

WOL004-2023

**Fairfield Street Reconstruction
& Sidewalk**

May 2023



A cultivated experience for the mind, body, and soil

Closing: Thursday, June 1, 2023 (14:00)

TITLE	SECTION	REVISION DATE
Use of Standard Contract and Specification		May 2023
Information to Tenderers	00 21 00	May 2023
Tender Form	00 41 43	May 2023
Form of Agreement	00 53 43	May 2023
Supplementary Specifications	00 74 00	May 2023

APPENDIX A – Town of Wolfville Contractor Safety Forms

APPENDIX B – Town of Wolfville Award Document Submission Checklist (for reference only)

DRAWING LIST

FAIRFIELD STREET RECONSTRUCTION & SIDEWALK

- C-000 – COVER SHEET
- C-001 – EXISTING PLAN AND PROFILE – STA 0+000 TO 0+140
- C-002 – EXISTING PLAN AND PROFILE – STA 0+140 TO 0+260
- C-003 – PROPOSED PLAN AND PROFILE – STA 0+000 TO 0+140
- C-004 – PROPOSED PLAN AND PROFILE – STA 0+140 TO 0+260
- C-005 – SECTION VIEWS
- C-006 – WATERMAIN EASEMENT – STA 0+000 TO 0+140
- C-005 – ROAD DETAILS AND TYPICAL SECTIONS
- C-006 – WATER SERVICE DETAILS
- C-007 – DRAINAGE DETAILS AND SECTIONS

1. Overview .1 These *Project Documents* have been prepared for use with and require being read in conjunction with the **Standard Specifications for Municipal Services** as published by the Nova Scotia Road Builders Association (NSRBA) - Consulting Engineers of Nova Scotia (CENS) **Joint Committee on Contract Documents**. Copies of the Standard Specifications for Municipal Services are available from the Joint Committee on Contract Documents, 18 Laurier Street, Dartmouth, NS, B3A 2G7; Telephone: (902) 233-9362 or email at nsmunicipalservices@gmail.com.

It is acknowledged that the Standard Specifications for Municipal Services is a general resource tool and reference document for Municipal Works undertaken within various locations across Nova Scotia and may not include all requirements for any given project. Additional specification requirements will be provided as *Supplementary Specifications*.
2. Updating and Feed-back The Standard Specifications for Municipal Services will be updated periodically according to feedback from users, industry needs and changes in codes and regulations.
3. Registration of Tenderers Interested parties must register with the *Owner* to obtain paper or electronic copies of the tender documents. Contact *Owner* in accordance with 00 21 00.

REVIEW ONLY

**** End Use of Standard Contract and Specification ****

PROJECT: Tender No. WOL004-2023
Fairfield Street Reconstruction & Sidewalk
Wolfville, Nova Scotia

OWNER: Town of Wolfville
359 Main Street
Wolfville, NS B4P 1A1

ENGINEER: Hatch Corporation
Suite 1009, 1809 Barrington Street
Halifax, Nova Scotia, B3J 3K8
(902) 332-3609
Attn: Jeffrey Theriault, P.Eng.

1. Tender Documents

1. Non-watermarked electronic tender documents can be requested without cost by email to kouterleys@wolfville.ca. Prospective bidders are required to register with the company name, representative name, and contact information to obtain documentation.
2. Printed paper copies of tender documents cannot be obtained from the *Owner*.

2. Tender Submission

1. Tenders will be received up to 2:00 p.m., local time, **Thursday, June 1, 2023**.
2. Tender submissions shall be delivered to Wolfville Town Hall in a sealed envelope bearing the label below. **This shall be the only accepted method of tender submission.** The completed tender form must be accompanied by originals of all required documentation indicated herein, signed under seal where required.

TENDER

Fairfield Reconstruction & Sidewalk
Contract #WOL004-2023

Closing 14:00 (local time),
Thursday, June 1, 2023

Town of Wolfville
ATTN: Mr. Alexander de Sousa, P.Eng.
359 Main Street
Wolfville, Nova Scotia B4P 1A1

3. Late tenders shall not be opened.

4. All tenders shall be and remain valid for acceptance for 60 days from the time of tender closing, unless withdrawn prior to the designated closing time.

3. Safety Certification

1. Submit with tender a copy of tenderer's current and valid safety accreditation issued by Nova Scotia Workers' Compensation Board or Certificate of Recognition (COR) issued by Construction Safety Nova Scotia.
2. Out-of-province tenderers with a current and valid COR from a Canadian Federation of Construction Safety Associations member shall obtain and submit, with tender, a current and valid Letter of Good Standing from Construction Safety Nova Scotia.

4. Workers' Compensation

1. Submit with tender a copy of tenderer's current and valid clearance letter issued by the Workers' Compensation Board of Nova Scotia.
2. Out-of-province tenderers shall submit, with tender, a current and valid clearance letter from a government workers' compensation board but must register with the Nova Scotia Workers' Compensation Board prior to being awarded the *Contract*.

5. Tender Opening

1. Tenders will be opened publicly in Council Chambers at the Wolfville Town Hall approximately 15 minutes following tender closing deadline. An abstract of results for the tender submissions and pricing will be available the following business day by request to kouterleys@wolfville.ca.

6. Accuracy of Referencing

1. Indexing and cross-referencing are for convenience only.

7. Conditions of Tendering

1. Take full cognizance of content of all *Contract Documents* in preparation of tender. Refer to Section 00 41 43 – Tender Form, Subsection 3.9 for a complete list of *Contract Documents*.

8. Tenderers to Investigate

1. Tenderers will be deemed to have familiarized themselves with existing *Site* and working conditions and all other conditions which may affect performance of the *Contract*. No plea of ignorance of such conditions as a result of failure to make all necessary examinations will be accepted as a basis for any claims for extra compensation or an extension of time.

9. Clarification and Addenda

1. All questions concerning this tender shall be directed to the following: Alexander de Sousa, P.Eng.; Director of Engineering & Public Works; adesousa@wofville.ca. Any attempt by the Proponent or any of its employees, agents, contractors, or representatives to contact members of Town Council or Town staff not identified in this clause may lead to disqualification.
2. Notify *Owner* not less than four (4) *Working Days* before tender closing of omissions, errors or ambiguities found in *Contract Documents*. If *Owner* considers that correction, explanation, or interpretation is necessary; a written addendum will be issued.
3. All addenda will form part of the *Contract Documents*.
4. Any changes to this tender shall be stated in writing by Addenda. Verbal statements made by Town staff or their representatives shall not be binding unless included in an Addendum.
5. Confirm in Tender Form that all addenda have been received.

10. Preparation of Tender

1. Legibly complete tender form provided with *Project Documents*. Tender all items and fill in all blanks. Have corrections initialed by person signing tender.

11. Taxes

1. Include all taxes in prices except Harmonized Sales Tax (HST).

12. Tender Security

1. *Provide* tender security in the minimum amount of ten percent (10%) of total price including HST. *Provide* security with tender in the form of a certified cheque or money order payable to the *Owner*, a bid bond on CCDC Form 220, or other *Owner-Approved* form.

13. Contract Security

1. Refer to Section 00 72 45 – General Conditions, subsection GC11.2 – CONTRACT SECURITY for form of *Contract* security. Refer to *Project Documents* for amount of *Contract* security.

14. Insurance

1. Refer to Section 00 72 45, General Conditions, subsection GC11.1 - INSURANCE, and CCDC 41 for insurance requirements. Refer to *Project Documents* for additional requirements.

15. Form of Agreement

1. Form of Agreement is attached for information purposes only until execution of the *Contract*.

16. Retain Tender Security

1. Original tender security will be retained by:
 1. All except the three lowest acceptable tenderers for a minimum of five (5) *Working Days* after tender opening.
 2. Two (2) remaining unsuccessful tenderers for a minimum of ten (10) *Working Days* after date of award.
 3. Successful tenderer, for immediate submission to *Owner* (by courier) in award document package with original Tender Form and addenda forms (if applicable) as specified in Document Submission Checklist. Tender security will be returned to successful tenderer at kick-off meeting when *Contract* security documents become due and are submitted.

17. Amendment or Withdrawal of Tender

1. Tenders may be amended or withdrawn prior to tender closing.
2. Amendment of individual *Unit Prices* is the only acceptable price amendment. Amendments shall not disclose either original or revised total price.
3. Head amendment or withdrawal as follows: "[Amendment/Withdrawal] of tender for [Name of Project/Contract] [Contract number, if applicable]". Sign as required for tender and submit by email to the address given for receipt of tenders. In order to be considered, submissions shall be received prior to time of tender closing.

18. Offer, Acceptance, Rejection

1. The *Owner* reserves the right to accept or reject any or all tenders and to award the *Contract* to whomever the *Owner* deems appropriate, and the *Owner* may award a portion or all of the *Work* to one or more *Contractors*. The *Owner* will not be responsible for any costs incurred by any tenderer in preparing its tender.
2. The *Owner* specifically reserves the right to reject all tenders if none are considered to be satisfactory and, in that event, at its option, to call for additional tenders. The *Project* award is subject to funding and regulatory *Approval* from various agencies. Without limiting the generality of any other provision hereof, the *Owner* reserves the right to reject any tender:
 1. that contains any irregularity, formality or informality, or is considered in the opinion of the *Owner* to be unbalanced;
 2. that is not accompanied by the security documents required;
 3. that is not properly signed by or on behalf of the tenderer;
 4. that contains an alteration in the quoted price that is not initialed by or on behalf of the tenderer;
 5. that is incomplete or ambiguous; or
 6. that does not strictly comply with the requirements contained in these instructions.

Notwithstanding the foregoing, the *Owner* shall be entitled, in its sole discretion, to waive any irregularity, formality, informality, or nonconformance with these instructions in any tender received by the *Owner*.

3. The *Owner* also reserves the right to reject any or all tenders based on the tenderer's lack of proven experience, performance on similar projects, or the suitability of proceeding with the execution of the *Work*.
4. The *Owner* reserves the right to suspend or cancel the tendering process and reject all tenders at any time and for any reason prior to the award of a *Contract* without incurring any liability to affected tenderers. The *Owner* has the right at any time prior to the award of a *Contract* to decide not to award a *Contract* for any reason, and may decide not to proceed with the *Work*, issue a new call for tenders, or seek to have the *Work* or any part of it completed through another means.
5. No term or condition shall be implied based upon any industry or trade practice or custom, any practice or policy of the *Owner*, or otherwise, which is inconsistent with the provisions contained herein.

**** End 00 21 00 ****

REVIEW ONLY

1. SALUTATION:

.1 To: Alexander de Sousa, Director of Engineering and Public Works
Town of Wolfville
359 Main Street
Wolfville, NS B4P 1A1

.2 For: Tender No. WOL004-2023
Fairfield Street Reconstruction & Sidewalk
Wolfville, Nova Scotia

.3 From:

2. TENDERER DECLARES:

- .1 That this tender was made without collusion or fraud.
- .2 That the proposed *Work* was carefully examined.
- .3 That the tenderer was familiar with local conditions.
- .4 That *Contract Documents* and Addenda No. _____ to _____ inclusive were carefully examined.
- .5 That all the above were taken into consideration in preparation of this tender.

3. TENDERER AGREES:

- .1 To enter into a *Contract* to supply all labour, material and equipment and to do all *Work* necessary to construct the *Work* as described and specified herein for the *Unit Prices* stated in Subsection 1.4 hereunder, Schedule of Quantities and *Unit Prices*.
- .2 That the Estimated *Contract Price* shall be the sum of the products of the tendered *Unit Prices* and the estimated quantities in Subsection 4 hereunder.
- .3 That this Tender is valid for acceptance for 60 days from tender closing.
- .4 That measurement and payment for items listed in Subsection 4 hereunder shall be in accordance with corresponding items in Section 01 22 00 - Measurement and Payment.
- .5 To provide evidence of ability and experience within five (5) *Working Days* of request, including: experience in similar work, work currently under contract, senior supervisory staff available for the *Project*, equipment available for use on the *Work*, and financial resources. This information may be taken in consideration at the time of *Contract Award*.

- .6 To execute in duplicate the Agreement and forward same together with the specified *Contract* security, insurance documents, and other submissions specified in the Document Submission Checklist to the *Owner* at the earlier of either within fifteen (15) *Working Days* of written notice of award, or at the construction kick-off meeting.
- .7 That failure to enter into a formal *Contract* and submit specified documents and *Contract* security within time required will constitute grounds for forfeiture of certified cheque or enforcement of bid bond.
- .8 That if tender security is enforced, *Owner* will retain difference in money between amount of tender and amount for which *Owner* legally *Contracts* with another party to perform the *Work* and will refund balance, if any, to tenderer.
- .9 That the *Contract Documents* include:
 - .1 Standard Specifications for Municipal Services (*Standard Specification*) latest edition.
 - .2 *Project Documents*, to be read in conjunction with the *Standard Specification*
 - .1 Information to Tenderers (00 21 00)
 - .2 Tender Form (00 41 43)
 - .3 Form of Agreement (00 53 43)
 - .4 *Supplementary Specifications* (00 74 00)
 - .5 *Drawings*
 - C-000 – COVER SHEET
 - C-001 – EXISTING PLAN AND PROFILE – STA 0+000 TO 0+140
 - C-002 – EXISTING PLAN AND PROFILE – STA 0+140 TO 0+260
 - C-003 – PROPOSED PLAN AND PROFILE – STA 0+000 TO 0+140
 - C-004 – PROPOSED PLAN AND PROFILE – STA 0+140 TO 0+260
 - C-005 – SECTION VIEWS
 - C-006 – WATERMAIN EASEMENT – STA 0+000 TO 0+140
 - C-005 – ROAD DETAILS AND TYPICAL SECTIONS
 - C-006 – WATER SERVICE DETAILS
 - C-007 – DRAINAGE DETAILS AND SECTIONS
 - .6 Addenda as issued and as confirmed in subsection 2.4 of this section
 - .7 Town of Wolfville checklists as attached.

4. SCHEDULE OF QUANTITIES AND UNIT PRICES

No.	Item	Unit	Est. Qty	Unit Price	Amount
<u>WATER MAIN SYSTEM</u>					
11.	Pipe				
.1	200mm PVC DR18	m	230		
.2	250mm PVC DR18	m	145		
12.	Fire Hydrant	Ea	2		
14.	Direct Buried Valves				
.1	200mm Gate	Ea	1		
.2	250mm Gate	Ea	3		
15.	Services				
.1	Set of Fittings – 19mm	Ea	14		
.2	Service Pipe – 19mm	m	120		
.3	Set of Fittings – 25mm	Ea	2		
.4	Service Pipe – 25mm	m	16		
16.	Connections to Existing Main				
.1	at Highland Avenue	LS	1		
.2	at Hillside Avenue	LS	1		
.3	at Gaspereau Avenue	LS	1		
18.	Temporary Water Main	LS	1		
<u>SANITARY SEWER SYSTEM</u>					
21.	Gravity Pipe				
.1	200mm PVC DR35	m	220		
23.	Manholes				
.1	1050mm Precast	Ea	3		
24.	Services				
.1	100mm PVC DR28 (Green)	m	120		
.2	150mm PVC DR28 (Green)	m	16		
<u>STORM SEWER SYSTEM</u>					
31.	Pipe				
.1	300mm PVC DR35	m	120		
.2	375mm PVC DR35	m	12		
32.	Manholes				
.1	1050mm Precast	Ea	4		
33.	Catch Basins				
.1	1050mm Precast	Ea	5		
.2	600x600mm Precast (<i>Provisional</i>)	Ea	2		
34.	Catch Basin Leads				
.1	200mm PVC DR35	m	18		
.2	250mm PVC DR35	m	10		
35.	Services (<i>Provisional</i>)				
.1	100mm PVC DR28 (White)	m	20		
.1	150mm PVC DR28 (White)	m	20		
40.	Additional Storm Sewer Items				
.1	Subdrains - 150mm w/drain sock	m	485		
.2	Yard Drain – 600x600mm Precast	Ea	2		

SCHEDULE OF QUANTITIES AND UNIT PRICES continued

No.	Item	Unit	Est. Qty	Unit Price	Amount
<u>STREET CONSTRUCTION</u>					
41.	Gravels – Type 1				
.1	Type 1 – 150mm thick	t	750		
.2	Type 2 – 250mm thick	t	1250		
.3	Surge Rock – 400mm thick	t	1850		
43.	Asphalt Concrete				
.1	Type C-HF – 40mm thick	t	160		
.2	Type B-HF – 50mm thick	t	200		
44.	Curb				
.1	Curb	m	60		
.2	Curb and Gutter	m	500		
45.	Sidewalk				
.1	Concrete				
.1	100mm thick	m ²	320		
.2	150mm thick	m ²	150		
46.	Tactile Walking Surface Indicators (set)	ea	2		
53.	Site Removals				
.1	Existing Asphalt and Subgrade Removal, Embankment and Disposal				
.1	Street	m ²	1400		
.2	Driveway	m ²	275		
.2	Watermain and Appurtenances				
.1	within Street ROW	m	240		
.2	outside of ROW	m	135		
.3	Sanitary Piping	m	240		
.4	Storm Piping and Culverts	m	265		
.5	Hydrants	Ea	2		
.6	Catch Basins and Storm Manholes	Ea	6		
.7	Sanitary Manholes	Ea	1		
54.	Driveway/Walkway Reinstatement				
.1	Gravel	m ²	40		
.2	Asphalt	m ²	75		
.3	Paver/Brick/Stone	m ²	3		
55.	Geotextile (Geotex 351)	m ²	2200		
<u>LANDSCAPING</u>					
61.	Topsoil and Sod	m ²	1000		
63.	New Tree within ROW [Provisional]	ea	10		
66.	Tree Removal & Replacement	ea	2		
<u>ADDITIONAL ITEMS</u>					
71.	Trench Excavation – Rock [Provisional]	m ³	50		
76.	Mob. and Demob.	LS	1		
77.	Topsoil and Sod Excavation	LS	1		
78.	Street Light (NXT-24S-700Ma (5000K) with individual photo cells	ea	3		

SCHEDULE OF QUANTITIES AND UNIT PRICES continued

No.	Item	Unit	Est. Qty	Unit Price	Amount
	CONTINGENCY ALLOWANCE			\$	<u>60,000</u>
	TOTAL ESTIMATED <i>CONTRACT PRICE</i> (excluding HST)			\$	_____
	ADD HARMONIZED SALES TAX (15%)			\$	_____
	TOTAL PRICE			\$	=====

TENDERER'S HST REGISTRATION NUMBER _____

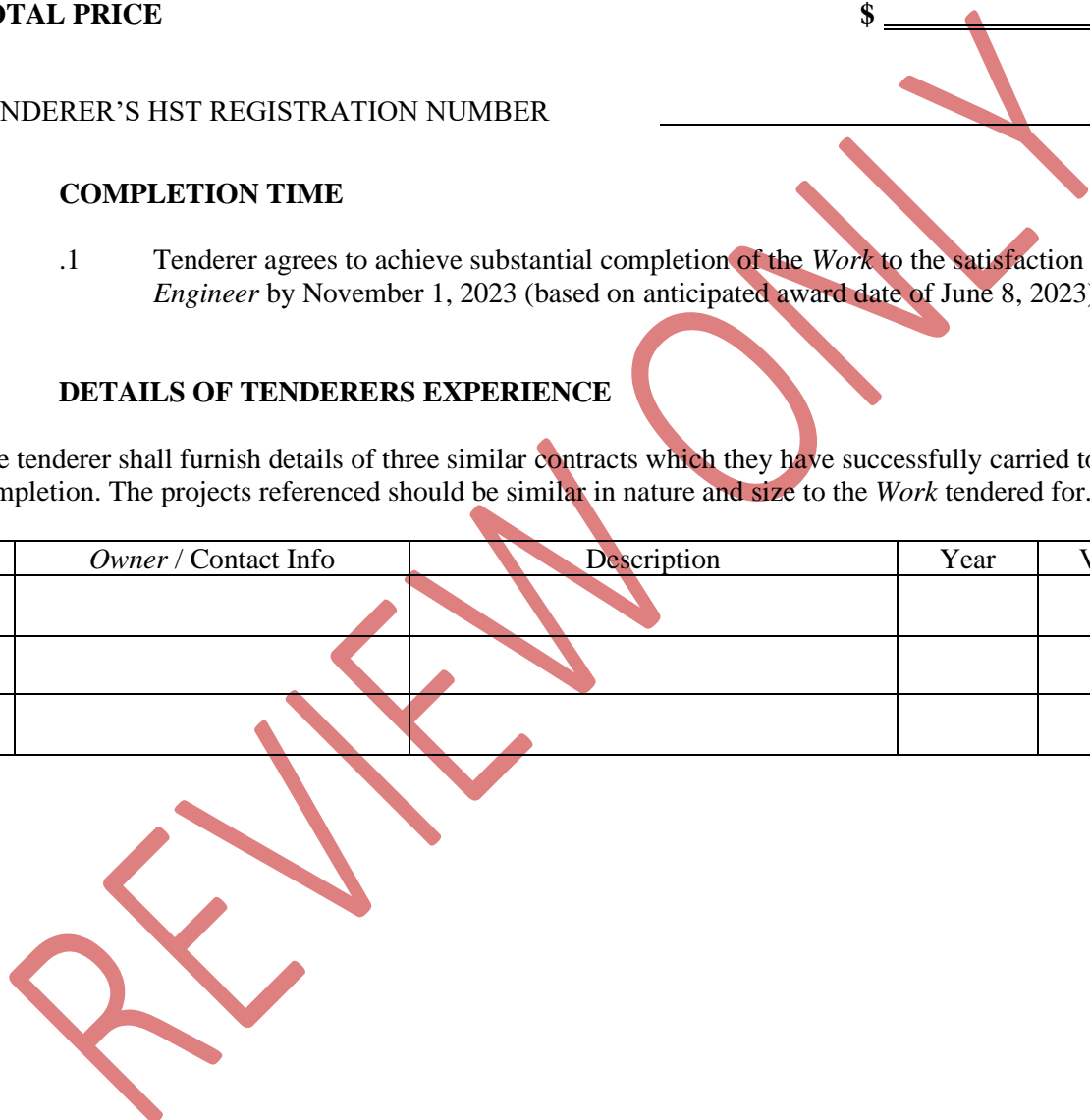
5. COMPLETION TIME

- .1 Tenderer agrees to achieve substantial completion of the *Work* to the satisfaction of the *Engineer* by November 1, 2023 (based on anticipated award date of June 8, 2023).

6. DETAILS OF TENDERERS EXPERIENCE

The tenderer shall furnish details of three similar contracts which they have successfully carried to completion. The projects referenced should be similar in nature and size to the *Work* tendered for.

	Owner / Contact Info	Description	Year	Value
1				
2				
3				



SIGNATURE*

Dated this _____ Day of _____, 20_____ .

Name of Firm Tendering

Witness

Signature of Signing Officer

Name and Title (Printed)

Witness

Signature of Signing Officer

Name and Title (Printed)

Company Address

Telephone Number

Fax Number

Seal

*NOTE: Tenders submitted by or on behalf of any Corporation must be signed and sealed in the name of such Corporation by a duly authorized officer or agent.

REVIEW ONLY

This Agreement made this _____ day of _____ in the year 20_____ .

BY AND BETWEEN

Town of Wolfville
359 Main Street
Wolfville, NS B4P 1A1

hereinafter called the "*Owner*"

and

hereinafter called the "*Contractor*"

The *Owner* and the *Contractor* agree as follows:

ARTICLE A1 - THE WORK

The *Contractor* shall:

- .1 Perform the *Work* required by the *Contract Documents* for:

Fairfield Street Reconstruction & Sidewalk – Contract WOL004-2023 located in Wolfville, NS for which the Agreement has been signed by the parties, and for which;

Hatch Ltd.
Suite 1009, 1809 Barrington Street
Halifax, NS B3J 3K8

is acting as and is hereinafter called the "*Engineer*", and

- .2 Do and fulfil everything indicated by this Agreement;
- .3 Attain *Substantial Performance of the Work* as certified by the *Engineer* within by November 1, 2023 (based on anticipated award date of June 8, 2023).

ARTICLE A2 – AGREEMENTS AND AMENDMENTS

This *Contract* supersedes all prior negotiations, representations or agreements, either written or oral, relating in any manner to the *Work*, including the bidding documents that are not expressly listed in Article A3 of the Agreement.

ARTICLE A3 - CONTRACT DOCUMENTS

The following is an exact list of the *Contract Documents* referred to in Article A1.1 of this Agreement and as defined in subsection 6 of Section 00 71 00 DEFINITIONS. This list is subject to subsequent amendments in accordance with the provisions of the *Contract Documents*.

- .1 Standard Specifications for Municipal Services (*Standard Specification*), latest edition.
- .2 *Project Documents* to be read in conjunction with the *Standard Specification*
 - .1 Information to Tenderers (00 21 00)
 - .2 Tender Form (00 41 43)
 - .3 Form of Agreement (00 53 43)
 - .4 *Supplementary Specifications* (00 74 00)
 - .5 *Drawings*
 - C-000 – COVER SHEET
 - C-001 – EXISTING PLAN AND PROFILE – STA 0+000 TO 0+140
 - C-002 – EXISTING PLAN AND PROFILE – STA 0+140 TO 0+260
 - C-003 – PROPOSED PLAN AND PROFILE – STA 0+000 TO 0+140
 - C-004 – PROPOSED PLAN AND PROFILE – STA 0+140 TO 0+260
 - C-005 – SECTION VIEWS
 - C-006 – WATERMAIN EASEMENT – STA 0+000 TO 0+140
 - C-005 – ROAD DETAILS AND TYPICAL SECTIONS
 - C-006 – WATER SERVICE DETAILS
 - C-007 – DRAINAGE DETAILS AND SECTIONS
 - .6 Addenda as issued and as confirmed in subsection 2.4 of section 00 41 43 – Form of Tender.

ARTICLE A4 - CONTRACT PRICE

- .1 The estimated *Contract Price* is the sum of the *Products* of the estimated quantities multiplied by the appropriate *Unit Prices* in the Tender Form excluding the amount of Harmonized Sales Tax.
- .2 The estimated *Contract Price* is \$ _____, excluding HST.
- .3 All amounts shall be in Canadian funds.
- .4 The amounts shall be subject to adjustment as provided in the *Contract Documents*.
- .5 The final *Contract Price* will be the sum of the products of the actual final quantities that are incorporated in, or made necessary by the *Work*, as confirmed by count and measurement, multiplied by the appropriate *Unit Prices* from the Tender Form together with any adjustments that are made in accordance with the provisions of the *Contract Documents* plus the amount of HST.

ARTICLE A5 - PAYMENT

- .1 The *Owner* shall pay the *Contractor* in Canadian funds for the performance of the *Contract*.
- .2 The *Owner* shall make monthly payments on account to the *Contractor* for the *Work* performed, as certified by the *Engineer*, subject to a 10% holdback.
- .3 The amount of the monthly payments shall be calculated as follows:

- .1 The quantity for each pay item on which actual *Work* has been performed shall be measured.
 - .2 For each *Unit Price* item this quantity shall be multiplied by the applicable *Unit Price* as provided in the Tender Form.
 - .3 For each lump sum item, multiply the percent complete by the value of the lump sum item.
 - .4 The total value of *Work* completed for the payment period shall be calculated by adding the total of the products for all pay items from .3.2 and .3.3 of this Article.
 - .5 The amount of the monthly payment shall be determined by deducting the 10% holdback and the total of all previous payments from the total value of such completed *Work* as determined under .3.4 of this Article.
 - .6 To the amount calculated above, the Harmonized Tax will be added.
- .4 The last day of the payment period shall be the last calendar day of the month.
 - .5 Upon *Substantial Performance of the Work* as certified by the *Engineer*, the *Owner* shall pay to the *Contractor* the holdback monies then due in accordance with the provisions of Section 00 72 45 - General Conditions, subsection GC5.8 – PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE WORK.
 - .6 Upon the issuance of the final certificate for payment as certified by the *Engineer*, the *Owner* shall pay to the *Contractor* the balance of monies then due in accordance with the provision of Section 00 72 45 - General Conditions, subsection GC5.10 – FINAL PAYMENT.
 - .7 In the event of loss or damage occurring where payment becomes due under the property and boiler insurance policies, payment shall be made to the *Contractor* in accordance with the provisions of Section 00 72 45 - General Conditions, subsection GC11.1 - INSURANCE.
 - .8 If the *Owner* fails to make payment to the *Contractor* as it becomes due under the terms of the *Contract*, interest shall be payable as follows:
 - .1 The annual interest rate applicable to the *Contract* is 2% compounded monthly.
 - .2 Interest shall be calculated on the overdue balance from the due date.

ARTICLE A6 - RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING

- .1 Notices in writing will be addressed to the recipient at the address set out below.
- .2 The delivery of a notice in writing will be by hand, by courier, by prepaid first-class mail, or by facsimile or e-mail during the transmission of which no indication of failure of receipt is communicated to the sender.
- .3 A notice in writing delivered by one party in accordance with this *Contract* will be deemed to have been received by the other party on the date of delivery if delivered by hand or courier, or if sent by mail it shall be deemed to have been received five (5) *Working Days* after the date on which it was mailed.
- .4 A notice in writing sent by facsimile or e-mail shall be deemed to have been received on the date of its transmission provided that such day is a *Working Day*. If such day is not a *Working Day* or if it is received after the end of normal business hours on the date of its transmission at the place of

receipt, then it shall be deemed to have been received at the opening of business at the place of receipt on the first *Working Day* next following the transmission thereof.

.5 An address for a party may be changed by Notice in Writing setting out the new address delivered to the other party in accordance with this Article.

.1 The *Owner* at Town of Wolfville (c/o Alexander de Sousa)
359 Main Street
Wolfville, NS B4P 1A1

.2 The *Contractor* at _____

.3 The *Engineer* at Hatch Ltd. (c/o Jeffrey Theriault)
Suite 1009, 1809 Barrington Street
Halifax, NS B3J 3K8

ARTICLE A7 - QUANTITIES AND MEASUREMENT

- .1 The quantities shown in Section 00 41 43 Tender Form - Schedule of Quantities and Unit Prices are estimated.
- .2 Measurement for the actual quantities used to determine payments and *Contract Price* shall be in accordance with Section 01 22 00 - Measurement and Payment.

ARTICLE A8 - SUCCESSION

- .1 The aforesaid *Contract Documents* are to be read into and form part of the Agreement and the whole shall constitute the *Contract* between the parties and subject to law and the provisions of the *Contract Documents* shall inure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors and assigns.

ARTICLE A9 - RIGHTS AND REMEDIES

- .1 No action or failure to act by the *Owner, Engineer, or Contractor* shall constitute a waiver of any right or duty afforded any of them under the *Contract*, nor shall any such action or failure to act constitute an *Approval* of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

ARTICLE A10 - TIME

- .1 Time shall be construed as being the essence of the *Contract*.

ARTICLE A11 – ADMINISTRATION OF THE CONTRACT

- .1 The *Owner* will provide administration of the *Contract* per the requirements of 00 72 45 – GENERAL CONDITIONS, PART 2 – ADMINISTRATION OF THE CONTRACT.

- .2 The *Owner* appoints its member of staff, Alexander J. de Sousa, P.Eng., Manager of Engineering, as *Contract Administrator*, having all authority granted to, and fulfilling the obligations of the *Engineer* under 00 72 45 - GENERAL CONDITIONS.
- .3 While fulfilling the commitments of *Contract Administrator*, the individual described above shall waive his obligation to act as a faithful agent or trustee of his employer, and will instead act with objectivity, fairness, and justice to all parties of this *Contract*, showing no partiality to either the *Owner* or the *Contractor*.
- .4 Where the *Contract Administrator* and the *Contractor* are unable to resolve a dispute by amicable negotiations, the parties agree to provide, without prejudice, frank, candid, and timely disclosure of relevant facts, information, and documents to facilitate third-party review by the *Engineer* specified in Article A1.1 to allow for further negotiations. If the dispute remains unresolved after reasonable efforts have been made by all parties to negotiate, the matter shall be settled in accordance with the requirements of Part 8 of the General Conditions – DISPUTE RESOLUTION.

REVIEW ONLY

In witness whereof the parties hereto have executed this Agreement and by the hands of their duly authorized representatives.

SIGNED AND DELIVERED

In the presence of:

OWNER

Town of Wolfville

Name of Owner

Witness

Signature

Name and Title of Person Signing

Witness

Signature

Name and Title of Person Signing

CONTRACTOR

Name of Contractor

Witness

Signature

Name and Title of Person Signing

Witness

Signature

Name and Title of Person Signing

N.B. Where legal jurisdiction, local practice or Owner or Contractor requirements calls for (a) proof of authority to execute this document, attach such proof of authority in the form of a certified copy of a resolution naming the representative(s) authorized to sign the Agreement for and on behalf of the corporation or partnership; or (b) the affixing of a corporate seal, this Agreement should be properly sealed.

PART 1 General

1.1 INTENT

- .1 The *Work* of this *Contract* is to be constructed in accordance with the Standard Specification for Municipal Services (2022 Revision) as developed and published by the Nova Scotia Road Builders Association and the Consulting Engineers of Nova Scotia Joint Committee on Contract Documents, except as modified herein.
- .2 These Supplementary Specifications modify and take precedence over the *Standard Specification* sections to which they refer.
- .3 These Supplementary Specifications replace Standard Specification section 00 73 00 – Supplementary General Conditions, as noted in this section.

SECTION 00 21 00 – INFORMATION TO TENDERERS

Delete Section 00 21 00 in its entirety and replace with new Section 00 21 00 provided in *Project Documents*.

SECTION 00 41 43 – TENDER FORM

Delete Section 00 41 43 in its entirety and replace with new Section 00 41 43 provided in *Project Documents*.

SECTION 00 53 43 – FORM OF AGREEMENT

Delete Section 00 53 43 in its entirety and replace with new Section 00 53 43 provided in *Project Documents*.

SECTION 00 71 00 - DEFINITIONS

Delete definition number four (4), for the term *Consultant*. Where this term is used elsewhere in 00 71 00 - DEFINITIONS, and 00 72 45 - GENERAL CONDITIONS, revise to read "*Engineer*", as defined in this section.

Add the following definitions:

28. Approved or Approval

"Approved" or "Approval" is defined as acceptance by the *Engineer* in accordance with the *Engineer's* responsibilities described in Clause GC 2.2 - ROLE OF THE ENGINEER.

29. Contract Administrator

An individual or corporate entity, when duly appointed as set forth in the *Contract Documents*, will act in the capacity of *Contract Administrator*, having some or all authority given to, and fulfilling some or all obligations of the *Engineer* under 00 72 45 - GENERAL CONDITIONS.

30. Delay Charges

Delay Charges is defined as the sum of all charges incurred by the *Owner*, and payable by the *Contractor* in connection with the *Period of Delay*, as described in GC 6.5 - DELAYS.

31. Engineer

An individual or corporate entity, when duly appointed as set forth in the *Contract Documents*, will act in the capacity of engineer for *the Project*. This individual or entity shall be licenced to practice and carry out business in the province or territory of *the Place of the Work*. The term *Engineer* means the *Engineer* or the *Engineer's* delegate or authorized representative.

32. Period of Delay

Period of Delay is defined as the period of time from the *Substantial Performance of the Work* date stated in Article A1 of the Agreement - THE WORK, and the actual date of *Substantial Performance of the Work*; if any.

33. Project Documents

Project Documents consist of those documents prepared to supplement the *Standard Specification* for the *Work* on a specific *Project*. Where applicable, they consist of the Information for Tenderers, Tender Form, Form of Agreement, Supplementary Specifications, drawings, and addenda.

34. Site

The *Site* is defined as the geographical location(s) of the *Work* identified in the *Contract Documents*.

35. Standard Specification

The *Standard Specification* consists of Definitions, General Conditions, Supplementary General Conditions, Measurement and Payment, General Requirements, other technical specifications and standard details developed by the Nova Scotia Road Builders Association and the Consulting Engineers of Nova Scotia Joint Committee on Contract Documents and published with the title of Standard Specification for Municipal Services.

36. Supplementary Specifications

Supplementary Specifications consist of the specifications for a specific project which amend or add to the *Standard Specification*.

37. Total Amount Payable

Total Amount Payable is defined as the sum of the *Contract Price* in the Tender Form, subject to adjustments made in accordance with the provisions of the *Contract Documents* plus the amount of *Value Added Taxes*.

SECTION 00 72 45 - GENERAL CONDITIONS

GC 2.4 – DEFECTIVE WORK

Within clause 2.4.3, delete the following words in the last sentence at the end of the clause:

"they shall refer the matter to the *Engineer* for a determination."

... and replace with the following:

"then the matter shall be resolved in accordance with the requirements of Part 8 of the General Conditions – DISPUTE RESOLUTION."

GC 3.4 - DOCUMENT REVIEW

Add clause 3.4.2 as follows:

“3.4.2 Each party has had an opportunity to evaluate this *Agreement* with counsel of its choosing and, in the event an ambiguity or question of intent or interpretation arises, this *Agreement* will be enforced and construed as if drafted jointly by the parties and no presumption or burden of proof will arise favouring or disfavouring either party or its construction or interpretation of this *Agreement* by virtue of the authorship of any of the terms of provisions of this *Agreement*.”

GC 3.5 - CONSTRUCTION SCHEDULE

Add clause 3.5.2 as follows:

“3.5.2 If, at any time, it should appear to the *Owner* or the *Engineer* that the actual progress of the *Work* is behind the accepted schedule or is likely to become behind schedule, or if the *Contractor* has given notice of such to the *Owner* or the *Engineer* pursuant to clause 3.5.1.3, the *Contractor* shall take reasonable steps to cause the actual progress of the *Work* to conform to the accepted schedule, or minimize the resulting *Period of Delay*, and shall produce and submit to the *Engineer* a recovery plan based on a good knowledge of the project progress that provides a reasonable and attainable approach for the *Contractor* to regain lost time. If the *Contractor* intends to apply for a change in the *Contract Price* in relation to a schedule recovery plan, then the *Contractor* shall proceed in accordance with General Condition 6.6 – CLAIMS.”

GC 3.6 – SUPERVISION

Delete clause 3.6.1, and replace with the following:

“3.6.1 The *Contractor* shall provide all necessary supervision to effectively direct and supervise the *Work* being performed by the *Contractor's* own forces, any *Subcontractors* engaged in the *Work*, and during any other activities required by the *Contract Documents*. The appointed representative shall be in attendance at the *Place of the Work* while any *Work* is being performed, and shall not be changed without the written consent of the *Engineer*.”

...and add clause 3.6.3 as follows:

“3.6.3 The *Owner* may, at any time during the course of the *Work*, request immediate replacement of the appointed representative(s), where grounds for the request involve conduct which jeopardizes the safety or security of the *Site* or the *Owner's* operations. Immediately, upon receipt of the request, the *Contractor* shall make arrangements to appoint a competent replacement representative acceptable to the *Owner* and the *Engineer*.”

GC 3.7 – LAYOUT OF THE WORK

Delete clause 3.7.1 in its entirety, and replace with the following:

“3.7.1 The *Contractor* shall have reference points established at the *Site* by a Professional Engineer or land surveyor licenced to practice in the province of Nova Scotia, at no additional cost to the *Owner*.”

GC 3.11 – SHOP DRAWINGS

Add the following to existing clause 3.11.1:

... “or as requested by the *Owner*.”

Add the following to existing clause 3.11.4:

“The *Contractor*'s schedule shall allow for a minimum review period of two (2) *Working Days* by the *Owners Representative*.”

GC 3.15 - CLOSEOUT SUBMITTALS

Add GC 3.15 - CLOSEOUT SUBMITTALS as follows:

- “3.15.1 Fifteen (15) *Working Days* before an application for *Substantial Performance* is made, submit the following closeout documents to the *Engineer* for review:
- .1 Record Drawings (or, if required, As-Built Drawings) and related survey data.
 - .2 Any other documentation identified as a submittal requirement in Section 01 10 00.
- 3.15.2 Should the *Contractor* fail to submit any of the required closeout documents, this will be considered a contractual deficiency in an amount determined by the *Engineer* and will be subject to finishing holdback procedures granted by the Builders' Lien Act of Nova Scotia.”

GC 5.4 – BASIS OF PAYMENT FOR COST PLUS WORK

Delete clause 5.4.1, and replace with the following:

“5.4.1 Payment for cost plus work shall be based on the cost of such work, as provided in paragraph 5.4.2, plus a fee calculated as a single percentage of the cost of such work, for the *Contractor's* combined overhead and profit. The percentage amount shall be **five percent (5%)** of the cost plus work, but shall not be applied to the cost of *Construction Equipment* or *Products* when such cost is based on rates which already include overhead and profit. The percentage fee shall be **five percent (5%)** for total *Contractor* markup on work or *Products* provided by *Supplier* and/or *Subcontractor* forces.”

After Clause 5.4.6, add the following clause:

“5.4.7 Any discounts, refunds, or rebates not reflected in the invoice costs, and any salvage value of reusable materials shall be deducted for determining costs.”

GC 5.5 - APPLICATIONS FOR PROGRESS PAYMENT

Delete Clause 5.5.2, and replace with the following:

“5.5.2 Applications for payment shall be dated the last day of the agreed monthly payment period and the amount claimed shall be for the value, proportionate to the amount of the *Contract*, of *Work* performed at that date. Applications for payment shall be accompanied by updated construction schedule per the requirements of the *Project Documents*.”

Delete clause 5.5.3, and replace with the following:

“5.5.3 Where the basis of payment of the *Contract Price* is *Unit Prices*, the *Contractor* shall propose interim quantity measurements in preparation of applications for payment, which shall include any other data requested by the *Engineer* to assist the *Engineer* in evaluating the application and verifying quantity measurements. Prior to submission of progress payment application, all parties must agree to proposed quantities.”

GC 5.6 - PROGRESS PAYMENT

In the first line of clause 5.6.1, revise "5 working days" to read "15 working days", and in the second line revise "GC 5.2" to read "GC 5.5".

Delete clause 5.6.2 in its entirety, and replace with the following:

“5.6.2 The *Owner* shall make payment to the *Contractor* on account as provided in Article A-5 of the Agreement – PAYMENT no later than thirty (30) calendar days after the date of a certificate for payment issued by the *Engineer*.”

After clause 5.6.3, add the following new clause:

“5.6.4 The *Contractor* shall pay promptly any and all accounts for labour, services and materials used for the purpose of the fulfillment of this *Contract* as and when such accounts become due and payable, and shall furnish the *Engineer* with proof of payment of such accounts in such form and as often as the *Engineer* may request.”

GC 5.8 - PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE WORK

Revise all instances of “sworn or affirmed statement” to read “Statutory Declaration on CCDC Form 9A, latest edition”

After clause 5.8.1.2, add the following sub-clauses:

“5.8.1.3 Submit a certificate by deed search to the *Owner* by a solicitor licensed to practice law in the Province of Nova Scotia, certifying that no lien associated with the *Work* exists against the *Owner’s* property or *Work*;

- 5.8.1.4 Submit a certificate of clearance from the Nova Scotia Worker’s Compensation Board, certifying the *Contractor’s* compliance with the requirements of the applicable act and legislation.
- 5.8.1.5 Submit a valid letter of Good Standing issued by the Nova Scotia Construction Safety Association and the Nova Scotia Department of Labour.
- 5.8.1.6 Submit a statement of all outstanding claims against the *Contract* which precede the date of application for payment of the holdback amount. Any outstanding claims not disclosed shall later be rejected.
- 5.8.1.7 Submit any outstanding closeout submittals per the requirements of GC 3.15 - CLOSEOUT DOCUMENTS, and Section 01 10 00.
- 5.8.1.8 Date all such documents not earlier than the expiry of the lien period as stipulated by the Builders' Lien Act of Nova Scotia.”

In clause 5.8.4, add the following new sub-clause:

- “5.8.4.1 If, within sixty (60) days after the issue of the *Certificate of Substantial Performance*, the *Contractor* has not corrected all the documented deficiencies, the *Owner* shall retain sufficient monies, as determined by the *Engineer*, to cover the cost of completing said deficiencies. These monies shall be held in addition to holdback monies retained in accordance with the provisions of the *Contract* and subject to the terms of the Builders' Lien Act of Nova Scotia.”

GC 5.10 – FINAL PAYMENT

Delete clause 5.10.1 in its entirety and replace with the following:

- “5.10.1 When the *Contractor* considers that the *Work* is completed, the *Contractor* shall make such an attestation in an application for final payment submitted to the *Engineer*. The *Contractor’s* application for final payment will only be accepted by the *Engineer* when the following has occurred:
 - .1 *Work* has been completed and inspected for compliance with the *Contract Documents*, and the *Engineer* has agreed that all the requirements of the *Contract* have been fulfilled by the *Contractor*;
 - .2 Where the basis of payment of the *Contract Price* is *Unit Prices*, all parties must agree to proposed final quantities;
 - .3 Defects have been corrected and deficiencies have been completed;
 - .4 Equipment and systems have been tested, adjusted, and balanced and are fully operational, and written reports and manuals as outlined in the *Contract Documents* have been provided to the *Owner*, and are to the *Owner’s* satisfaction;
 - .5 Certificates required by utilities, authorities having jurisdiction, manufacturers, and inspectors have been submitted and accepted;
 - .6 Spare parts, maintenance materials, record drawings, warranties and applicable bonds have been provided.”

Add the following new Clauses after 5.10.1:

- “5.10.2 If, in the opinion of the *Engineer*, the above requirements are not complete, then the *Engineer* will not accept the application, and request resubmission.
- 5.10.3 If, in the opinion of the *Engineer*, it is not expedient to correct defective work or *the Work* has not been performed in accordance with the requirements of the *Contract*, the *Owner* may deduct from the *Contract Price* the difference in value between work performed and that called for by the *Contract Documents*, the amount of which shall be determined by the *Engineer*.”

... and renumber existing clauses 5.10.2, 5.10.3, and 5.10.4 to 5.10.4, 5.10.5, and 5.10.6 respectively.

In renumbered clause 5.10.6, revise "5 working days" to read "15 working days".

GC 6.2 - CHANGE ORDER

Following clause 6.2.3, add the following:

- “6.2.4 If the method of adjustment of the *Contract Price* presented by the *Contractor* is a lump sum or a unit price quotation as described in 6.2.2.2, the following shall apply:
- .1 Maximum *Contractor* markup for overhead and profit shall be:
 - .1 Ten percent (10%) for *Work* performed by the *Contractor's* own forces, unless rates already include overhead and profit, in which case rates will not be marked up further;
 - .2 Five percent (5%) for *Work* performed by the *Subcontractor*;
 - .3 Five percent (5%) for *Products* provided by the *Supplier*.
 - .2 Upon request by the *Engineer*, the *Contractor* shall prepare a detailed cost summary for proposed lump sum or unit price costs associated with the change which will include at minimum the following breakdown:
 - .1 Labour rates;
 - .2 Equipment rates, including operators;
 - .3 Supervisory staff rates;
 - .4 *Subcontractor* and *Supplier* invoices (where applicable);Price will be assessed by the *Engineer* based on the prevailing rates in the locality of the *Place of the Work*.
 - .3 All *Subcontractors* and *Suppliers* performing a part or parts of the *Work*, or supplying Labour and/or *Products* (described in GC 3.9) required by the change, shall have a direct contract with the *Contractor*, and upon request, produce a detailed cost summary and/or written quotations as described in 6.2.4.2.
- 6.2.5 No compensation for extra *Work*, *Product*, *Construction Equipment*, or delays shall be allowed unless *such Work*, *Product*, and/or *Construction Equipment* is ordered in writing by the *Engineer*, and any associated delays are evaluated and approved by the same.
- 6.2.6 While executing an approved *Change Order*, the *Contractor* shall, each *Working Day*, report to the *Engineer* in writing and in full detail as described in 6.2.4.2, the amount and costs associated with carrying out such work on the preceding working day. No claim for

compensation shall be considered or allowed unless such reports have been made. The *Engineer* shall not allow any compensation for the cost of repairs to *Construction Equipment* or in respect of *Construction Equipment* of any kind idle on the *Site* except as directed and approved by the *Engineer* in writing.

- 6.2.7 The price applicable to any *Work* omitted from the *Contract*, which shall be deducted from the *Contract Price*, will be mutually agreed upon by the *Contractor* and the *Engineer*. The price will be assessed by the *Engineer* based on the prevailing rates in the locality of the *Place of the Work*.”

GC 6.3 - CHANGE DIRECTIVE

Within clause 6.3.8, delete the following words at the end of the clause:

"the adjustment shall be referred to the *Engineer* for a determination."

... and replace with the following:

"the matter shall be resolved in accordance with the requirements of Part 8 of the General Conditions – DISPUTE RESOLUTION."

GC 6.5 – DELAYS

Within clause 6.5.2, delete the last sentence of the paragraph, and replace with the following sentence:

"The *Contractor* will not be reimbursed by the *Owner* for costs incurred by the *Contractor* as a result of such delay."

Following Clause 6.5.5, add the following new Clauses:

“6.5.6 Should the *Contractor* fail to obtain *Substantial Performance* of the *Work* by the date indicated in Article A1, subclause 3, in the AGREEMENT BETWEEN OWNER AND CONTRACTOR, the period of time from this agreed date to the actual date on the certificate of *Substantial Performance* of the *Work* as determined by the *Engineer*, shall be termed the *Period of Delay*.

6.5.7 In the event there is a *Period of Delay*, the *Contractor* shall be liable for and shall pay to the *Owner* the cost of continuance of supervision during the *Period of Delay*, and all additional fees, disbursements and costs incurred by the *Owner* as a result of the *Period of Delay*, as determined by the *Engineer*, such charges hereby termed as *Delay Charges*. The *Owner* may deduct the amount of such *Delay Charges* from further payments.”

GC 6.6 – CLAIMS

Following clause 6.6.5, add the following new clause:

“6.6.6 The *Owner* may make claims arising out of the costs incurred for additional services provided by the *Engineer* resulting from the *Contractor*’s failure to reasonably perform the *Work* in accordance with the *Contract*, including the *Contractor*’s issuance of unnecessary Contemplated/Requested Change Orders (CCOs or RCOs) and Requests for Information

(RFIs). The *Engineer* will notify the *Contractor* where it has been determined that additional services will be required or have been provided in order not to cause delay. The *Owner* shall make claims based on the *Engineer's* invoices.”

GC 10.1 - TAXES AND DUTIES

Following clause 10.1.2, add the following new clause:

“10.1.3 In each application for payment, indicate as a separate amount after the subtotal, the appropriate *Value Added Tax* the *Owner* is legally obliged to pay. This amount will be paid to the *Contractor* in addition to the amount certified for payment under the *Contract*.”

GC 10.2 - LAWS, NOTICES, PERMITS AND FEES

Delete clause 10.2.2, and replace with the following:

“10.2.2 Except for the permits and fees which the *Contract Documents* specify as the responsibility of the *Owner*, the *Contractor* shall obtain all permits, such as those from the Department of Transportation; licenses; letters of approval, and certificates, and pay the fees required for the performance of the *Work* which are in force at the date of tender closing. This shall not include obtaining of permanent easements or rights-of-way.”

For clause 10.2.3, add the following sentence to the end of the clause:

“Some jurisdictions may require posting refundable and/or non-refundable fees before excavations are carried out within public rights-of-way. The *Contractor* is responsible for the determination of the requirement for each specific project and for the payment of any required deposits.”

GC 11.1 – INSURANCE

In Clauses 11.1.1.1, 11.1.1.2, and 11.1.1.3, change the \$2,000,000 policy limits to \$5,000,000; and in Clauses 11.1.1.1 and 11.1.1.4(1), change the \$2,500 deductible to \$5,000.

GC 11.2 - CONTRACT SECURITY

Delete clause 11.2.1 in its entirety, and replace with the following:

“11.2.1 Prior to commencement of the *Work*, and on the earlier of either fifteen *Working Days* following notice of award, or at the construction kick-off meeting, provide to the *Owner* original certificates of contract security. The required contract security is a **Performance Bond** and a **Labour & Materials Bond**, each in the amount of 50% of the *Total Amount Payable*. Include the cost of providing this surety in the *Contract Price*.”

Renumber existing clause 11.2.2 to 11.2.3, and insert the following clause:

- “11.2.2 Should it become apparent that the final cost of the *Work* will exceed the *Total Amount Payable* by more than 10%, or if the *Approved Period of Delay* causes the contract surety to expire prior to fulfillment of *the Contract*, the *Contractor* shall arrange to have the required surety extended and reissued based on the projected final *Total Amount Payable* and *Contract* fulfillment date.”

GC 12.1 - INDEMNIFICATION

In clause 12.1.2, change all occurrences of \$2,000,000 indemnification limits to \$5,000,000.

GC 12.3 – WARRANTY

Following clause 12.3.6, add the following clause:

- “12.3.7 All work of repair or replacement carried out during the Warranty Period shall be maintained for a period of one (1) year from the date of the *Engineer’s* acceptance of the work of repair or replacement notwithstanding that the Warranty Period expires before the expiration of the said year. This clause shall not apply to normal operational maintenance, which shall be carried out by the *Owner*.”

00 73 00 - SUPPLEMENTARY GENERAL CONDITIONS

Delete *Standard Specification* section 00 73 00 in its entirety, and refer to supplementary general conditions provided in this section.

01 10 00 - GENERAL REQUIREMENTS

In Part 1 - General, delete subsection 2 and replace with the following:

“1.2 Summary of the Work

- .1 The *Project* is located in the Town of Wolfville. The *Work* consists of the reconstruction of Fairfield Street and is generally described as follows:
 - .1 Reconstruction of Fairfield Street from Highland Avenue to Hillside Avenue, including cut/fill to match finished subgrade, backfilling, supply, placement and compaction of all granulars and asphalt.
 - .2 As indicated on the *Drawings*, removal and replacement of catch basins, manholes, storm sewer, culverts, sanitary main, water main, hydrants, and appurtenances, reinstatement of all disturbed surfaces and installation of new services to property line.
 - .3 Concrete sidewalk along the north side of Fairfield Street.
 - .4 Off-street watermain replacement from Intersection of Fairfield Street & Hillside Avenue to tie-in on Gaspereau Avenue.
 - .5 Supply and installation of three street lights on existing utility poles.
 - .6 Supply and install of new trees.

- .7 *Contractor to Provide all traffic control required during the Project, per Section 1.12.*
- .8 All environmental protection necessary in accordance with Section 01 57 00 and Nova Scotia Environment (NSE) requirements.
- .9 Installation of a temporary water line and supply to each residence affected by the installation of the new watermain to be supplied and installed by the *Contractor* with coordination with the *Owner*.
- .10 *Contractor to coordinate pole support requirements with Nova Scotia Power Inc. as part of the Work.*
- .11 Relocate any survey markers, monuments, and survey pins disturbed during construction activities under the direction of a qualified provincial land surveyor. Include costs for these services in *Contract Price*."

Delete subsection 1.3.1, and replace with the following:

- "1 Submit at the earlier of either within fifteen (15) Working Days of date of award, or at the construction kick-off meeting, a detailed draft schedule for planned operations and performance requirements of the *Work* by completion date. Revise, update, and submit schedule for initial approval by *Engineer*, and maintain schedule by furnishing monthly updates to *Engineer* as the *Work* progresses."

Following 1.3.4, add the following:

- “.5 *Contractor* shall backfill, grade, and clean up the *Work* as the installation proceeds, to limit disruption to affected land owners and users.
- .6 The *Contractor* shall temporarily install factory-made caps to the ends of all pipes included in the *Work* at the end of each *Working Day* to prevent infiltration of water and debris.
- .7 The *Contractor* shall strive to minimize effects of the *Work* on the *Owners*, tenants, or users of *Project* lands and adjacent properties, and shall repair any damage promptly as directed by the *Engineer*.
- .8 Safe access shall be maintained through the *Site* at all times for emergency vehicles, local residents, and Acadia University staff (when applicable). Any temporary access limitations to private property resulting from the requirements of the *Work* must be disclosed by the *Contractor* to owners of private property (and/or tenants) a minimum of 24 hours prior to the access limitation, and acknowledged by the same. Coordinate communications with *Owner* and utilize Portable Variable Message Signs (PVMS) when the requirements of the *Work* require complete access restrictions, such as during concrete placement.
- .9 Notify *Owner*, appropriate agencies, and inspectors prior to commencing, and during the *Work*. No *Work* is authorized to commence without express written consent from the *Owner* following review and acceptance of the schedule by the *Engineer*.
- .10 Unless agreed to by the residents and the *Owner*, equipment shall not be operated before 7:00 am and after 7:00 pm. The *Owner* shall be notified if the *Contractor* intends to *Work* on holidays. No *Work* shall take place before 12:00 noon on November 11.
- .11 Use of private property for *Site* access, staging, laydown areas, disposal of excess materials, etc. shall be negotiated solely by the *Contractor* and confirmed in writing, signed by the affected property owner, and submitted to the *Engineer* for their records. The *Owner* assumes no liability for any claims or costs resulting from the use of private property by the *Contractor*.
- .12 Notwithstanding the provisions of Section 00 72 45, GC 5.7, *Substantial Performance of the Work* will not be certified until all reinstatement is complete."

Delete Section 1.4 in its entirety and replace with the following:

“1.4 Setting Out the Work

- .1 The *Contractor* shall establish, maintain, and protect reference control points, and is responsible for layout of the *Work*, per 00 72 45 – GC 3.7 – LAYOUT OF THE WORK.
- .2 The *Contractor* shall assist the *Engineer* to check the line and grade of the *Work* to perform measurements for payment by providing casual labour and convenient means of access to all parts of the *Work*.
- .3 The *Contractor* shall take measurements and cross-sections and record all information before and after changes in construction for determination of quantities for measurement. All such information shall be provided to the *Engineer* for his review and acceptance before proceeding to the next stage. The costs of all materials, labour and equipment required for all surveying on the *Contract* shall be included in the amount of the tender. No additional or direct payment will be made for any part of these services.”

Add the following to Section 1.5:

- “3 Relocate any survey markers, monuments, and survey pins disturbed during construction activities under the direction of a qualified provincial land surveyor. Include costs for these services in *Contract Price*.
- .4 The existence and location of signs is not guaranteed. Document the location and condition of all signs, and reinstall them as near as possible to their original location.
- .5 Maintain the integrity of all ditches, culverts, and flow paths encountered during the execution of the *Work*. Existing ditches, culverts, or flow paths shall not be blocked, filled, or prevented from providing proper discharge, unless indicated otherwise in *Project Documents* and/or *Drawings*.
- .6 Utilities, Existing Structures, and Underground Services:
 - .1 The existence, location, and elevation of underground utilities, utility poles, and guy wires, are not guaranteed, and notwithstanding any provision in the *Contract Documents*, the *Contractor* shall be responsible for confirming the location and elevations of all sewers, water or other mains, services or lines, steam, electrical power or telephone conduits, or other such structures or utilities.
 - .2 Whenever it is necessary to explore and excavate to determine the location of existing underground utilities, services, or structures, make such examination and excavation at no additional cost to the *Contract*.
 - .3 The *Contractor* shall be responsible for notifying the appropriate company, department, person or persons, of his intention to carry out his operations. The *Contractor* shall deposit with the *Engineer* a letter or letters from the appropriate authority of the utility or utilities involved stating that the *Contractor* has made satisfactory arrangements with the utility for the location, protection, and inspection of the utility involved.
 - .4 Excavation in the vicinity of existing structures and utilities shall be carefully performed. The *Contractor* shall furnish temporary support, and provide adequate protection and maintenance of any underground utilities which cross an excavation, underground and surface structures, drains, sewers, power lines and other existing *Site* items affected by the *Work*. Where trenching is to be done under existing utilities, before excavation commences, such utilities shall be properly shored to prevent settlement. Shoring to be left in place until backfilled.

- Notify *Engineer* before altering or supporting an existing underground utility or structure.
- .5 Do not operate valves, electrical, or telephone controls on any existing utility systems.
- .6 Apply to the utility having jurisdiction for permission to operate such systems if it becomes necessary, and only operate such system in accordance with and in the presence of a representative of the utility affected.
- .7 The cost of having a utility company representative present when the *Work* passes under or in close proximity to underground cables, structures or utility poles shall be included in the *Contract* price.
- .8 *Contractor* to organize the moving or supporting of any utility poles, or the installation of any spreader bars for guy wires, with the utility having authority. Coordinate with utility for pole replacement, new guy wire installation, or the moving of any wires or services, if required.
- .9 If any services are damaged or disrupted during the *Work*, submit to the *Engineer* a letter from the utility affected stating that services damaged during construction have been repaired to the satisfaction of the utility.
- .10 Restore, upon completion of the *Work*, any utilities or structures that have been disturbed.
- .7 Documentation of Existing Conditions:
- .1 Prior to the commencement of *Work*, the *Contractor* shall take photographs of the place of *Work* and those properties adjacent to the place of *Work*, and take written notes to document any existing conditions that may affect execution of the *Work* or cause disputes throughout.
- .2 Prior to commencement of the *Work*, the *Engineer* may take or arrange for photographs and/or scans to be taken of the *Site* and those properties adjacent to the *Site*. The *Contractor* may request to accompany the *Engineer* or *Engineer's* delegate during the taking of photographs and/or scans to make any comments on the conditions of the *Site* or adjacent properties based on his own notes.
- .3 The *Owner*, or an authorized representative of the *Owner*, may be present during the taking of the photographs/scans and documentation of initial conditions to make comments on the conditions of the *Site*.
- .4 These photographs and scans, together with any collected by parties retained by the *Owner*, will serve as a record of *Site* conditions prior to the commencement of *Work*. The *Engineer* will retain photographs, together with a written report, on the condition of existing roads, sidewalks, trees, lawns, and adjacent properties as a record of existing conditions prior to the start of the *Work*.”

Delete Section 1.7, Subsection 1 in its entirety replace with the following:

“1.7 Submittals

- .1 Electronic Documents
- .1 Submit electronic versions of all required submittals to the *Engineer* in original PDF format. Original PDF files are generated at the source; scans of paper copies will not be accepted for this purpose. Where it is not possible or practical to provide electronic copies as described, submit three (3) paper copies of documents to the *Engineer* with prior approval.

.2 Shop Drawings

- .1 Subject to the requirements of 00 72 45 – GC 3.11 – SHOP DRAWINGS, submit shop detail or working drawings and manufacturer's data for all items requiring fabrication, on or off the *Site*, and for all proprietary equipment to the *Engineer* for review before any such items or equipment are commissioned for manufacturing, or are incorporated into the *Work*.
 - .1 This review of *Shop Drawings* by *Engineer* is for the sole purpose of ascertaining conformance with the general design concept.
 - .2 This review shall not mean the *Engineer* approves the detailed design depicted in the *Shop Drawings*, the responsibility for which shall remain with the *Contractor* submitting them, and such review shall not relieve the *Contractor* of responsibility for errors and/or omissions in *Shop Drawings*, or of responsibility for meeting all requirements of the *Contract Documents*.
 - .3 The *Contractor* is responsible for dimensions to be confirmed and correlated at the *Site*, for information that pertains solely to fabrication processes or to techniques of construction and installation, and for co-ordination of the *Work* of all *Subcontractors*.
- .2 Submit electronic copies of all relevant *Shop Drawings* per 1.7.1.
- .3 Submit *Shop Drawings* with such promptness as not to cause delay in this *Work*, or of the *Works* of any *Sub-Contractors*.
- .4 The information submitted shall clearly show the dimensions, materials or construction, performance, finish, service and installation requirements and other characteristics in sufficient detail to permit the *Engineer* to evaluate the suitability of the articles for the use intended.
- .5 Make corrections required by the *Engineer* as noted and resubmit corrected copies to the *Engineer* for review before manufacturing or fabrication.
- .6 The *Engineer* will mark comments on one (1) copy of each *Drawing* or document submitted and will return this as an electronic copy for the *Contractor's* purposes.
- .7 The *Engineer* will not review *Shop Drawings* and other material involving a large amount of information in those instances where it is evident that the *Contractor* has not used all the information contained in, or where such details are obviously not consistent with the *Contract Documents*. In such instances, the *Engineer* may reject the submission, and request removal or redaction of irrelevant information prior to re-submission.
- .8 Provide the section number of the specification with each submitted *Shop Drawing* for the purpose of identification.

.3 Samples

- .1 Submit samples where specified in the *Project Documents*, indicating details of sampling methods, date/time, and locations of sources.
- .2 Do not deliver products requiring sample *Approval* to *Site* prior to receiving written *Approval*.

.4 Mix Design and Material Verification Reports

- .1 Submit mix design formula for each discrete mix type of **concrete** to *Engineer* for acceptance prior to incorporating material into the *Work*, and to quality control personnel for in-field verification. Mix design submissions shall

- incorporate descriptive notes indicating which portion or component of the *Work* each mixture will be supplied for.
- .2 Submit mix design formula for each discrete mix type of **asphalt** to *Engineer* for acceptance prior to incorporating material into the *Work*, and to quality control laboratory for compliance verification during execution. Submit any revisions or updated mix formulas to *Engineer* and quality control personnel as *Work* progresses.
 - .3 Submit laboratory test reports for each discrete **granular material** to *Engineer* for acceptance prior to incorporating material into the *Work*. Test reports to indicate source of material, the dates sampled and tested, and shall confirm each lot of material conforms to the gradation, fractured particles, and physical properties requirements specified for each material type per the NSTIR Standard Specification for Highway Construction and Maintenance.
 - .4 Submit Standard Proctor test reports for each discrete **granular material** to *Engineer* for acceptance prior to incorporating material into the *Work*, in accordance with the requirements of Section 31 20 00 - EARTHWORK. Laboratory reports to establish control density targets for each granular material to be incorporated into the *Work*. Results also to be shared with quality control personnel for in-field verification during execution.
 - .5 Design Verification of *Temporary Work*
 - .1 Submit plans sealed by a professional engineer licenced to practice in the Province of Nova Scotia for *Temporary Work* as required by governing legislation.
 - .6 Operating and Maintenance Data
 - .1 Submit the following prior to application for final payment:
 - .1 General description, list of equipment including nameplate information, installation, operation and maintenance instructions, included parts list, and spare parts recommendations.
 - .2 Names, addresses, and phone numbers of *Subcontractors*, *Suppliers*, and manufacturers.
 - .3 Certificates of guarantees and warranties.
 - .2 Typed lists and notes using drawings, diagrams, and manufacturer's literature.
 - .7 Test Results
 - .1 Submit certificates and/or reports of the results of monitoring, testing, and inspections where specified in *Project Documents*."

Delete Section 1.8 in its entirety, and replace with the following:

“1.8 Record Drawings

- .1 After award of *Contract*, *Contractor* will maintain a set of As-Built Drawings for the purpose of providing red-line markups to assist the *Engineer* in generating Record Drawings. Accurately and neatly record any deviations from *Contract Documents* caused by *Site* conditions and changes ordered by *Engineer*.
- .2 Identify Drawings as "Project As-Built Copy". Maintain in good condition and make available for inspection on *Site* by *Engineer*.

- .3 *Contractor* is responsible for full-time construction surveying throughout execution of the *Work* for the purposes of collecting digital data suitable for the *Engineer* to produce and certify final record drawings. Discrete survey measurement points to be collected linearly, and at the location of each individual component of the *Work* – pipe installation to be recorded at each bell, flange, fitting, and stub end. Locations of utilities and all other structures of any nature which intersect or are about the line of the *Work* must be recorded. Data points, in PNEZD, to contain a unique numerical point number, northing and easting (NAD83 CSRS 2010 v6, Nova Scotia MTM Zone 5 – EPSG 8083), vertical elevation (to CGVD 2013), and a descriptor. Horizontal and vertical measurements to be in meters to a precision of one one-thousandth (0.001), and descriptors should be logical and not require interpretation, or include a descriptive code legend or guide.
- .4 Do not backfill pipework, appurtenances, or other portions of the *Work* until necessary measurements have been taken.
- .5 Prior to application for *Substantial Performance of the Work*, as described in 00 72 45 – General Conditions, submit as-built documents and survey point CSV file to *Engineer*.”

Delete Section 1.9 in its entirety replace with the following:

“1.9 Quality Control

- .1 All costs related to the testing requirements specified in 1.9.3 will be arranged and paid for by the *Owner* and will be conducted by an independent third-party agency. The *Contractor* will be expected to coordinate with the *Engineer* and the agency and provide access to the *Work* for testing and sample collection.
- .2 Within fifteen (15) *Working Days* following notice of award, the *Owner* will submit to the *Contractor* a Quality Control Testing and Inspection Plan covering all phases of the *Work*. The plan shall include, but not be limited to the following:
 - .1 Identification and description of inspection and required test procedures to be used to fulfil the conditions of the *Contract*;
 - .2 The names and certifications of the individuals or testing firms selected to fulfil the requirements of this section.
- .3 In accordance with the accepted Quality Control Testing and Inspection Plan described above, the *Contractor* shall appoint, pay for, and coordinate quality control testing and inspection for the following, for verification and acceptance into the *Work*:
 - .1 Ready-mix **Concrete**, as follows:
 - .1 In-field testing of concrete deliveries in accordance with *Specifications* and CSA A23.1-19/A23.2-19 to verify temperature, slump, and air content of each load is within the appropriate ranges specified by the accepted mix design. Verbally report results of each test to *Engineer*’s delegate immediately for field acceptance of concrete deliveries and submit written report of test results to *Engineer* for *Project* records.
 - .2 Assist the testing agency in casting QA and QC compressive strength verification specimens for 7-day and 28-day test results for the first delivery of each *Working Day* and submit laboratory results to *Engineer* for acceptance. The QA specimens shall have descriptive labelling applied to the outside of each specimen after curing and shall be delivered to the *Owner*. The specimens will be retained for independent testing at a qualified laboratory agreed to by all parties, should a dispute arise.

- .2 **Construction aggregates and engineered fill materials** as follows:
- .1 Sampling and laboratory testing of construction aggregates per the requirements of 1.7.3.3 and 1.7.3.4 above, if not provided by the *Supplier* of such materials.
 - .2 Full-time, in-field nuclear densometer compaction testing during bedding and backfilling operations, and during installation of road gravels. The quality control testing personnel shall communicate insufficient compaction results to *Engineer's* delegate and *Contractor* immediately. Corrective measures and the results of any re-tested areas to be verified as having achieved minimum compaction requirements and shall be reported in deliverables.
 - .3 Where laboratory control densities are unable to be achieved, a new control density for the material may be determined by the quality control personnel in accordance with the NSTIR Standard Specification for Highway Construction and Maintenance, Division 3, Section 5, after having received prior written consent from the *Engineer*. Verbally report results to *Engineer's* delegate immediately for field acceptance of new control density and submit results to *Engineer* for *Project* records.
 - .4 The testing agency will submit a detailed test location sketches and reports of all results to *Engineer* for acceptance once minimum compaction is achieved in all areas tested.
- .3 **Road asphalt** as follows:
- .1 Prior to paving, final (fine) grading shall be certified, witnessed, and approved by the *Engineer* and/or the testing agency to ensure compliance with *Project Drawings* for crown and slope.
 - .2 Bulk sampling, coring, and laboratory testing per the NSTIR Test Methods Manual and the Standard Specification for Highway Construction and Maintenance, Division 4, Section 19, to determine conformance with *Specifications* and parameters established in accepted asphalt mix design formula.
In accordance with TM-3, collect a minimum of two (2) sample sets on each day of paving for each road asphalt mix type for the following tests:
 - .1 Mix testing, per Table 2, Series D and E only;
 - .2 Asphalt density, per 6.2.4;
 - .3 Asphalt thickness, per 6.2.5.One (1) of the above sample sets shall have descriptive labelling applied to the outside of each bulk sample container and asphalt core, and shall be delivered to the *Owner*. The sample set will be retained for independent testing at a qualified laboratory agreed to by all parties, should a dispute arise.
 - .3 All testing results shall be submitted to the *Engineer* for acceptance and payment adjustment calculation (if required) in accordance with Table 4.
- .4 If requested, ensure *Owner* and *Engineer* have adequate access to the *Work* and to locations where products being incorporated into the *Work* are being prepared.
- .5 Cooperate and assist *Engineer* in conducting necessary tests when requested.
- .6 Arrange for inspections and tests by authorities other than the *Engineer* when required.

- .7 Do not backfill pipework, appurtenances, or other portions of the *Work* until necessary inspections by the *Engineer* are completed, QC and other required tests are completed, and passing results are achieved.
- .8 The *Engineer* may order any buried *Work* to be uncovered for examination, if necessary. Correction of defective *Work* shall be paid for by *Contractor*. If *Work* was previously *Approved* and no defects are found, the *Owner* will reimburse the *Contractor* for their costs.

Delete Subsection 1.10.3, and replace with the following:

“.3 *Engineer’s Site* office is not required.”

Delete Subsections 1.10.6 and 1.10.7, and replace with the following:

- .6 The *Contractor* shall make arrangements and pay for any temporary power, if required. Coordinate with the electrical utility when arranging for, and installing temporary power.
- .7 Temporary water piping and connections to be *Provided* by the *Contractor* in coordination with the *Owner*. Water to be supplied by the *Owner* when necessary.”

After replaced Subsection 1.10.7, add new Subsection 1.10.8 & 1.10.9 as follows:

- .8 Ensure temporary reinstatement is maintained throughout construction *Site* for the duration of the *Project* until final reinstatement.
- .9 Access to and from all properties may be required at any time. By the end of each *Working Day*, all driveway access must be either temporarily or permanently reinstated unless otherwise directed.”

Delete Subsection 1.11.1, and replace with the following:

- .1 Confine *Construction Equipment, Products*, and operations to within the boundaries of streets, specified right-of-way, or *Site* limits shown or *Site* secured by the *Contractor* as an operations base. Use of private property outside of the limits specified here shall be as per 1.3.11”

After Subsection 1.11.2, add the following:

- .3 *Site* shall be kept neat and tidy and undergo a thorough cleanup at the end of each *Working Day* (or more frequent intervals if required), to the satisfaction of the *Engineer*. This includes, but is not limited to, the following:
 - .1 Removal of gravel/soils/debris from paved and landscaped areas;
 - .2 Removal and disposal of waste materials/garbage;
 - .3 Grading (and gravelling, if required) of travelled ways to ensure a smooth unimpeded passage of vehicles;
 - .4 Application and maintenance of dust control measures, as required, and as *Approved* by the *Engineer*;
 - .5 Maintenance of safety and traffic control equipment (signs, barricades, cones, etc.).”

Delete Subsection 1.12.1, and replace with the following:

- "1 While the *Work* is being carried out, *Provide* continuous traffic control in accordance with Temporary Workplace Traffic Control Manual, latest edition, as issued by the Nova Scotia Department of Transportation and Infrastructure Renewal. A Temporary Workplace Signer certified by the province of Nova Scotia is required to prepare traffic control plans and oversee traffic control operations for all *Work* performed within the right-of-way.

The basic objective of each traffic control plan is to permit the *Contractor* to *Work* within the right-of-way efficiently and effectively, while maintaining a safe and efficient movement of vehicles and pedestrians around or through temporary workplaces, and to protect workers in temporary workplaces from errant vehicles.

Traffic control plans shall be submitted to the *Engineer* for *Approval* a minimum of five (5) *Working Days* prior to commencement of the *Work* requiring the traffic control activity. Coordinate proposed traffic control activities with Acadia University during preparation of traffic control plan (where required). Plans must consider access to campus buildings and residences, especially during the **final weekend in August when students move in to begin classes in September**. Any plans found incomplete, ambiguous, or unclear will be returned for revision and re-submittal.

Any requests for full street closures are to be submitted to the *Owner* in writing at least 48 hours in advance of the proposed closure, and *Approved* in writing by the *Owner*, with notifications and public messaging per section 1.3."

After Subsection 1.14.1, add the following:

- ".2 Comply with all *Owner* Health and Safety requirements for *Contractors*. Complete and return Health and Safety Checklist."

Delete Subsection 1.16.1, and replace with the following:

- ".1 Prepare a Waste Management Plan, including source separating plan and waste disposal plan indicating anticipated waste types, disposal methods, and disposal locations. Plan shall be submitted to the *Engineer* for *Approval* a minimum of five (5) *Working Days* prior to commencement of the *Work*."

01 22 00 – MEASUREMENT AND PAYMENT

Delete *Standard Specification* section 01 22 00 in its entirety, and replace it with new Section 01 22 00 included with these *Project Documents*.

01 57 00 – ENVIRONMENTAL PROTECTION

After Section Subsection 1.3.2, add the following:

- “3 Catch basin protection:
 - .1 Install *Approved* sediment traps on all existing catch basins remaining in service within and adjacent to *Work* areas to ensure sediment does not enter stormwater system.
 - .2 Inspect and maintain sediment traps throughout execution of the *Work*, and remove sediment traps at completion.”

Delete subsection 1.5.4, and replace with the following:

- “4 Control emissions from equipment by employing the following mitigation best practices:
 - .1 Procure fuel-efficient equipment models, equipped with run-time indicators where possible, to assist in monitoring and lowering fuel consumption and cost;
 - .2 Encourage reduced idling by use of automatic shut-off mechanisms where possible, and through driver training programs;
 - .3 Assess the capacity of the equipment being considered, and use only equipment that meets minimum size requirements, to reduce unnecessary fuel consumption;
 - .4 Regularly maintain vehicles and equipment to ensure efficient operation (e.g. regularly checking tire pressure, and conducting operational maintenance on the basis of engine hours);
 - .5 Vehicle route planning to take the shortest transportation route possible;
 - .6 Install energy efficient security and task lighting (e.g., LED lights);
 - .7 Minimize areas of disturbance, where possible;
 - .8 Arrange site toolbox talks to encourage compliance with the mitigation measures listed above, and to raise awareness of the benefits of the mitigation measures.”

SECTION 03 30 00 – CONCRETE

Delete Subsection 2.2.1, and replace with the following:

- “1 *Provide* in accordance with CSA A23.1, Table 5, Alternate (1) Performance.”

SECTION 31 10 00 – CLEARING AND GRUBBING

At the end of Section 3.1 – General, add the following new subsections:

- “7 Where topsoil is to be reused for landscaping fill, take measures to ensure all deleterious materials are removed and the resulting material meets the requirements of 32 91 19 – 2.1.
- .8 The *Contractor* shall take all reasonable precautions to protect mature trees in the work area in accordance with 32 91 10. Mature trees having a breast diameter of 100mm or larger shall not be disturbed unless directed by the *Engineer*. Notify the *Engineer* of the presence of any such trees or their root systems in the *Work* area that may impede *Work*.”

SECTION 31 20 00 - EARTHWORK

At the end of this specification section, add new sections as follows:

- “3.12 Disposal of Surplus Excavated Material
 - .1 Dispose of surplus excavated material as directed by the *Engineer* to disposal *Sites Approved* by the Town of Wolfville.
- 3.13 Restoration
 - .1 Reinstatement of disturbed areas to condition, elevation and thickness equal to or better than that which existed before excavation with matching material, as specified in Section 32 98 00.”

SECTION 32 98 00 - REINSTATEMENT

Following Section 1.3, add new Section 1.4 as follows:

- “1.4 **PAYMENT**
 - .1 Payment for reinstatement of street asphalt, pavement marking, driveways, walkways, gravel, and landscaped/vegetated surfaces within 6m on either side of the *Work* disturbed during construction is to be included as an incidental to the *Work*, unless specified under *Contract* items within 01 22 00 – MEASUREMENT AND PAYMENT.”

Add the following to Section 3.1:

- “3.1.3 All disturbances are to be maintained such that do not pose a safety risk to the public at all times including weekends and holidays.”

PART 2 **Products**

- 2.1 **NOT USED**
 - .1 Not used.

PART 3 **Execution**

- 3.1 **NOT USED**
 - .1 Not used.

PART 1 General

1. *Unit Prices* and lump sum prices are full compensation for the work necessary to complete each item in the *Contract* and in combination for all work necessary to complete the *Work* as a whole.
2. For water main, sanitary sewer, and storm sewer items, the following are included (but are not limited to) as required where individual quantities are not provided in the Tender Form: clearing, grubbing, common excavation, shoring, dewatering, geotextile, bedding, backfilling, compaction, disposal of surplus materials, joint restraints, thrust blocks, thrust anchors, zinc anodes, insulation, polyethylene encasement, flushing, pressure, vacuum and mandrel testing, disinfection, dechlorination, cleaning, closed circuit television inspections, marker stakes, marker tape, tracer wire and test stations.
3. For earthwork, street construction and landscaping include all of the following as required where individual quantities are not provided in the Tender Form: clearing and grubbing, removals, borrow, common excavation, backfilling, compaction, disposal of surplus material, pavement markings, tree removal, traffic control, all incidentals and reinstatement as specified
4. All measurement shall be along a horizontal plane unless otherwise indicated. Scale tickets for gravels and asphaltic concrete shall be provided within 48 hours, when requested by the Engineer, regardless of the unit of measurement.
5. The quantities listed in the Schedule of Quantities and *Unit Prices* are approximate only and are for the purpose of tendering. Payment to the Contractor will be based on actual quantities of work completed in accordance with the drawings and specifications.
6. The numbers of the items described below correspond to the numbers of the items in Section 00 41 43, Part 4 - Schedule of Quantities and *Unit Prices*.
7. Provisional items shall be included in the estimated *Contract Price* as tendered. The *Owner* reserves the right to alter quantities and/or delete all or portions of provisional items from the estimated *Contract Price* without change to any tendered unit rates.

WATER MAIN SYSTEM

11. Pipe

Unit of Measurement: meter (m)

Method of Measurement: along centreline of pipe through fittings and valves.

This item includes: Supply and installation of water main pipe and tracer wire, including excavation, dewatering, granular bedding, backfilling, compaction, restoration, fittings (tees, bends, crosses, reducers), factory-made caps/plugs, including supply and installation of thrust blocks, anchors, flushing, testing, disinfection, de-chlorination, and any incidentals, will be measured in linear metres of each size of water main installed.

12. Fire Hydrants

Unit of Measurement: Each (Ea)

This item includes: Supply, installation, and testing of McAvity Brigadier M-67 hydrants, complete with hydrant gate valve, valve box, lead, extensions, thrust block, anchor tee, restraints, anodes, bedding and pipe protection gravels, common excavation, backfilling, compaction, finish grade adjustments and hydrant painting.

14. Direct Buried Valves

Unit of Measurement: Each (Ea)

This item includes: supply and installation of valves complete with valve boxes and appurtenances, tracer wire bonding/test station loop, common excavation, backfilling and finish grade adjustment.

15. Services

.1/.3 Set of Fittings

Unit of Measurement: Each (Ea)

This item includes: location of existing dwelling water services, replacement of curb stops with stainless steel curb stops and adjustment to finished grade, including all necessary excavation, saddles, main stop, curb stop, all fittings, polyethylene wrapping, backfilling and compaction as well as removal and disposal of existing fittings. Replacement service size to match existing.

.2/.4 Service Pipe - Polyethylene

Unit of Measurement: meter (m)

Method of Measurement: along centerline of pipe through fittings.

This item includes: replacement of existing water service laterals from new water main to the property line including supply and installation of polyethylene pipe, nipples, fittings, tracer wire, and incidentals as well as removal and disposal of existing services. Replacement service size to match existing.

16. Connections to Existing Main

Unit of Measurement: Each (Ea)

This item includes: locating existing pipe or tee connection and connecting new pipe to existing including fittings, reducers, and incidentals as required, common excavation, backfilling, compaction, and reinstatement. Any valves at connections to existing will be paid separately under pay item 14.

For 16.1 (at Highland Avenue), includes connecting to existing gate valve or PVC pipe installed in 2022.

For 16.2 (at Hillside Avenue), includes connections to existing pipe to remain at limits of intersection reconstruction.

For 16.3 (at Gaspereau Avenue), includes connecting to existing gate valve at existing tee installed in 2019.

18. Temporary Water Main

Unit of Measurement: Lump Sum (L.S.)

This item includes: but is not limited to, the design, supply of all labour, material and equipment required for installing, maintaining, and removing a minimum 50 mm diameter temporary main line and 19 mm service laterals complete with valves, pipe, backflow prevention devices (sized to match temporary main line diameter), and vacuum breakers at the connection to homes, etc. All pipe must be disinfected and tested to specification Section 33 11 00. Coordinate connection to homes with home owners or tenants. Limits of temporary water service may extend outside the limits of construction. Larger temporary lines may be required to ensure that an adequate supply of water is provided to all customers. *Work zone* includes two pressure zones, which must be considered in the temporary water design. Submit a proposed plan a minimum of two (2) weeks prior to installation for review by *Engineer*. This item also includes installation of *Approved* vehicle and pedestrian crossing protective measures along with producing and distributing notice to customers to be placed on temporary water.

SANITARY SEWER

21. Gravity Pipe

Unit of Measurement: meter (m)

Method of Measurement: along centerline of pipe through manholes and chambers.

This item includes: Supply and installation of gravity sewer pipe, including excavation, dewatering, granular bedding, backfilling, compaction, fittings and couplings, factory-made caps/plugs, CCTV inspection, leakage and deflection testing, and any incidentals. Also includes fittings as required for connection to exiting piping where new piping is to connect directly to existing. No separate payment will be made for connection to existing piping.

23. Manholes

Unit of Measurement: Each (Ea)

This item includes: new precast manhole, including all required excavation, dewatering, granular bedding, waterproofing membrane, backfilling, compaction, vacuum testing, supply and installation of all frames and covers, adjustment to finished grade, and connection of all in/out flowing pipes. No separate payment will be made for connection to exiting piping.

24. Services

Unit of Measurement: meter (m)

Method of Measurement: along the centreline of pipe through fittings.

This item includes: supply and installation of green PVC DR28 service laterals from property line to sanitary sewer main including fittings, prefabricated PVC inline tees, bends, and incidentals, and all required excavation, dewatering, granular bedding, backfilling. Also includes removal and disposal of existing services to property line. Replacement service size to match existing.

STORM SEWER

31. Pipe

Unit of Measurement: meter (m)

Method of Measurement: along centerline of pipe through manholes and catchbasins.

This item includes: Supply and installation of gravity pipe, including excavation, dewatering, granular bedding, backfilling, fittings and couplings, factory-made caps/plugs, deflection testing, CCTV inspection, and any incidentals. Also includes location and connection of existing services. Also includes fittings as required for connection to exiting piping where new piping is to connect directly to existing. No separate payment will be made for connection to existing piping.

32. Manholes

Unit of Measurement: Each (Ea)

Method of Measurement: number of units installed by type and size.

This item includes: Installation of new manholes and catchbasin manholes complete with new frame and grate/cover, inspection, including all required excavation, backfilling, compaction, supply and installation of all frames and grates/covers and adjustment to finished grade, connection of all in/out flowing pipes. No separate payment will be made for connection to exiting piping.

33. Catch Basins

Unit of Measurement: Each (Ea)

Method of Measurement: number of units installed by type and size.

This item includes: Installation of catch basins complete with frame and grate, inspection, including all required excavation, backfilling, compaction, supply and installation of all frames and grates and adjustment to finished grade. Min. 450 mm sump depth.

34. Catch Basin Leads

Unit of Measurement: metre (m)

Method of Measurement: along centreline of pipe from centre of catchbasin to centre of main sewer, centre of manhole, or termination point indicated.

This item includes: excavation, removal and disposal of existing pipe within or partially within theoretical trench, bedding and backfilling, supply and placement of pipe complete with all fittings, connections and reinstatement up to and including subgrade as specified.

35. Services (Provisional)

Unit of Measurement: meter (m)

Method of Measurement: along the centreline of pipe through fittings.

This item includes: supply and installation of white PVC DR28 service laterals from property line to storm sewer main including fittings, prefabricated PVC inline tees, bends, and incidentals, and all required excavation, dewatering, granular bedding, backfilling. Also includes removal and disposal of existing services to property line. Replacement service size to match existing.

40. Additional Storm Sewer Items

.1 Subdrains – 150mm w/ drain sock

Unit of Measurement: meter (m)

Method of Measurement: along centerline of pipe from catch basin to catch basin.

This item includes: pipe complete with Type 2 gravel surround, filter sock, and connection to catch basins.

.2 Yard Drain – 600x600mm Precast

Unit of Measurement: Each (Ea)

Method of Measurement: number of units installed by type and size.

This item includes: Removal and disposal of existing yard drain if applicable, supply and installation of yard drain complete with inspection, including all required excavation, bedding, backfilling, compaction, supply and installation of all grates and connections of pipe(s) including any make-up sections required, adjustment to finished grade. Min. 450 mm sump depth.”

STREET CONSTRUCTION

41. Gravels

Unit of Measurement: tonne (t)

Method of Measurement: scale tickets signed by Engineer.

This item includes: supply, placement and compaction of gravel as indicated.

43. Asphalt Concrete

Unit of Measurement: tonne (t)

Method of Measurement: scale tickets signed by Engineer.

This item includes: supply, placement and compaction as indicated including tack coat.

44. Curb

Unit of Measurement: metre (m)

Method of Measurement: along top face of curb.

This item includes: concrete curb, including dowels/reinforcement as required, heating/hoarding and other cold weather incidentals (when required), curing and backfill to subgrade as indicated. Note that supply/placing/compaction of 150mm Type 1 granular base (extend 300mm beyond back of curb for street curbing, 150mm behind curb elsewhere) will be paid under Item 41 – Gravels.

45. Sidewalk

.1 Concrete

Unit of Measurement: square metre (m²)

Method of Measurement: slope measure of indicated area.

This item includes: This item includes: sidewalk, including dowels/reinforcement as required, heating/hoarding and other cold weather incidentals (when required), curing, supply/placing/compaction of base gravels and backfill as indicated. Sidewalk to be 150mm thick at driveways and landings at intersections, 100mm elsewhere.

46. Tactile Walking Surface Indicators (set)

Unit of Measurement: Each (ea.)

This item includes: Supply and installation of tactile walking surface indicator sets at crossing locations specified in plans. Each set includes 3 plates unless indicated otherwise on *Drawings*.”

53. Site Removals

All disposal of removed materials to be in accordance with *Contractor's* Waste Management Plan (01 10 00 – 1.16.1).

.1 Existing Asphalt and Subgrade Removal, Embankment and Disposal

Unit of Measurement: square meter (m²)

Method of Measurement: slope measure of subgrade of indicated area at mean depth.

This item includes: removal and disposal of asphalt, excavation, embankment and compaction of granular materials to new subgrade lines and disposal of excess material. Also includes saw cutting at limits to be removed, and milling as required for step joint where new asphalt is to meet existing. Any asphalt curb removal required is considered incidental to this *Work*, as well as any embankment and grading required for new sidewalk and side slopes.

.2. Watermain and Appurtenances

Unit of Measurement: meter (m)

Method of Measurement: along the centreline of the pipe through valves and fittings.

This item includes: excavation, removal and disposal of watermain, removal and handing over of valves to the *Owner*, removal and disposal of thrust blocks and all bedding gravels. This item also includes backfilling and compaction as required.

.3 Sanitary Piping

Unit of Measurement: meter (m)

Method of Measurement: along the centreline of the pipe through manholes.

This item includes: excavation, removal and disposal of existing pipe and all bedding gravels. This item also includes backfilling and factory plugs/caps as required. Note that payment will only be made for piping requiring removal and disposal off-site. No payment will be made for lengths which are broken and left on *Site* (i.e. clay piping)

.4 Storm Piping and Culverts

Unit of Measurement: meter (m)

Method of Measurement: along the centreline of the pipe through catch basins and manholes.

This item includes: excavation, removal and disposal of storm piping, catch basin leads, culverts and all bedding gravels. This item also includes backfilling and plugs/caps as required. Note that payment will only be made for piping requiring removal and disposal off-site. No payment will be made for lengths which are broken and left on *Site* (i.e. clay piping).

.5 Hydrants

Unit of Measurement: Each (Ea)

This item includes: excavation, removal and disposal of thrust blocks and all bedding gravels. Hydrant and hydrant valve to be removed and turned over to the *Owner*.

.6 Catch Basins & Storm Manholes

Unit of Measurement: Each (Ea)

This item includes: excavation, removal and disposal of concrete catch basins/storm manholes and all bedding gravels. Frame and grates to be removed and turned over to the *Owner*. This item also includes backfilling as required.

.7 Sanitary Manholes

Unit of Measurement: Each (Ea)

This item includes: excavation, removal and disposal of concrete sanitary manholes and all bedding gravels. Frame and covers to be removed and turned over to the *Owner*. This item also includes backfilling as required.

54. Driveway Reinstatement

Unit of Measurement: square meter (m²)

Method of Measurement: slope measure of surface area reinstated behind sidewalk.

.1 For gravel driveways/walkways; This item includes: removal of existing driveway including granulars to extent required, supply, placement and compaction of 150mm of Type 1 Gravel and 75mm of Type C asphalt course as indicated on *Drawings*. All gravel driveways to be reinstated with asphalt to property line. For gravel driveways requiring reinstatement past the property line, also includes supply, placement and compaction of 150mm of Type 1 gravel to reinstatement extents.

.2 For asphalt driveways/walkways; This item includes: removal of existing driveway including granulars to extent required, supply, placement and compaction of 150mm of Type 1 Gravel and 75mm of Type C asphalt course as indicated on *Drawings*. All asphalt driveways to be reinstated with asphalt at minimum to property line, or extents required in grade-adjusted areas. Tie into existing steps at appropriate elevations as required.

.3 For brick/paver/stone walkways; This item includes: removal of existing walkway and granulars to extent required, temporary storage of brick/paver/stones removed, supply, placement and compaction of 150mm of Type 1 Gravel, bedding sand and jointing material, supply and placement of bricks/pavers/stones as required re-using and/or matching original material and installation pattern. Should exact material match not be readily available, alternative reinstatement material shall be *Approved* by property owner prior to placement.

55. Geotextile

Unit of Measurement: square meter (m²)

Method of Measurement: slope measure of area to receive geotextile.

This item includes: supply, installation of Propex Geotex 351 geotextile where shown on the *Project Drawings* or as directed by *Engineer*.

LANDSCAPING

61. Topsoil and Sod

Unit of Measurement: square metre (m²)

Method of Measurement: slope measure.

This item includes: excavation, supply 150 mm topsoil, lime, fertilizer, sod, required accessories, and maintenance/watering as required through establishment period.”

63. Tree within ROW (Provisional)

Unit of Measurement: Each (ea)

This item includes: supply and planting of Canadian No. 1 nursery stock red maple (or other such tree *Approved* by the *Owner*), free of pests and disease, 60mm balled and burlapped, tree supports, accessories and maintenance. This item requires coordination with Town of Wolfville staff for location setting prior to installation.

66. Tree Removal and Replacement

Unit of Measurement: Each (ea)

This item includes: mass excavation and embankment – common, removal and disposal of tree including stumps and roots as indicated on plan, backfill, and all reinstatement, and supply and planting of Canadian No. 1 nursery stock red maple (or other such tree *Approved* by the *Owner*), free of pests and disease, 60mm balled and burlapped, tree supports, accessories and maintenance.

ADDITIONAL ITEMS

71. Trench Excavation - Rock (Provisional)

Unit of Measurement: cubic metre (m³)

Method of Measurement: surface-to-surface volume method between topographical survey taken after rock is exposed and theoretical trench dimensions as indicated in Section 39 00 00 - Standard Detail 01 22 00 - 01.

Boulders larger than one-half cubic metre, any portion of which is within theoretical trench, will be classified as rock. Boulders removed from trench shall be measured along the three maximum perpendicular axes.

This item includes: all incremental work for rock excavation and disposal of surplus material over and above cost of common excavation which is included in price for pipe and related items.

76. Mob. and Demob.

Unit of Measurement: Lump Sum (LS)

This item includes: where individual *Contract* items and quantities are not provided in the Tender Form, or where costs are not included in specific items under 01 22 00 – MEASUREMENT AND PAYMENT, include here any and all costs associated with moving equipment and personnel to/from the *Site* to complete the *Work* specified, project signage, temporary facilities, traffic control, assistance to the *Engineer*, location of in-ground utilities and services by external parties, and coordination of work by external utilities (NSPI, Aliant, etc.), environmental protection, protection of existing trees, dewatering, marker tape and stakes, clearing, grubbing, excavation, shoring, dewatering, backfilling, bedding, compaction, disposal of surplus materials, protective coatings, reinstatement of all disturbed surfaces to existing or with materials and thicknesses as indicated on the *Project Drawings*, pipe cleaning, disinfection, pressure testing, topographic survey to record as-constructed features, video inspection, bonding and security, closeouts, and any other incidentals not specifically covered in *Contract* items. This item shall only be used for applicable general overhead costs that are not specific to the scope of any *Contract* items, allowing for the most accurate representation of unit costs for other items.

77. Topsoil and Sod Excavation

Unit of Measurement: Lump Sum (LS)

This item includes: removal of sod and other organic material, stripping and stockpiling or disposal of topsoil as directed from within *Work* limits as required to execute the *Work*.

78. Street Light (NXT-24S-700Ma (5000K) with individual photo cells

Unit of Measurement: Each (ea)

This item includes: the supply and installation of street light fixtures, NXT-24S-700Ma (5000K) with individual photo cells, and davit arms matching other light along Fairfield Street, on existing utility poles as shown on the drawings. This item also includes tree trimming where required, wiring, connections, coordination and approvals with NS Power, inspection and permitting as required, testing, and commissioning.

CONTINGENCY ALLOWANCE

No payment will be made under this item unless authorized by the *Engineer*.

Expenditures under the contingency allowance shall be authorized in accordance with Part 6, CHANGES – in the General Conditions.

Any portion of the contingency allowance remaining upon completion of the Contract shall not form part of the final Contract Price.