

**WOL009-2024**

# **Wolfville AT Network Improvements**

August 2024



A cultivated experience for the mind, body, and soil

Closing: Thursday, August 22, 2024 at 14:00

<b>Section</b>		<b>Pages</b>
00 20 00	Overview	1
00 21 00	Information to Tenderers	3
00 41 43	Tender Form	9
00 53 43	Form of Agreement	5
00 74 00	Supplementary Specifications	24

#### Supplementary Specifications

- Section 00 74 00 – Supplementary Specifications
- Highland Avenue AT Signage & Pavement Markings Report prepared by DesignPoint Engineering & Surveying Ltd., dated June 21, 2024
- Cherry Lane and Kent Avenue – Bike Boulevards Report prepared by DesignPoint Engineering & Surveying Ltd., dated June 21, 2024
- HRM Standard Detail “HRM 119 Pedestrian Gate”

#### Tender Drawings:

##### **Wolfville AT Network Improvements prepared by DesignPoint Engineering & Surveying Ltd., Revision 1, Issued for Tender June 21, 2024**

- Sheet 1 / C-01 / Site Plan
- Sheet 2 / PP-01 / Plan & Profile 0+000 – 0+120
- Sheet 3 / PP-02 / Plan & Profile 0+120 – 0+280
- Sheet 4 / PP-03 / Plan & Profile 0+280 – 0+420
- Sheet 5 / PP-04 / Plan & Profile 0+400 – 0+540
- Sheet 6 / PP-05 / Plan & Profile 0+540 – 0+680
- Sheet 7 / G-01 / Grading Sheet 1
- Sheet 8 / G-02 / Grading Sheet 2
- Sheet 9 / D-09 / Details

##### **Cherry Lane Crossing prepared by DesignPoint Engineering & Surveying Ltd., Revision 1, Issued for Tender June 21, 2024**

- Sheet 1 / C-01 / Crossing Plan

**END OF SECTION**

## **OVERVIEW**

This document is a Supplementary Specification to The Standard Specification for Municipal Services as published by the Joint Committee on Contract Documents in association with the Nova Scotia Roadbuilders Association, Consulting Engineers of Nova Scotia and Landscape Nova Scotia.

The Town of Wolfville has decided to use the Standard Specification in an effort to regulate their specification practices, simplify the review and approval process, and standardize the specifications written by their consultants.

These project documents have been prepared for use with and require being read in conjunction with the Standard Specification for Municipal Services as published by the Joint Committee on Contract Documents in association with Nova Scotia Roadbuilders Association, Consulting Engineers of Nova Scotia and Landscape Nova Scotia. Copies of the Standard Specification are available from Spectech Limited, 18 Laurier Street, Dartmouth, NS, B3A 2G7; telephone: (902) 233-9362; e-mail: [nsmunicipalservices@gmail.com](mailto:nsmunicipalservices@gmail.com); or visit: [www.standardspec.ca](http://www.standardspec.ca).

**END OF SECTION**

Wolfville AT Network Improvements  
Wolfville, Nova Scotia

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

Engineer: DesignPoint Engineering & Surveying Ltd., 90 Western Parkway Suite 500, Bedford NS B4B 2J3

## 1.1 Tender Submission

- .1 Submit completed tender form for above project in sealed envelope marked as follows:

**TENDER**

Tender No. WOL009-2024  
Wolfville AT Network Improvements

Closing 2:00 p.m. local time on Thursday, August 22, 2024

Town of Wolfville  
359 Main Street, Wolfville NS, B4P 1A1  
Attn: Alexander de Sousa, P.Eng.  
Director of Engineering & Public Works

## 1.2 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.

## 1.3 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.

## 1.4 Tender Opening

- .1 Tenders will be opened on Thursday, August 22, 2024 at 2:15 p.m. local time at the Wolfville Town Hall at 359 Main Street, Wolfville. Opening will be public.
- .2 Tender amendments will be disclosed at public openings.

## 1.5 Accuracy of Referencing

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

**1.6 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 1.3.8 for a complete list of Contract Documents.

**1.7 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.

**1.8 Clarification and Addenda**

- .1 All questions concerning this tender shall be directed to the following:  
  
Alexander de Sousa, P. Eng  
(902)-542-3213  
adesousa@wolfville.ca
- .2 Notify Engineer not less than two (2) Working Days before tender closing of omissions, errors, or ambiguities found in Contract Documents. If Engineer considers that correction, explanation, or interpretation is necessary, a written addendum will be issued. All addenda will form part of Contract Documents.
- .3 Confirm in the tender form that all addenda have been received. Tenderers are solely responsible to obtain and acknowledge the receipt of addenda at time of tender closing.

**1.9 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.

**1.10 Taxes**

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

**1.11 Tender Security**

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

**1.12 Contract Security**

- .1 Refer to Section 00 73 00 – Supplementary General Conditions, subsection GC11.2 – CONTRACT SECURITY for form of contract security. Refer to Project Documents for amount of contract security.

**1.13 Insurance**

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

**1.14 Form of Agreement**

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

**1.15 Return of Tender Security**

- .1 Tender security will be returned to:

- .1 All except the three lowest acceptable tenderers within five (5) Working Days of tender opening.
- .2 Two (2) remaining unsuccessful tenderers within ten (10) Working Days of date of award.
- .3 Successful tenderer following receipt by Owner of executed agreement, specified contract security, and insurance documents.

**1.16 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 Wolfville AT Network Improvements, Tender # WOL009-2024". Sign as required for tender and submit to the address given for receipt of tenders. In order to be considered, submissions shall be received prior to time of tender closing.

**1.17 Offer, Acceptance, Rejection**

- .1 The Owner reserves the right to accept or reject any tender and to cancel the tendering process and reject all tenders at any time prior to the award of Contract without incurring any liability to affected tenderers.

**END OF SECTION**



**1.1 SALUTATION:**

- .1 To: Town of Wolfville  
359 Main Street, Wolfville Nova Scotia B4P 1A1  
\_\_\_\_\_
  
- .2 For: Tender # WOL009-2024  
Wolfville AT Network Improvements  
Wolfville, Nova Scotia  
\_\_\_\_\_
  
- .3 From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**1.2 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.

**1.3 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 multiplied by the estimated quantities in Subsection 1.4 hereunder excluding Harmonized Sales Tax (HST).
- .3 That this tender is valid for acceptance for sixty (60) days from tender closing.
- .4 That measurement and payment for items listed in Subsection 1.4 hereunder shall be in accordance with corresponding items in Section 01 22 00 Measurement and Payment.
- .5 To execute in triplicate the Form of Agreement and forward same together with the specified contract security and insurance documents to the Owner within ten (10) Working Days of written notice of award.
- .6 That failure to enter into a formal contract and provide specified insurance documents and contract security within time required will constitute grounds for forfeiture of tender security.
- .7 That if tender security is forfeited, 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.

- .8 That *Contract Documents* include:
  - .1 Standard Specification for Municipal Services listed in Table of Contents Page Dated January 2024.
  - .2 Overview
  - .3 Information to Tenderers
  - .4 Tender Form
  - .5 Form of Agreement
  - .6 Supplementary Specifications
    - .1 Section 00 74 00 – Supplementary Specifications
    - .2 Highland Avenue AT Signage & Pavement Markings Report prepared by DesignPoint Engineering & Surveying Ltd., dated June 21, 2024
    - .3 Cherry Lane and Kent Avenue – Bike Boulevards Report prepared by DesignPoint Engineering & Surveying Ltd., dated June 21, 2024
    - .4 HRM Standard Detail “HRM 119 Pedestrian Gate”
- .7 Drawings
  - .1 **Wolfville AT Network Improvements prepared by DesignPoint Engineering & Surveying Ltd., Revision 5, Issued for Tender**
    - Sheet 1 / C-01 / Site Plan
    - Sheet 2 / PP-01 / Plan & Profile 0+000 – 0+120
    - Sheet 3 / PP-02 / Plan & Profile 0+120 – 0+280
    - Sheet 4 / PP-03 / Plan & Profile 0+280 – 0+420
    - Sheet 5 / PP-04 / Plan & Profile 0+400 – 0+540
    - Sheet 6 / PP-05 / Plan & Profile 0+540 – 0+680
    - Sheet 7 / G-01 / Grading Sheet 1
    - Sheet 8 / G-02 / Grading Sheet 2
  - .2 **Cherry Lane Crossing prepared by DesignPoint Engineering & Surveying Ltd., Revision 2, Issued for Tender**
    - Sheet 1 / C-01 / Crossing Plan
- .8 All addenda as issued and as confirmed in subsection 1 of this section.





**1.4 SCHEDULE OF QUANTITIES AND UNIT PRICES**

**WOLFVILLE AT NETWORK IMPROVEMENTS**

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
----------	-------------	---------------------	--------------------	------------	------------

EARTHWORK

5.	Mass Excavation – Unsuitable Material (Provisional)	m <sup>3</sup>	5		
8.	Geotechnical Inspection	L.S.	1		

SUBTOTAL EARTHWORK: \$ \_\_\_\_\_

STORM SEWER

31.	Pipe				
.1	Pipe				
.1	100 mm PVC DR35	m	4		
.2	200 mm PVC DR35	m	42		
.3	250 mm PVC DR35	m	6		
.4	750 mm RCP CSA 65D	m	24		
.2	Perforated Pipe				
.1	100 mm PVC DR35	m	406		
.2	200 mm PVC DR35	m	4.5		
32.	Manholes				
.1	1500 mm	ea	3		
33.	Catch Basins				
.1	S361 Grate	ea	1		
.2	S401 Grate	ea	2		
.3	Pyramid Grate	ea	5		
36.	Connection to Existing				
.1	Pipe	ea	1		
.2	Catch Basin	ea	4		
40.	Discharge Swale	m	23		

SUBTOTAL STORM SEWER: \$ \_\_\_\_\_

STREET CONSTRUCTION

44.	Curb				
.1	Concrete	m	300		



Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
<b>STREET CONSTRUCTION CONTINUED</b>					
45.	Sidewalk				
.1	Concrete				
.1	100mm Concrete	m <sup>2</sup>	554		
.2	150mm Concrete	m <sup>2</sup>	35		
46.	Tactile Walking Surface Indicators	ea	32		
49.	Adjust Existing Valve Box Covers	ea	1		
50.	Adjust Existing Manhole Frames and Covers	ea	1		
51.	Adjust Existing Catch Basin Frames and Covers	ea	1		
53.	Replace Frames and Grates or Covers	ea	1		
54.	Active Transportation Trail	m <sup>2</sup>	1760		
55.	Traffic Sign Base	ea	20		
56.	Traffic Signs	ea	29		
57.	Traffic Calming				
.1	Speed Hump	ea	1		
.2	Raised Crosswalk	ea	2		
.3	Raised RA-4 Crossing with RRFB	ea	1		
58.	Pedestrian Gates	L.S.	1		
59.	Removal and Repainting of Reconfigured Parking Lot Lines				
.1	Festival Theatre	L.S.	1		
.2	Wolfville Farmer's Market	L.S.	1		
60.	Painted Markings				
.1	Single Line (Yellow)	m	595		
.2	Stop bar	m	9		
.3	Midblock Crossing	m	27		
.4	Sharrow	ea	4		
.5	Shared-Use Path Marking	ea	13		
.6	Speed Hump/Table Markings	ea	4		

SUBTOTAL STREET CONSTRUCTION: \$ \_\_\_\_\_



Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
----------	-------------	---------------------	--------------------	------------	------------

LANDSCAPING

61.	Topsoil and Sod				
	.1 100mm	m <sup>2</sup>	1680		
	.2 150mm	m <sup>2</sup>	385		
66.	Vegetation Clearing (Provisional)	L.S.	1		

SUBTOTAL LANDSCAPING: \$ \_\_\_\_\_

ADDITIONAL ITEMS

71.	Trench Excavation – Rock (Provisional)	m <sup>3</sup>	5		
72.	Trench Excavation – Unsuitable Material (Provisional)	m <sup>3</sup>	5		
73.	Replacement of Unsuitable Material With Surge Rock (Provisional)	m <sup>3</sup>	5		
76.	Sign Relocation	ea	2		
77.	Removal of Ex. Fence	m	430		

SUBTOTAL ADDITIONAL ITEMS: \$ \_\_\_\_\_

ENVIRONMENTAL PROTECTION

90.	Environmental Protection	L.S.	1		
-----	--------------------------	------	---	--	--

SUBTOTAL ENVIRONMENTAL PROTECTION: \$ \_\_\_\_\_

**SUBTOTAL WOLFVILLE AT NETWORK IMPROVEMENTS: \$ \_\_\_\_\_**



**CHERRY LANE/KENT AVENUE BIKE BOULEVARDS**

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
----------	-------------	---------------------	--------------------	------------	------------

EARTHWORK

8.	Geotechnical Inspection	L.S.	1		
----	-------------------------	------	---	--	--

SUBTOTAL EARTHWORK: \$ \_\_\_\_\_

STREET CONSTRUCTION

44.	Curb				
.1	Concrete	m	9		
45.	Sidewalk				
.1	Concrete				
.2	150mm Concrete	m <sup>2</sup>	14		
.2	Asphalt Walkway	m <sup>2</sup>	12		
46.	Tactile Walking Surface Indicators	ea	9		
55.	Traffic Sign Base	ea	8		
56.	Traffic Signs	ea	20		
57.	Traffic Calming				
.1	Speed Hump	ea	5		
60.	Painted Markings				
.3	Midblock Crossing	m	1		
.4	Sharrow	ea	20		
.6	Speed Hump/Table Markings	ea	5		

SUBTOTAL STREET CONSTRUCTION: \$ \_\_\_\_\_

LANDSCAPING

61.	Topsoil and Sod				
.1	100mm	m <sup>2</sup>	30		

SUBTOTAL LANDSCAPING: \$ \_\_\_\_\_



Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
----------	-------------	---------------------	--------------------	------------	------------

ENVIRONMENTAL PROTECTION

90.	Environmental Protection	L.S.	1		
-----	--------------------------	------	---	--	--

SUBTOTAL ENVIRONMENTAL PROTECTION: \$ \_\_\_\_\_

**SUBTOTAL CHERRY LANE/ KENT AVENUE BIKE BOULEVARDS:** \$ \_\_\_\_\_



**HIGHLAND AVE. AT SIGNAGE & PAVEMENT MARKINGS**

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
<b>STREET CONSTRUCTION</b>					
56.	Traffic Signs	ea	10		
60.	Painted Markings				
.3	Midblock Crossing	m	1		
.5	Shared-Use Path Marking	ea	15		
.7	Sidestreet Crossing Marking	ea	4		

SUBTOTAL STREET CONSTRUCTION: \$ \_\_\_\_\_

**ENVIRONMENTAL PROTECTION**

90.	Environmental Protection	L.S.	1		
-----	--------------------------	------	---	--	--

SUBTOTAL ENVIRONMENTAL PROTECTION: \$ \_\_\_\_\_

**SUBTOTAL HIGHLAND AVE. AT SIGNAGE & PAVEMENT MARKINGS: \$ \_\_\_\_\_**

SUBTOTAL WOLFVILLE AT NETWORK IMPROVEMENTS \$ \_\_\_\_\_

SUBTOTAL CHERRY LANE/ KENT AVENUE BIKE BOULEVARDS \$ \_\_\_\_\_

SUBTOTAL HIGHLAND AVE. AT SIGNAGE & PAVEMENT MARKINGS \$ \_\_\_\_\_

ESTIMATED CONTRACT PRICE (EXCLUDING HST) \$ \_\_\_\_\_ (A)

ADD HARMONIZED SALES TAX (15% of Estimated Contract Price) \$ \_\_\_\_\_ (B)

TOTAL PRICE (A + B) \$ \_\_\_\_\_

TENDERER'S HST REGISTRATION NO. \_\_\_\_\_

**1.5 COMPLETION TIME**

.1 Tenderer agrees to attain Substantial Completion of the work by November 29, 2024.



**1.6 SIGNATURES\***

DATED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Name of Tenderer

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Signature of Signing Officer

\_\_\_\_\_  
Name and Title (Printed)

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Signature of Signing Officer

\_\_\_\_\_  
Name and Title (Printed)

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

**END OF SECTION**



This Agreement made on the \_\_ day of \_\_\_ in the year\_\_.

**BY AND BETWEEN**

\_\_\_\_\_ The Town of Wolfville \_\_\_\_\_  
\_\_\_\_\_

hereinafter called the "Owner"

and

\_\_\_\_\_  
\_\_\_\_\_

hereinafter called the "Contractor"

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

**ARTICLE A1 - THE WORK**

.1 The Contractor shall:

.1 Perform the Work required by the Contract Documents for

Wolfville AT Network Improvements, Tender # WOL009-2024

located at Main Street, Wolfville, Nova Scotia

for which the Agreement has been signed by the parties, and for which

DesignPoint Engineering & Surveying Ltd.

is acting as and is hereinafter called the "Engineer"

and

.2 do and fulfill everything indicated by this Agreement, and

.3 attain Substantial Performance of the work as certified by the Engineer by the 29<sup>th</sup> day of November in the Year 2024.

**ARTICLE A2 – AGREEMENTS AND AMENDMENTS**

.1 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

- .1 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 2024 STANDARD SPECIFICATION FOR MUNICIPAL SERVICES.
    - .2 Overview
    - .3 Information to Tenderers
    - .4 Tender Form
    - .5 Form of Agreement
    - .6 Supplementary Specifications
      - .1 Section 00 74 00 – Supplementary Specifications
      - .2 Highland Avenue AT Signage & Pavement Markings Report prepared by DesignPoint Engineering & Surveying Ltd., dated May 17, 2024
      - .3 Cherry Lane and Kent Avenue – Bike Boulevards Report prepared by DesignPoint Engineering & Surveying Ltd., dated January 5, 2024
    - .7 Drawings:
      - Wolfville AT Network Improvements prepared by DesignPoint Engineering & Surveying Ltd., Revision 5, Issued for Tender**
      - Sheet 1 / C-01 / Site Plan
      - Sheet 2 / PP-01 / Plan & Profile 0+000 – 0+120
      - Sheet 3 / PP-02 / Plan & Profile 0+120 – 0+280
      - Sheet 4 / PP-03 / Plan & Profile 0+280 – 0+420
      - Sheet 5 / PP-04 / Plan & Profile 0+400 – 0+540
      - Sheet 6 / PP-05 / Plan & Profile 0+540 – 0+680
      - Sheet 7 / G-01 / Grading Sheet 1
      - Sheet 8 / G-02 / Grading Sheet 2
      - Cherry Lane Crossing prepared by DesignPoint Engineering & Surveying Ltd., Revision 2, Issued for Tender**
      - Sheet 1 / C-01 / Crossing Plan
  - .8 Addenda

### 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 \$ \_\_\_\_\_
- .3 All amounts shall be in Canadian funds.
- .4 The amounts shall be subject to adjustment as provided in the Contract Documents.

### 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 shall be added.
- .4 The last day of the payment period shall be the last 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 GC5.6 – SUBSTANTIAL PERFORMANCE OF THE WORK AND PAYMENT OF HOLDBACK.
- .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 GC5.7 – 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.

#### **ARTICLE A6 - RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING**

- .1 Notices in writing shall be addressed to the recipient at the address set out below.
- .2 The delivery of a notice in writing shall be by hand, courier, prepaid first class mail, facsimile or e-mail.
- .3 A notice in writing delivered by one party in accordance with this Contract shall 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 if such day is not a Working Day or if it is received after the end of normal business hours 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 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 \_\_\_\_\_ 359 Main Street, Wolfville NS B4P 1A1 \_\_\_\_\_  
\_\_\_\_\_
- .2 The Contractor at \_\_\_\_\_  
\_\_\_\_\_
- .3 The Engineer at \_\_\_\_\_ 90 Western Parkway Suite 500, Bedford NS B4B 2J3 \_\_\_\_\_  
\_\_\_\_\_

**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 of the essence of the Contract.



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

\_\_\_\_\_  
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 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.*

**END OF SECTION**



---

**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 (2024 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**

In 00 71 00, number the CCDC 18-2023 definitions starting at number one (1) for *Change Directive*, to number thirty (30) for *Working Day*.

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

Add the following definitions:

**31. 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.

---

---

### **32. 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.

### **33. Delay Charges**

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.

### **34. 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.

### **35. Period of Delay**

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

### **36. 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.

### **37. Site**

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

### **38. 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.

### **39. Supplementary Specifications**

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

---

#### **40. 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 - CONSTRUCTION SCHEDULE

Revise clause 3.4.1.1 as follows:

“.1 prepare and submit to the *Owner* and the *Engineer* for discussion at the first project stakeholder (“kickoff”) meeting, a construction schedule that indicates the timing of the major activities of the *Work* and provides sufficient detail of the critical events and their interrelationship to demonstrate the *Work* will be performed in conformity with the *Contract Time*;"

Add clause 3.4.2 as follows:

“3.4.2 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 3.4.1.3, 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 GC 6.6 – CLAIMS FOR A CHANGE IN CONTRACT PRICE.”

### GC 3.5 – SUPERVISION

Delete clause 3.5.1, and replace with the following:

“3.5.1 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 3.5.3 as follows:

“3.5.3 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 3.6 – LAYOUT OF THE WORK

Delete clause 3.6.1 in its entirety, and replace with the following:

“3.6.1 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 3.9 – SHOP DRAWINGS

Add the following to the end of existing clause 3.9.1:

... “or as requested by the *Engineer*.”

Add the following to the end of existing clause 3.9.7:

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

---



---

#### GC 5.4 - APPLICATIONS FOR PAYMENT

Delete Clause 5.4.2, and replace with the following:

“5.4.2 Applications for payment shall be dated the last day of the monthly payment period. 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.”

Delete clause 5.4.3, and replace with the following:

“5.4.3 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 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 5.5 - PAYMENT

In clause 5.5.1.1, revise "10 working days" to read "15 working days".

After clause 5.5.2, add the following new clause:

“5.5.3 The *Contractor* shall pay promptly, and in compliance with *Payment Legislation*, any and all accounts for labour and services, equipment, and/or materials used in the *Work*, and shall furnish the *Engineer* with proof of payment of such accounts in such form and as often as the *Engineer* may request.”

#### GC 5.6 - SUBSTANTIAL PERFORMANCE OF THE WORK AND PAYMENT OF HOLDBACK

Delete clause 5.6.2, and renumber existing 5.6.1 to 5.6.2. Add new clause 5.6.1 as follows:

“5.6.1 The *Contractor* shall make application to the *Engineer* for *Substantial Performance of the Work*. The proposed date of *Substantial Performance of the Work* shall allow sufficient time for inspection and evaluation of the *Work* by the *Engineer* and *Owner*, and payment of the holdback within the timeframes mandated by *Payment Legislation*, and specified elsewhere in the *Contract Documents* if *Substantial Performance of the Work* is to be approved for the date applied.”

---

Delete clause 5.6.4, and replace with the following:

“5.6.4 The *Contractor* shall submit an application for payment of the holdback amount in accordance with GC 5.5 – Payment, such that the *Owner* has sufficient time to pay the holdback amount in full within five (5) days of the expiration of the lien period stipulated by the Builders' Lien Act of Nova Scotia. Include the following with application:

- .1 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*;
- .2 A certificate of clearance from the Nova Scotia Worker's Compensation Board, certifying the *Contractor's* continued compliance with the requirements of the applicable act and legislation.
- .3 A valid letter of current Good Standing issued by the Nova Scotia Construction Safety Association and the Nova Scotia Department of Labour.
- .4 A Statutory Declaration on CCDC Form 9A, latest edition, affirming that all accounts for labour, subcontracts, *Products*, *Construction Equipment*, and any other indebtedness which may have been incurred by the *Contractor* in the *Substantial Performance of the Work*, and for which the *Owner* may in any way be held responsible, have been paid in full, except for amounts properly retained as a holdback or as an identified amount in dispute. Any outstanding claims not disclosed shall later be rejected.”

#### GC 5.7 – FINAL PAYMENT

Delete clause 5.7.1 in its entirety and replace with the following:

- “5.7.1 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, is *Ready-for-Takeover* in accordance with GC 12.1 – READY-FOR-TAKEOVER, has been 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 All identified defects and deficiencies have been corrected and 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 5.7.1:

“5.7.2 If, in the opinion of the *Engineer*, the above requirements are not complete, then the *Engineer* will not accept the application, and request resubmission.

5.7.3 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 5.7.2 through 5.7.4 to 5.7.4 through 5.7.6 respectively.

In renumbered clause 5.7.6, revise "5 calendar 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* proposed by the *Contractor* is a lump sum or unit price quotation as described in 6.2.2.2, the following shall apply:

- .1 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 Itemized quantities and unit rates for *Contractor*-supplied labour and *Products* defined in GC 3.8 – LABOUR AND PRODUCTS;

- 
- .2 Itemized *Subcontractor* and *Supplier* costs (where applicable);
- Prices will be assessed by the *Engineer* based on the prevailing rates in the locality of the *Place of the Work*.
- .2 The unit rates submitted for 6.2.4.1.1 shall be the *Contractor's* standard chargeout rates, and shall already include all overhead and profit. The extended totals shall be the only compensation the *Contractor* is entitled to for any and all overhead, profit, incidental, and/or administrative costs related to the change in the *Work*, including but not limited to any costs related to management and supervision, shop drawing production, estimating, site office and home office expenses, workers tools, temporary facilities and controls, and/or coordination of any and all activities related to the change in the *Work*.
- .3 Under 6.2.4.1.2, the maximum *Contractor* markup shall be **Five percent (5%)** net of taxes for all **Products, Construction Equipment, Temporary Work, Subcontracts, and Others**, as defined in 6.3.7;
- .3 All *Subcontractors* and *Suppliers* performing a part or parts of the *Work*, or supplying labour and/or *Products* described in GC 3.8 and 6.3.7 which are required by the change, shall have a direct contract with the *Contractor* subject to the requirements of the *Contract Documents*, and upon request, produce a detailed cost summary and/or written quotations as described in 6.2.4.1. A *Subcontractor* may not subcontract and invoice the *Contractor* for any portion of their scope in respect of any change in the *Work* unless agreed by the *Owner*.
- 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* using the cost plus method, the *Contractor* shall, each *Working Day*, report to the *Engineer* in writing and in full detail, the amount and costs associated with carrying out such work on the preceding working day in the form of daily work records. No claim for compensation shall be considered or allowed unless such reports have been made and verified on a daily basis by the *Engineer*. 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

Delete clause 6.3.6.3, and replace with the following:

- “.3 The *Contractor*’s markup fee shall be **fifteen percent (15%)** for the actual costs of **Labour** performed by the *Contractor*’s own forces, net of taxes, on the first \$20,000, and **ten percent (10%)** thereafter. The *Contractor*’s markup shall be **five percent (5%)** for the costs, net of taxes, for all **Products, Construction Equipment, Temporary Work, Subcontracts, and Others**, as defined in 6.3.7, and subject to the limitations of 6.3.6.5.”

After Clause 6.3.6.3, add the following clauses:

- “.4 All subcontracts shall be with the *Contractor* directly, with the conditions of 6.3.6 being applicable to the *Subcontractor*. A *Subcontractor* may not subcontract and invoice the *Contractor* for any portion of their scope in respect of any change in the *Work* unless agreed by the *Owner*.
- .5 In the event that any of the change in the *Work* contains items or parts that, in the opinion of the *Engineer*, are the same as, or equivalent to items in the *Schedule of Prices*, then the unit prices in the *Schedule of Prices* shall be the prices paid by the *Owner*, without markup, for the work or parts of the work in respect of any change in the *Work*, subject to GC 6.7 – QUANTITY VARIATIONS.
- .6 The markups provided for in 6.3.6 shall be the only compensation the *Contractor* is entitled to for any and all overhead, profit, incidental, and/or administrative costs related to the change in the *Work*, including but not limited to any costs related to management and supervision, shop drawing production, estimating, site office and home office expenses, workers tools, temporary facilities and controls, and/or coordination of any and all activities related to the change in the *Work*.”

#### 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 attain *Ready-for-Takeover* by the date indicated in Article A1, subclause 3, in the FORM OF AGREEMENT, the period of time from this agreed date to the actual date of *Ready-for-Takeover* 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 costs resulting from the 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 its engineering consultants 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 / Proposed Change Orders (CCOs, RCOs, or PCOs) and Requests for Information (RFIs). The *Engineer* will notify the *Contractor* if it determines that additional services will be required, or have been provided in order not to cause delay. The *Owner* shall make claims based on the invoices of its engineering consultants.”

#### 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, inspections, licenses, letters of approval, and certificates, such as those from the NS Department of Public Works, Nova Scotia Power, Nova Scotia Environment, and shall 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, if required.”

Delete clause 10.2.3, and replace with the following:

“10.2.3 The Contractor shall post or pay any refundable and/or non-refundable fees, where required, before proceeding with the *Work*. The *Contractor* is responsible for the determination of the requirement for each specific project and for the payment of any required deposits.”

Rename PART 11 – INSURANCE to PART 11 – INSURANCE AND CONTRACT SECURITY, and add new GC 11.2 - CONTRACT SECURITY, with the following clauses:

- “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 surety bonds, the costs for which shall be included in the *Contract Price*:
- 11.2.1.1 **Performance Bond** in the amount of 50% of the *Total Amount Payable*; and
  - 11.2.1.2 **Labour & Materials Bond**, in the amount of 50% of the *Total Amount Payable*.
- 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.
- 11.2.3 Bonds shall be issued by a duly licensed surety company authorized to transact the business of suretyship in the province of the *Place of the Work* and shall be maintained in good standing until the fulfillment of the *Contract*. The form of such bonds shall be in accordance with the latest edition of the CCDC approved bond forms.”

---

### GC 12.1 – READY-FOR-TAKEOVER

Add the following subclauses to 12.1.1:

- “.9 All reinstatements as required by the *Contract Documents*.
- .10 Any outstanding closeout submittals per the requirements of Section 01 10 00.”

### 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 overall 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 Harvest Moon Trailway is a trail that passes through Wolfville, Nova Scotia. This *Project* includes the replacement of approximately 440 m of the existing asphalt trail with a dual-lane asphalt active transportation trail from Harbourside Drive to the west side of the Wolfville Farmer’s Market, as well as construction of an active transportation connection approximately 270 m long between the west side of the Wolfville Farmer’s Market and the intersection of Highland Avenue and Main Street. The *Project* also includes the construction of a zebra crossing and concrete ramps at the intersection of Cherry Lane and Main Street, bike boulevards along Cherry Lane and Kent Avenue, and active transportation pavement markings and signage along Highland Avenue.

The *Project* includes supply and installation of the active transportation trail, raised crosswalks, RA-4 crossing, speed hump, traffic signs including bases, pavement markings, concrete curb, concrete sidewalk, French underdrain, manholes, catch basins, stormwater pipe, discharge swale, adjustment of existing infrastructure to

---



- finished grade, realignment of parking stalls in existing parking lots including line painting, removal of existing infrastructure as required, and reinstatement. The *Project* also includes a provisional item for vegetation clearing.
- .2 The *Work* includes obtaining all necessary approvals and permits from the appropriate regulatory bodies as well as any associated costs, and compliance with all approvals and permits.
  - .3 The *Work* includes all traffic control and detours as per the Town of Wolfville requirements and Nova Scotia Department of Transportation and Infrastructure Renewal (NSTIR) Temporary Workplace Traffic Control Manual.
  - .4 The *Work* includes erosion control, protection and reinstatement of all disturbed areas to pre-construction condition or better.
  - .5 The *Work* includes coordination with utilities for location of any existing infrastructure and alteration of this infrastructure.
  - .6 The *Work* includes shoring and relocation of utility poles and anchors, as needed.
  - .7 The *Work* is subject to approval by Nova Scotia Environment.”

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 1.3.5, add the following:

- “.6 *Contractor* shall backfill, grade, and clean up the *Work* without delay as the installation proceeds, to limit disruption to affected landowners and users.
- .7 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.
- .8 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*.
- .9 Safe access shall be always maintained through the Site for emergency vehicles, local traffic, and Acadia University staff and operations (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) as necessary when the requirements of the *Work* require complete access restrictions, such as during concrete placement.

- .10 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*.
- .11 Unless agreed to by the *Owner*, equipment shall not be operated before 7:00 am or after 7:00 pm. The *Contractor* shall notify the *Owner* if intending to perform *Work* on holidays. No *Work* shall take place before 12:00 noon on November 11.
- .12 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*.

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 3.6 – LAYOUT OF THE WORK, for the entire duration of the *Contract Time*.
- .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*.”

Delete Section 1.7 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 3.9 – SHOP DRAWINGS, submit shop detail or working drawings and manufacturer's data in electronic form for all items requiring fabrication, on or off the *Site*, and for all proprietary equipment to the *Engineer* for review prior to any such items or equipment are commissioned for manufacturing, or are incorporated into the *Work*. Clearly show in detail the dimensions, materials of construction, finish, performance, service and installation requirements, and other pertinent information.
- .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 Check shop drawings prior to submission. Determine and verify all field measurements, field construction criteria, materials, catalogue numbers, and similar data, and check and coordinate each shop drawing with the requirements of the *Work* and *Contract Documents*. Sign and date each shop drawing to confirm compliance with the above requirements.

- 
- .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. The *Engineer* will not review *Shop Drawings* where it is evident they do not meet the requirements of the *Contract Documents*.
  - .5 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.
  - .6 Make corrections required by the *Engineer* as noted and resubmit corrected copies to the *Engineer* for review before manufacturing or fabrication.
  - .7 The *Engineer* will mark comments on one (1) copy of each *Drawing* or document submitted and will return this as an electronic (PDF) copy for the *Contractor's* purposes.
  - .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 NSDPW 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 electronic copies of the following prior to application for *Ready-for-Takeover*:
      - .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 pipes or 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 *Ready-for-Takeover*, 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 testing requirements specified in 1.9.3 shall be arranged by the *Engineer* and paid for by the *Owner*, and may be conducted by an independent third-party agency. The *Contractor* shall coordinate with staff of the *Engineer* and the testing agency, and shall provide reasonable notice and access to the *Work* for in-situ testing and sample collection.
- .2 Within fifteen (15) *Working Days* following receipt of the construction schedule as defined in GC 3.4 – CONSTRUCTION SCHEDULE, the *Engineer* shall submit to the *Contractor* a Quality Control Testing and Inspection Plan (QCTIP) 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 QCTIP described above, the *Engineer* shall 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 delivered loads 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 Cast QA and QC compressive strength verification specimens for 7-day and 28-day test results for the first delivery of each *Working Day* (or as specified in the QCTIP) 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 1.7.4.3 and 1.7.4.4 above, if not provided by the *Supplier* of such materials.
- .2 In situ 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 testing agency in accordance with the NS Public Works 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 Submit detailed test location sketches and reports of all results to *Engineer* for acceptance once required compaction is achieved in all areas tested.
- .3 **Road asphalt** as follows:
- .1 Prior to paving, compacted final (fine) grading shall be certified, witnessed, and approved by the *Engineer* ensuring compliance with *Project Drawings* for crown and slope.
- .2 Bulk sampling, coring, and laboratory testing per the NS Public Works 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, a minimum of two (2) sample sets will be collected 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*, *Engineer*, and any testing agency personnel have adequate access to the *Work* and to locations where products being incorporated into the *Work* are being prepared.
- .5 Cooperate and assist 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 Subsections 1.10.8 and 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 shall be as per 1.3.12”

After Subsection 1.11.2, add the following:

- “.3 *Site* shall be kept secure, neat, and tidy, and shall 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 access, safety, and traffic control equipment (signs, barricades, cones, etc.).
- .4 Remove or relocate any privately owned vehicles from *Site* during the *Contract Time* at no additional cost to the *Owner*. Immediately notify the *Owner*, and keep record of any such removals or relocations.”

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 local transit authorities and Acadia University during preparation of traffic control plan (where required). Plans must consider transit routes and 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*."

Delete Subsections 1.18.1 through 1.18.3, and replace with the following:

- “.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*. 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*.”

Add the following Subclauses after 1.19.4:

- “.5 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.
- .6 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*.
- .7 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.
- .8 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.
- .9 *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.
- .10 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.
- .11 Restore, upon completion of the *Work*, any utilities or structures that have been disturbed.”

## **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**

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.”

**Part 2 Products**

**2.1 NOT USED**

- .1 Not used.

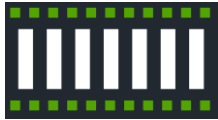
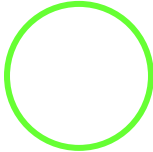
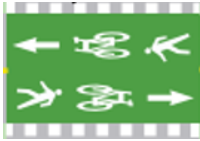
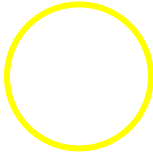

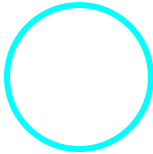

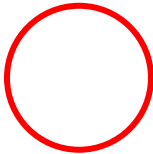


**Part 3 Execution**

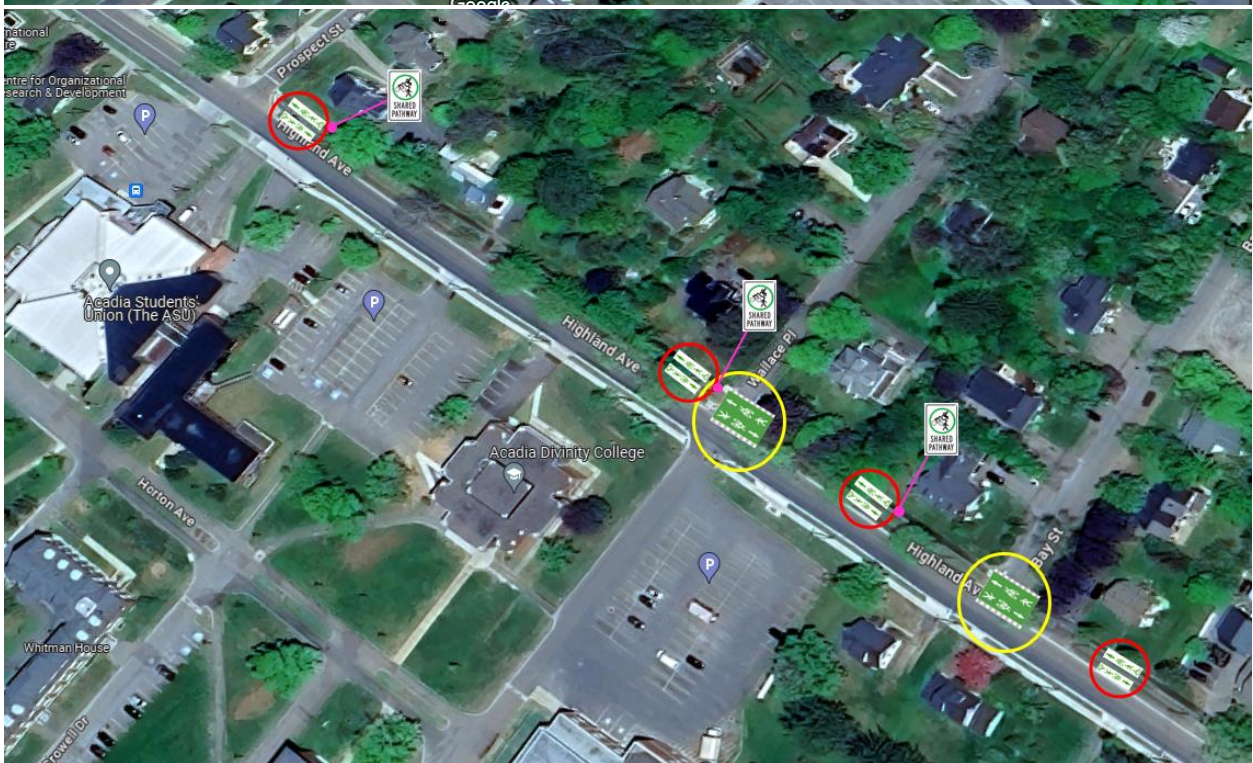
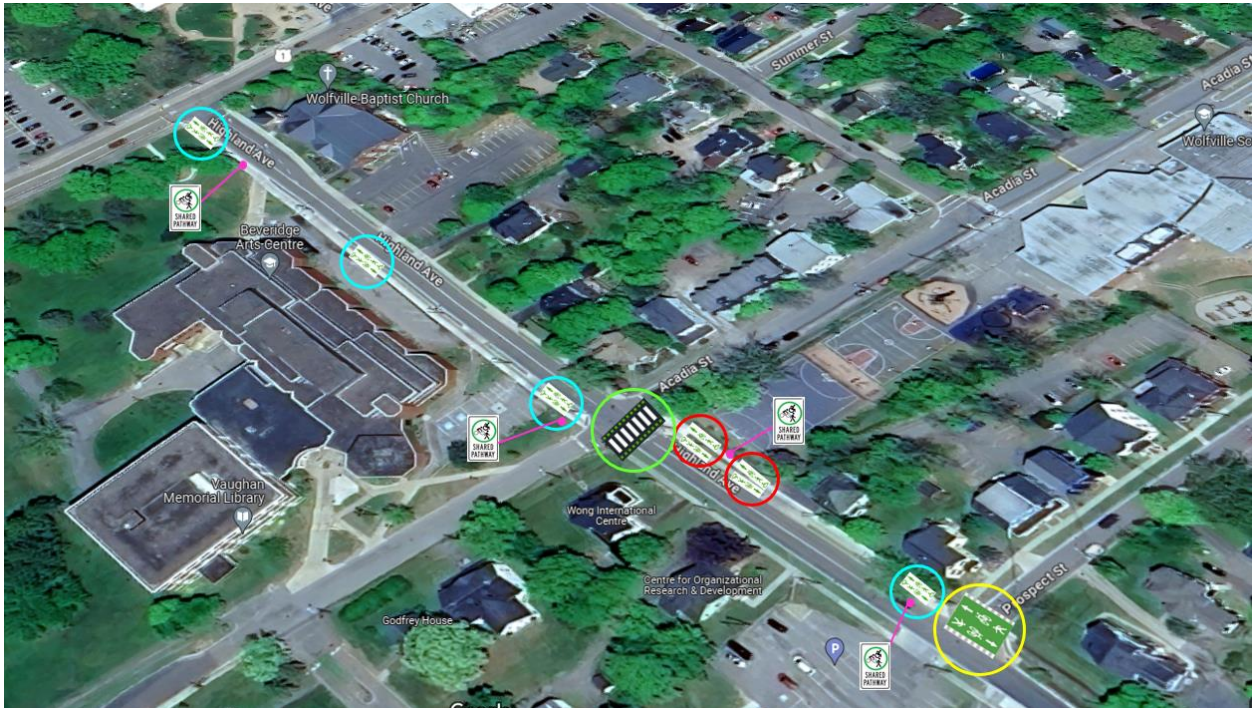
**3.1 NOT USED**

- .1 Not used.

## Highland Avenue Active Transportation Signage & Pavement Markings









The following schematics indicate the placement of proposed pavement markings and signage for the Highland Avenue active transportation facility.

Pavement Marking/Signage	Illustration	Schematic Colour Code	Quantity
Midblock Crossing			1
Sidestreet Crossing			4
Shared-Use Path Marking			4
Shared-Use Path Marking (Split directions)			11
TOW Shared Use Path Sign (Modified RB-93) To be placed on ex. utility poles			10





## Cherry Lane and Kent Avenue – Bike Boulevards

Traffic Device	Drawing Schematic	Quantity
Speed Hump (Installation as per Town of Wolfville standard)		5
Sharrow Pavement Marking		20
WA-50 Sign & Post 		6
WA-50 Sign on Existing Utility Pole 		4
Bike Boulevard Sign (Placement to be confirmed in field to utilize ex. utility poles where feasible) 		6



## Cherry Lane Bike Boulevard



## Kent Avenue Bike Boulevard

Road slopes at proposed speed hump locations to be confirmed as less than 8% prior to installation.

