 The Contractor's construction operations must comply with the requirements of the "Construction and Mitigation Handbook for MNR Class EA Projects" and the "Environmental Code of Good Practice for General Construction".

*** END OF SECTION ***

**GENERAL REQUIREMENTS
TRAFFIC CONTROL**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01570
PAGE 1 OF 4**

1. Scope of Work

- 1.1 Supply, place and maintain temporary traffic control devices required for the works in accordance with the Ontario Traffic Manual, Book 7 (latest edition).
- 1.2 Upon completion of the Work, restoration of the site to its original condition, all to the approval of the Consultant.
- 1.3 Payment for permits not obtained by the Owner.
- 1.4 The requirements of this Section are minimum. Refer also to City of Toronto Special Specifications SS6, SS7, SS8 and SS9. Comply with the more stringent requirements.

2. Submittals

- 2.1 Prior to commencement of the Work, the Contractor will provide the Consultant a written Traffic Protection Plan, including the identification of all hazards and all measures necessary to adequately protect the workers on site. The Plan shall protect the Owner and City of Toronto, including but not limited to the Inspectors, Supervisors, Surveyors, Traffic Services personnel and the Consultant. The "Work" zone design must be consistent, uniform and predictable. Traffic safety must be designed into work zones and provide for safety, mobility, advanced warning and positive guidance. The Traffic Protection Plan must be kept on site at all times for inspection by the Ministry of Labour.

3. Staging Plans

- 3.1 The Contractor shall provide the Owner and the City of Toronto and the Consultant one (1) month notice for full road closures and two (2) weeks notice for any partial road closures or lane restrictions.
 - (i) Contact for road closures is as follows:
City of Toronto
Transportation Services
Bruce Clayton,
Phone 416-394-8409
- 3.2 The Contractor shall provide the Owner and TTC and the Consultant one (1) month notice of all disruptions to TTC transit services due to their works.
 - (i) Contact for transit disruptions is as follows:

GENERAL REQUIREMENTS TRAFFIC CONTROL

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01570
PAGE 2 OF 4**

Toronto Transit Commission
Bus Transportation Department
Murray Hill
Phone 416-393-3302
E-mail murray.hill@ttc.ca

- 3.3 The Contractor shall retain a Professional "Traffic Engineer" to design and stamp detailed plans for all traffic stages. For each stage of construction, lane diversion or alteration in the traffic control setup, the Contractor shall provide the Consultant with a detailed Traffic Control Plan a minimum of six (6) weeks in advance of undertaking the Work, and maintain a copy on site during construction. The Traffic Control Plan shall, at a minimum:
- (i) The Contractor shall obtain all necessary road closure permits and approval of the City of Toronto prior to submission of Traffic Control Plans to the Consultant.
 - (ii) Encompass all areas of the Temporary Work Zone and a sufficient area outside of the Temporary Work Zone to incorporate advance signing;
 - (iii) Consist of a plan view drawing or series of drawings, drawn to scale of 1:500 unless otherwise approved by the Consultant, and indicate all key dimensions;
 - (i) Traffic Control Plans shall be produced on CAD based drawings and submitted to the City of Toronto, Transportation Services for approval.
 - (iv) Indicate the type and location of all temporary construction signs, delineators, barricades, flashers, and temporary pavement markings and the position of Traffic Control Persons (TCP's);
 - (v) Show all available vehicle lanes and widths, pedestrian walkways, construction vehicle access, egress routes, emergency routes, local access availability.

4. Pedestrian Traffic

- 4.1 The Contractor shall maintain or protect pedestrian traffic during the works.

5. Materials

GENERAL REQUIREMENTS TRAFFIC CONTROL

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

SECTION 01570
PAGE 3 OF 4

- 5.1 The Contractor shall supply, place and maintain all barricades, warning signs, delineators, temporary concrete barrier and flashing lights necessary for the protection of the public and the Work, including warning signs of construction operations maintained at both ends of the Contract, for the duration of the Contract, in accordance with the Ontario Traffic Manual, Book 7 (latest edition).
- 5.2 All signs, flashers, barricades, temporary concrete barriers, and delineators shall be cleaned and maintained throughout the duration of the Contract. The Contractor shall use flexible drums (TC-54) for delineation. No other material will be accepted.

6. Execution

- 6.1 Liaise with Consultant and all other applicable stakeholders in a timely manner to ensure that a safe quality product is delivered within the timeframe specified herein.

7. Traffic Operations

- 7.1 Peak hours for this Contract shall be defined as the time period from 9:00 am to 4:30 pm Monday to Friday inclusive, unless otherwise specified. The Contractor shall maintain at all times, one lane of traffic, in each direction, during peak hours.
- 7.2 The Contractor shall provide paid duty police officers for all major road closures.

8. Traffic Control Persons, Signs, Barricades, etc.

- 8.1 Traffic control on this contract shall be in conformance with the procedure outlined in the pamphlet entitled "Correct Methods for Traffic Control" issued by the Construction Safety Associations of Ontario.
- 8.2 Each traffic control person shall, while controlling traffic, wear either:
 - (i) an approved fluorescent blaze orange or fluorescent red safety vest
 - (ii) an approved fluorescent blaze orange or fluorescent red armband on each arm, and an approved fluorescent blaze orange or fluorescent red hat
- 8.3 The Contractor shall provide, , maintain and remove all of the traffic control devices required by the Ontario Traffic Manual, Book 7, Temporary Conditions for all Temporary Traffic Control Issues for Short Term Durations. The Contractor shall ensure that sufficient devices are always easily at hand to satisfy all of the requirements.

**GENERAL REQUIREMENTS
TRAFFIC CONTROL**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01570
PAGE 4 OF 4**

9. Reflectivity Requirements

- 9.1 The Contractor's attention is drawn to the new requirements of OHS Reg. 213/91 Section 67, 68 and 69, regarding Traffic Control Measures. TC-22 Stop/Slow paddles, Traffic Control Persons and Worker Clothing requirements. Nylon vests must have front and side tear away feature. Night-time retroreflective silver stripes around each arm and leg shall be used if required.

10. Quality Assurance and Traffic Conditions

- 10.1 The Consultant will make inspections, as required, and the Contractor will be notified of any deficiency in writing. Repairs shall be carried out in conformance with this specification.

11. Delivery and Trucking

- 11.1 The Contractor shall plan and schedule the routes of vehicles transporting all materials to, from or within the job, so that vehicular movements are accomplished with minimum interference and interruptions to traffic.
- 11.2 This will necessitate vehicles to "slip-off" or "slip-on" in the direction of traffic, in order to merge with and thereby avoid crossing traffic lanes.
- 11.3 The Contractor shall notify suppliers of materials and equipment of the above requirements.

*** END OF SECTION ***

GENERAL REQUIREMENTS SAFETY REQUIREMENTS

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

SECTION 01600
PAGE 1 OF 8

1.0 Construction Safety Measures

- 1.1 For the purposes of the Contract, the term "Constructor", as defined in the *Occupational Health and Safety Act*, (OHS) shall mean the entity that shall be responsible for ensuring that the provisions of the statutes, regulations and by-laws pertaining to the safe performance of the Work are to be observed. The "Constructor" shall submit the Notice of Project to the Ministry of Labour, if required by the Work as defined by the Construction Projects Regulation. The Contractor shall be listed as the Constructor and Metrolinx listed as the Owner.
- 1.2 The Contractor's Site Supervisor shall be defined as and perform all the functions of the "Supervisor" of the "Constructor" for the "Project", where these terms have the same meanings as defined in Section 1 of the OHS. The "Supervisor" shall also be deemed to be the "Supervisor" designated by the "Owner" should the Owner also fit the definition of a "Constructor" under the Occupational Health and Safety Act (Ontario). The supervisor shall not be changed except for valid reason.
- 1.3 The Contractor's Site Supervisor shall be present at the Place of Work during the performance of the Work. In the case of the Contractor's Site Supervisor's absence, the Contractor will name another person, in writing to the Consultant, who is competent to assume these responsibilities as the Contractor's Site Supervisor.

2.0 Project Responsibilities

- 2.1 The Contractor and the Contractor's representative shall ensure that:
 - 2.1.1 All measures and procedures prescribed by the most recent version of the following documents are carried out at the Place of Work;
 - (c) The *Occupational Health and Safety Act* and applicable Regulations made thereunder;
 - (d) The *Rail Safety Act* and applicable Regulations made thereunder;
 - (e) The *Environmental Protection Act* and applicable Regulations made thereunder;
 - (f) The *Smoke-Free Ontario Act* and Regulation;
 - (g) Metrolinx's Construction Safety Management Program (CSMP);

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01600
PAGE 2 OF 8**

- (h) Metrolinx Safety Guidelines for Contractors Consultants and Project Coordinators and
 - (i) Any other legislation, regulations and standards as applicable.
- 2.2 Every employer and every worker performing work at the Place of Work shall comply with all measures and procedures prescribed by the latest versions of the following Acts, Regulations and Metrolinx documents referred to in Section 2.1 above.
- 2.3 The health and safety of workers and the general public are protected in relation to the work performed on site. In addition to compliance with all occupational health and safety legislation, every employer and every worker performing Work at the Place of Work is required to demonstrate a willingness to participate in occupational health and safety program(s).

3.0 Deliverables

- 3.1 The Contractor shall, in accordance with paragraph 9.4.4 of the Supplementary General Conditions, within five (5) Working Days of the date of final execution of the Agreement Between Owner and Contractor, submit the following to the Owner for its review:
 - 3.1.1 A copy of the Contractor's Occupational Health and Safety Policy and Program, which shall comply with all applicable legislation; and
 - 3.1.2 A copy of the Contractor's Site Specific Safety Plan that includes site-specific hazard and risk assessment plans that will effectively prevent and control incidents and/or accidents.
- 3.2 Work shall not commence at Place of Work until the Owner has received the above referenced documents. The Owner shall not entertain any claim on the part of the Contractor for any extension to the Contract Time or the Contract Price as a result of the Contractor's failure to submit an Occupational Health and Safety and/or program and Site Specific Safety Plan that are acceptable to the Owner.
- 3.3 The Contractor shall, within five (5) Working Days of the date of final execution of the Agreement Between Owner and Contractor, deliver to the Owner copies of all training records for Occupational Health and Safety related courses taken by a "competent person" as defined by the *Occupational Health and Safety Act*, and designated as the Contractor's Site Supervisor as per OHS Act Section 25(2)(c). Relevant course subjects may, without limitation, include or be similar to the following:

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01600
PAGE 3 OF 8**

-
- 3.3.1 Certified Joint Health and Safety Committee Member Training;
 - 3.3.2 Basics of Supervising;
 - 3.3.3 Construction Health and Safety Representative;
 - 3.3.4 Occupational Health and Safety legislation;
 - 3.3.5 Due Diligence;
 - 3.3.6 Accident Investigation and Reporting; and
 - 3.3.7 Any other courses that relate directly to the *Occupational Health and Safety Act*.
- 3.4 The Contractor shall deliver to the Consultant as required:
- 3.4.1 A copy of all weekly inspection reports made by the Contractor in compliance with the Constructor's responsibility under O.Reg.213/91, the Construction Projects Regulation.
 - 3.4.2 A copy of all safety information pertaining to the Contract made and furnished by the Contractor's own "Safety Officer" or outside consultants/advisers engaged for the purpose of inspecting the workplace for occupational health and safety.
 - 3.4.3 A copy of the Contractor's Emergency and Evacuation Plans for review by the Owner.
 - 3.4.4 A copy of Access / Traffic Control Plans for review by the Owner.
 - 3.4.5 A copy of the Contractor's risk assessment documents.
 - 3.4.6 Where requested, copies of all injury and accident reports for occurrences on site. This shall include copies of all remedial measures taken to prevent recurrence.
 - 3.4.7 Copies of all weekly safety talks shall be maintained on file for review by the Owner upon request.
 - 3.4.8 Statistical information for the purpose of determining injury frequency and severity rates (hours worked, first-aid injuries, medical aid/reportable injuries, lost time injuries, restricted workday injuries, incident/accident and significant occurrence data), in a timely manner on a monthly basis or as required by the Owner.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01600
PAGE 4 OF 8**

3.4.9 The immediate reporting to GO CMO of all instances that are defined in the *Occupational Health and Safety Act* as "Notices of Injuries" and "Occurrences" under Sections 51, 52 and 53 and any other incidents as prescribed by applicable Metrolinx Construction Safety documents.

3.4.10 The Owner reserves the right to require additional or amended deliverables pertaining to safety during the duration of the Work at no additional cost to the Owner.

4.0 Due Diligence

4.1 The Contractor acknowledges that it has read and understands the measures and procedures relating to occupational health and safety as prescribed in Article 2 above. The Contractor acknowledges and understands its duties as therein set out and hereby expressly undertakes and agrees to comply with all such requirements and standards in their entirety and at the Contractor's expense.

4.2 The Contractor further agrees to fully cooperate with all health and safety requirements, rules, regulations, standards and criteria set out in the Contract Documents, which agreement is in furtherance of the Contractor's duties and responsibilities under occupational health and safety legislation.

4.3 The Contractor agrees that if, in the opinion of the Owner, the health and safety of a person or persons is endangered or the effective operation of the system put in place to ensure the health and safety of workers on the Place of Work is not being implemented, the Owner may take such action as it deems necessary and appropriate in the circumstances, including, without limitation, the following:

4.3.1 Require the Contractor to correct the condition forthwith at no expense to the Owner;

4.3.2 Require that the Place of Work be shut down in whole or in part until such time as the condition has been corrected. The Owner will not reimburse the Contractor for any costs caused by such a delay nor will the Owner extend the time to complete the Work of the Contract because of such a delay;

4.3.3 Correct the problem and deduct the cost thereof from any payment then or thereafter due the Contractor; and/or

4.3.4 Terminate the Contract in whole or in part.

GENERAL REQUIREMENTS SAFETY REQUIREMENTS

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

SECTION 01600
PAGE 5 OF 8

5.0 Barricades

- 5.1 Observe all necessary precautions and provide, erect and maintain suitable signs, barricades and lights to protect all persons from injury and all vehicles from damage during the progress of the work, in accordance with the CSMP, to the approval of the Consultant, or any authority having jurisdiction at this location.
- 5.2 Provide all means necessary to prevent the entrance of unauthorized personnel onto the work site and from using access roads.
- 5.3 Protect the work in conformity with the Contract.

6.0 Vehicle Traffic Protection

- 6.1 Provide qualified signal persons to protect vehicular and pedestrian traffic during the operations, at any time when workers or equipment could endanger such traffic, all to the complete satisfaction of the Consultant and any other authority having jurisdiction at this location.
- 6.2 Accept responsibility for any damage to vehicles and damage and injury to pedestrians or occupants of vehicles resulting from the operations or the operating of equipment by others. Provide adequate protection to the satisfaction of the Consultant.
- 6.3 Wherever the Place of Work is intersected by public or private roads, provide convenient openings to pass and maintain all crossings in a condition so they can be used safely and without any just grounds for complaint during the progress of the work; all to the satisfaction of the Consultant and respective Road Authority.
- 6.4 Shall submit any permits as requested by the Consultant or Road Authority.

7.0 Working at Heights

- 7.1.1 The Contractor shall comply with the following instructions for scaffold installations:
 - (j) Obtain authorization from the Owner before erecting scaffolds on existing Owner's structures or new structures under construction.
 - (k) Scaffolds must be positioned so that minimum clearance for road or other traffic including operating construction equipment is always provided.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01600
PAGE 6 OF 8**

7.1.2 All horizontal lifelines used for fall protection shall be designed and installed in accordance with the following CSA Standards:

- (l) CAN/CSA Z259.13-04 Flexible horizontal lifeline systems
- (m) CAN/CSA Z259.16-04 Design of active fall protection systems

7.1.3 The Contractor shall comply with the following instructions for fall protection system installations:

- (n) Obtain written authorization from the Owner before suspending, attaching or erecting fall protection devices on existing Owner structures or new Owner structures under construction.
- (o) Components attached to structures must be placed on neoprene pads to prevent damage to the structures as directed by the Owner.
- (p) Fall protection systems shall be positioned so that minimum clearance for road and other traffic including operating construction equipment is always provided.

7.2 Rescue Equipment and Training

7.2.1 Before considering the Fire Department (911) as a primary means for rescuing an employee, the Contractor shall:

- (q) Ensure a complete risk assessment of the fall protection system, or confined space, has been carried out by a competent person; and
- (r) Ensure the risk assessment and rescue plan have been reviewed and signed off by the appropriate municipal authority indicating they have:
 - (ii) An appropriate response time; and
 - (iii) The necessary rescue equipment; and
 - (iv) The specialized rescue training required.
- (s) Ensure all documentation has been submitted to the Owner, System Safety, for final review and approval prior to project start-up.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01600
PAGE 7 OF 8**

7.2.2 If it has been determined that the Fire Department (911) cannot adequately respond to the emergency, and specialty rescue equipment and/or training is required, the Contractor shall ensure that:

- (t) Specific rescue equipment for Confined Space Rescue or Fall Protection Rescue is on site as required and in readiness at all times; and
- (u) A sufficient number of employees are fully qualified as “rescuers” and are on site in order to carry out an efficient and effective rescue of a co-worker.

8.0 Hot Work Permit

8.1 The Contractor shall not undertake any Hot Work or otherwise cause a source of ignition to be created at the Place of Work without being issued a Hot Work Permit by the Owner and ensuring all measures have been implemented to prevent a fire from starting.

9.0 Metrolinx Construction Safety

9.1 The Owner has provided its Construction Safety Management Program (CSMP) and Safety Guidelines for Contractors, Consultants and Project Coordinators in the Tender Document.

9.2 Contractors are responsible for familiarizing themselves and their employees with the contents of these manuals.

9.3 The successful Contractor shall distribute copies of the to their subcontractors and shall ensure that they, and their employees, are familiar with its content.

9.4 Contractors shall ensure that all persons given a copy of the “Safety Guidelines For Contractors” complete the acknowledgement on the second page of the manual and return it to the Consultant.

9.5 The requirements of the CSMP and Safety Guidelines for Contractors, Consultants and Project Coordinators shall apply to the Work and the Place of the Work.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01600
PAGE 8 OF 8**

10.0 Site Safety Personnel

- 10.1 In the event the Owner deems it necessary, because of the Work and/or Safety Performance, the Contractor shall assign to the Place of Work a full time "Safety Officer" to assist the Contractor's representative in the discharging of safety responsibility on site, at no additional costs.
- 10.2 The Safety Officer shall have the training, experience and credentials to ensure compliance to the *Occupational Health and Safety Act* at the Place of Work.

11.0 Site Security

- 11.1 The Contractor shall ensure all personnel employed at the Place of Work, whether its own employees or a subcontractor's, wear an identification badge. At Owner locations where access is restricted the Owner shall supply the identification badges. At all other locations it shall be the Contractor's responsibility to provide the identification badges.
- 11.2 A daily site log shall be maintained of all persons granted access to the "Place of Work" under the control and custody of the Contractor.
- 11.3 The Contractor shall ensure that all required documentation is available upon request by the Consultant.
- 11.4 The Contractor shall not allow "Unauthorized" persons to access the "Place of Work".

12.0 Site Requirements

- 12.1 For night work activities, the Contractor shall supply and maintain adequate temporary lighting and associated generators at the Site such that all the work in these areas can be carried out safely and in a workmanlike manner. The Contractor shall use quiet available generators to minimize noise levels. At no time shall lights be directed in such a manner that will impede or deter the safe passage of rail traffic or affect any adjacent properties.

END OF SECTION

GENERAL REQUIREMENTS MATERIALS AND EQUIPMENT

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01700
PAGE 1 OF 3**

1.0 General

- 1.1 Provide material and equipment of specified design and quality, performing to published ratings and for which replacement parts are readily available.
- 1.2 Use products of one manufacturer for equipment or material of same type or classification unless otherwise specified.

2.0 Manufacturer's Instructions

- 2.1 Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation methods.
- 2.2 Notify the Owner in writing of any conflict between these Specifications and manufacturer's instructions. The Owner will designate which document is to be followed.

3.0 Fastenings

- 3.1 Provide metal fastenings and accessories in same texture, colour and finish as base metal in which they occur. Prevent electrolytic action between dissimilar metals. Use non-corrosive fasteners, anchors and spacers for securing exterior work.
- 3.2 Space anchors within limits of load bearing or shear capacity and ensure that they provide positive permanent anchorage. Wood plugs are not acceptable.
- 3.3 Keep exposed fastenings to minimum, space evenly and lay out neatly.
- 3.4 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.
- 3.5 Do not use explosive actuated fastening devices.

4.0 Fastening Equipment

- 4.1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- 4.2 Use heavy hexagon heads, semi-finished unless otherwise specified.

GENERAL REQUIREMENTS MATERIALS AND EQUIPMENT

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01700
PAGE 2 OF 3**

- 4.3 Bolts may not project more than one diameter beyond nuts.
- 4.4 Use plain type washers on equipment, sheet metal and shaft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

5.0 Delivery and Storage

- 5.1 Deliver, store and maintain packaged material and equipment with manufacturer's seals and labels intact.
- 5.2 Prevent damage, adulteration and soiling of material and equipment during delivery, handling and storage. Immediately remove rejected material and equipment from the site.
- 5.3 Store material and equipment in accordance with suppliers' instructions.
- 5.4 Touch-up damaged factory finished surfaces to the Owner's satisfaction. Use primer or enamel to match original. Do not paint over name plates.

6.0 Origin of Materials

- 6.1 Materials, plant and equipment supplied for Work shall be as far as possible and unless otherwise specified, of Canadian manufacture.

7.0 Ownership of Materials

- 7.1 Unless otherwise specified, materials existing on site at time of signing Contract shall remain the property of Owner.
- 7.2 Equipment and materials delivered on site to form part of Work shall be property of the Owner but the Owner shall not be liable for any loss or damage from any cause.
- 7.3 Contractor shall remove surplus or rejected materials off site when notified by Consultant as required by site conditions.

8.0 Specified Material and Equipment

- 8.1 Materials and equipment shall be as specified.

**GENERAL REQUIREMENTS
MATERIALS AND EQUIPMENT**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01700
PAGE 3 OF 3**

9.0 Substitutions After Award of Contract

- 9.1 Request for substitutions of specified materials and equipment other than alternatives accepted prior to award of contract will not be considered unless request is accompanied by a written statement from Contractor giving reasons why specified item cannot or should not be used, evidence of quality of substitution and amount of change in Contract Amount.
- 9.2 Written statement shall include full details, stating clearly name of manufacturer or supplier, together with a detailed description of substitutions, and stating reduction from or addition to contract price, if any for the use of alternative material or equipment.
- 9.3 The Consultant reserves right to accept or reject substitution as he sees fit and also to claim for the Owner financial benefit of substitution if accepted. Rejection by Consultant of proposed alternative material or equipment is final and does not become obligated to give any reason for his action.
- 9.4 Approved equipment substitutions must not exceed space requirements allocated on Drawings. Be responsible for additional cost resulting from acceptance of a substitute piece of equipment for this Division of Work.
- 9.5 Substitutions shall not be considered accepted unless authorized in writing by the Consultant.

10.0 Date-Related Compliance

- 10.1 All materials, equipment, systems and components thereof used in connection with the provision of the Work, individually or in combination as the case may be, shall accurately and automatically process any and all date and date-related data including, but not limited to calculating, comparing and sequencing when used in accordance with the documentation provided by the Contractor.

END OF SECTION

GENERAL REQUIREMENTS CLEANING

KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085

SECTION 01710
PAGE 1 OF 1

1.0 General

- 1.1 Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
- 1.2 Store volatile wastes in covered metal containers, and remove from premises daily.
- 1.3 Prevent accumulation of wastes which create hazardous conditions.
- 1.4 Provide adequate ventilation during use of volatile or noxious substances.

2.0 Products

- 2.1 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.

3.0 Execution

- 3.1 Cleaning During Construction
 - 3.1.1 Ensure that the work site is kept clean and tidy at all times throughout the construction period. Remove all rubbish and debris promptly as it accumulates. Ensure that all sub-trades conform similarly.
 - 3.1.2 Promptly remove from site and dispose of surplus materials.
 - 3.1.3 Do not accumulate scrap piles at any time. Fires will not be permitted on the site.
 - 3.1.4 Provide on-site containers for collection of waste materials, and rubbish.
 - 3.1.5 Vacuum clean interior work areas when ready to receive finish painting, and continue vacuum cleaning on an as-needed basis until work area is ready for substantial completion or occupancy.
 - 3.1.6 Schedule cleaning operations so that resulting dust and other contaminants will not fall on wet, newly painted surfaces.

END OF SECTION

**GENERAL REQUIREMENTS
PROJECT CLOSEOUT**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01800
PAGE 1 OF 3**

1.0 Final Cleaning

- 1.1 Remove dust and soil from all surfaces affected by Work by vacuuming, damp mopping, washing or scrubbing, as required.
- 1.2 Clean all equipment and accessories.
- 1.3 Remove all temporary labels, protective coatings, markings and tags, and thoroughly clean adhesive off surfaces.
- 1.4 Avoid contamination of surrounding surfaces with cleaning fluids. Install temporary protection, if required, and remove same immediately upon completion of cleaning operation involved.
- 1.5 Methods of cleaning shall be in accordance with Manufacturer's recommendations of the finishes involved.
- 1.6 Soaps, detergents, waxes, and other cleaning materials and methods shall be as recommended by Manufacturer of finish surface material involved.
- 1.7 Use a heavy duty type industrial machine for all vacuum cleaning.
- 1.8 Exercise extreme care with abrasive and chemical cleaning agents and verify their compatibility with finish and material to be cleaned.

2.0 Systems Demonstration

- 2.1 Prior to final inspection, demonstrate operation of each system to the Owner.
- 2.2 Instruct personnel in operation, adjustment, and maintenance of equipment and systems, using provided operation and maintenance data as basis for instruction.

3.0 Project Record Drawings

- 3.1 The Consultant will provide one set of white prints for each major trade section of this Contract for recording "as constructed" information.
- 3.2 The Contractor shall co-ordinate and maintain project "as-constructed" record drawings and record accurately significant deviations from Contract Documents caused by site conditions and changes ordered by Consultant and approved by the Owner.
- 3.3 Record following information:

GENERAL REQUIREMENTS PROJECT CLOSEOUT

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01800
PAGE 2 OF 3**

- 3.3.1 field changes of dimension and detail; and
- 3.3.2 changes made by Change Order or Field Instructions.
- 3.4 At each project meeting "as-constructed" record drawings shall be reviewed for completeness.
- 3.5 At completion of project and prior to final inspection, submit "as-constructed" drawings to Consultant.

4.0 Operations and Maintenance Data

- 4.1 On completion of project, submit to Consultant four (4) copies of Operations Data and Maintenance Manual, made up as follows:
 - 4.1.1 bind data in vinyl, hard covered, three ring, loose leaf binder for 215 x 280mm sized paper;
 - 4.1.2 enclose title sheet, labelled "Operation Data and Maintenance Manual", project name, date and list of contents; and
 - 4.1.3 organize contents into applicable sections of work. Mark each section by labelled tabs protected with celluloid covers fastened to hard paper dividing sheets.
- 4.2 Include following information plus data specified:
 - 4.2.1 description operation and maintenance instructions for equipment and systems, including a complete list of equipment and parts list. Indicate nameplate information such as make, size, capacity, serial number;
 - 4.2.2 names, addresses and phone numbers of subcontractors and suppliers;
 - 4.2.3 guarantees, warranties and bonds showing:
 - (v) name and address of projects;
 - (w) guarantee commencement date (date of Final Certificate of Completion);
 - (x) duration of guarantee;
 - (y) clear indication of what is being guaranteed and what remedial action will be taken under guarantee; and

**GENERAL REQUIREMENTS
PROJECT CLOSEOUT**

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

**SECTION 01800
PAGE 3 OF 3**

(z) signature and seal of Contractor; and

4.2.4 additional material used in project listed under various sections showing name of manufacturer and source supply.

4.3 Neatly type lists and notes. Use clear Drawings, diagrams or manufacturer's literature.

4.4 Include four complete sets of final Shop Drawings, bound separately, indicating corrections and changes made during fabrication and installation.

5.0 Inspection/Takeover Procedures

5.1 Procedures for Substantial and Total Performance of Work and completion takeover procedures shall be according to OAA/OGCA Document No. 100, December 12, 2007.

5.2 Meet and provide all the necessary information required by the GO Rail Corridors Infrastructure Handover Protocols (RC-0503-01).

6.0 Date-Related Compliance

6.1 The Owner may, at no additional cost to itself, require the Contractor to demonstrate Date-Related Compliance as specified by Article 10 of Section 01700 - Material and Equipment and/or compliance techniques and test procedures the Contractor followed in order to comply with these requirements.

END OF SECTION

SPECIFICATIONS

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 1 OF 1

The Specifications listed in Appendix "A" of Form of Tender are provided as separate electronic files and form part of the Specifications of this Tender Document.

DRAWINGS

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
IT-2016-CKU-085**

PAGE 1 OF 1

The Drawings listed in Appendix "A" of Form of Tender are provided as separate electronic files and form part of the Drawings of this Tender Document.

ATTACHMENTS

**KITCHENER CORRIDOR, WESTON SUBDIVISION
CONSTRUCTION OF NATURAL GAS LINE AND
SEWER CONNECTION
PT-2016-CKU-099**

PAGE I OF 1

The Attachments listed in Appendix A of Form of Tender are attached as separate electronic files and form part of this Tender Document.