The Regional Municipality of Niagara

2019-T-105 (Contract RN 19-05)

Reconstruction of Regional Road 98 (Montrose Road) From Regional Road 49 (McLeod Road) to Charnwood Avenue in the City of Niagara Falls

Addendum No. 2

I Directive

This addendum shall form an integral part of the plans and specifications for the above project and shall be read in conjunction therewith. This addendum shall, however, take precedence over all requirements of the previously issued drawings and specifications with which it may prove to be at variance, unless otherwise clarified by the Engineer.

This addendum must be signed by the Tenderer in the appropriate space and must be attached to the back of the Form of Tender and placed in the Envelope for submission at the time of tendering. **Tenders not including this addendum signed as requested shall be rejected as informal.**

II Revisions

1. Extension of Closing Date

SIB Section 2. Tender Procedure, page SIB 3

Time: **2:00 p.m.**
Date: **Tuesday, April 9, 2019**

2. Tender Enquiries

SIB Section 23. Tender Enquiries, page SIB 11

The deadline for tender enquiries is **April 3, 2019** at **3pm**.

3. Mandatory Pre-Bid Meeting at Thursday March 28, 2019

A Mandatory Pre-Bid Meeting is NOW required for this tender. It is the Bidder's responsibility to visit the job site and to examine all existing conditions to determine the amount and character of the work involved and to take their own measurements and make their own calculations prior to submitting a bid.

Bidders shall attend the mandatory site meeting, and will be required to sign an attendance sheet confirming their attendance at the mandatory site meeting. Only bids received from bidders who attend the mandatory site meeting, and sign the attendance sheet shall be considered. This will be the only time that Bidders will have access to the job site.

Any bidder who does not attend the mandatory site meeting, or who arrives after the mandatory site meeting has commenced, will not be considered for the award of this contract.

No allowance will subsequently be made for any errors or omissions on the part of any bidder.

Date: Thursday March 28, 2019
Time: 9:00 am (SHARP)
Location: On-site (Meet in MacBain Centre North Parking, 7150 Montrose Rd, Niagara Falls, ON)

4. REVISED Form of Tender – Addendum No. 2

Replace the Form of Tender with the REVISED Form of Tender – Addendum 2 (revised March 22, 2019) attached to this addendum.

Failure to submit the REVISED Form of Tender – Addendum No. 2 at the time of closing will result in automatic rejection.

1. An amount of $500,000.00 has been included under item 1.09 as per Addendum 1
2. A new item [Item 2.01 (b)] has been added.
3. A new item [Item 3.05 (h) (iv)] has been added.
4. A new item [Item 5.01 (a) (iii)] has been added.
5. Item 5.01 (c) (ii) has been revised.
6. Item 5.01 (c) (iii) has been revised.
7. Item 5.04 has been revised.
8. Item 5.05 has been revised.
9. Item 5.06 has been revised
10. A new item [Item 6.09] has been added.

5. Special Provisions - Supplementary Special Provisions

SSP8 CONSTRUCTION SIGNS, TRAFFIC CONTROL & TRAFFIC MANAGEMENT PLAN

ADD the following:

Where the Contractor elects to undertake traffic control by using Portable Lane Control Signals it shall be carried out in accordance with the Ontario Traffic Manual - Book 7, Field Edition. The contractor's traffic management and control plan shall identify the intended use, and location(s), of portable lane control signals for traffic control.

The following is to be provided to the Traffic Systems and Operations Section, for each work zone, a minimum of **three working days** prior to setup of the portable lane control signals:

1. A written request to implement portable lane control signals for the work zone;
2. An aerial view of the intended work zone indicating the work zone length from Rb-78 to Rb-78;
3. The intended duration that the portable lane control signals will be used to control traffic through the identified work zone.

Niagara Region will review the contractor's request, and will provide timings for the portable lane control signals. The work zone length shall not exceed 300m where portable lane control signals are being used.

Niagara Region may deny the use of the portable lane control signals for certain work zones based on safety. If the request to use portable lane control signals is denied by Niagara Region the contractor shall implement other suitable traffic control based on Ontario Traffic Manual - Book 7 at no additional cost.

SSP16 CONCRETE CURB & GUTTER

Add the following:

The unit price bid shall include all labour, equipment and materials required to install curbs at catchbasins in 2020.

SSP28 PRECAST SANITARY OR STORM MAINTENANCE HOLES & CATCHBASINS

Add the following:

All manholes and catch basins within the proposed roadway are to be set at the base course asphalt elevation in 2019, and adjusted to the finished rim elevation in 2020. Manholes are to be adjusted to finished rim elevation using concrete collar adjustments.

Add the following under Catchbasins (CB)

The unit price bid for catch basins shall include all labour, equipment and

materials necessary to adjust the frame and grate to the finished rim elevation in 2020 including the removal of temporary asphalt fillets.

SSP50 SUPPLY AND PLACE HOT MIX ASPHALT

Add the following

The unit price bid for the supply and placement of hot mix asphalt shall include all labour, equipment and materials to install temporary asphalt fillets at catch basins in 2019.

SSP52 RETAINING WALL STRUCTURES

Supplementary Special Provision SSP52 Retaining Wall Structures section 52-12. is to be replaced with the following:

52-12. Dowels into Concrete

The provisions of OPSS 905 apply except as amended or extended herein. The work under this item shall include the drilling, epoxy grouting, and placing of stainless-steel dowels into the concrete at the following locations:

- Into the top of the existing culvert for the installation of the new curb for railing.

Dowel adhesive shall be epoxy grout per MTO DSM # 9.10.25.

Dowel holes shall be drilled to the required dimensions and depth as specified in the Contract Documents. Core drilling of the dowel holes shall not be permitted.

Holes that are started but not completed shall be cleaned and filled with an approved proprietary patching material.

The installation and removal operations shall not cause spalling, cracking, or other damage to the surrounding concrete. Any damage shall be repaired in a manner acceptable to the Contract Administrator.

Steel reinforcement and other existing embedments shall not be cut or damaged by the drilling process. Existing steel reinforcement, utility ducts, and any unsound concrete in the vicinity of the dowel locations shall be located prior to the drilling of any holes. If any of the above is encountered during drilling operations, the Contract Administrator shall be notified immediately.

Prior to dowel installation, drill holes shall be thoroughly cleaned with compressed air. Dowels shall be positioned as specified in the Contract Documents. The dowel adhesive shall be placed according to the manufacturer’s recommendations and shall completely fill the drill hole once the

dowel is installed. All excess adhesive shall be struck-off flush with the concrete surface and removed from the surrounding concrete surface area.

Dowels shall be maintained in the proper position and protected from being disturbed during the setting of the dowel adhesive and loss of dowel adhesive from the holes shall be prevented.

VISUAL ACCEPTANCE CRITERIA

Completed dowel installations shall be properly positioned as specified elsewhere in the Contract Documents and free of damage to the dowel. Excess dowel adhesive shall have been struck off flush with the concrete surface and removed from the surrounding area.

All as shown on the Contract Drawings.

Payment at the lump sum Contract price for this item shall be full compensation for all labor, equipment, and material necessary to complete the work.

III Questions and Answers

Question 1:
As stated in the soils report, the depth of the proposed sanitary sewer will be below the groundwater table and there will be a likelihood of infiltration into the trench during construction. Due to the very deep sewer depth required in sandy wet soils it would be beneficial for all bidders to asses trenching conditions prior to bid closing. Can the Region consider the opportunity to perform some test pit explorations for all bidders to witness prior to bid closing.

Answer 1:

A MANDATORY pre-bid meeting has been arranged for this tender. A test pit(s) will be excavated to allow bidders to assess the subsurface soil conditions. See Revisions #3.

Question 2:
The soils report identifies impacted soils in the vicinity of BH4 SS2 and BH4 SS3. If this soil cannot be re-used on site it will need to be disposed of at a registered waste facility. Typically a tender item is provided for the unit rate disposal of impacted soils by the tonne. Will the Region be providing an additional an item in the tender for this?

Answer 2:

Refer to the REVISED Form of Tender included with this addendum. An item for the disposal of contaminated excess material has been included. Niagara Region is currently undertaking additional testing to further delineate the areas of contamination.

Question 3:
Upon review of the geotechnical report in the tender documents, we have concern about the soil conditions for the installation of the Sanitary Sewers which is approximately 8meters deep.

The second geotechnical report dated October 18,2017 indicates Sandy Silt which has been described by the consultant as moist to wet with sensitivity to disturbance. In quite a few of the boreholes the N values are extremely low which indicates soil instability.

The geotechnical report does not review or recommend a construction method for the installation of the Sanitary Sewers.

As a result of the potential unstable ground for the installation of the Sanitary Sewer and the absence of a recommendation from the Geotechnical Report we would request permission to complete a test dig to confirm the soil conditions and to determine a suitable construction method for the Sanitary Sewer work?
Answer 3:

A MANDATORY pre-bid meeting has been arranged for this tender. A test pit(s) will be excavated to allow bidders to assess the subsurface soil conditions. See Revisions #3.

End of Addendum No. 2
No. of Pages: 36 (6 pg – Addendum 2 + 30 pg. REVISED Form of Tender – Addendum No. 2.)

Date Issued: March 22, 2019

Signature: Vicki Lafford-Field
Purchasing Agent

The Tenderer Shall Adjust Their Bid Price According To The Changes Specified in this Addendum.

Name of Company: _____

Tenderer's Signature _____

Date: _____

Contract No. 2019-T-105
(RN19-05)

Reconstruction of Road 98 (Montrose Road)
from Regional Road 49 (McLeod Road)
to Charnwood Avenue
In the City of Niagara Falls

REVISED FORM OF TENDER

We, the undersigned Contractor(s) have carefully examined the attached documents as herein listed and forming part of this Tender

DOCUMENTS INCLUDED IN CONTRACT

Special Provisions
Special Instructions to Bidders
Instructions to Bidders
General Conditions
Supplementary General Conditions
Standard Specifications (as noted)
Supplementary Specifications (as noted)
Plans (as noted)
Addenda (if applicable)

and have carefully examined the site and location of the work to be done under this Contract. We, the undersigned Contractor(s), understand and accept the said drawings and contract documents, and, for the prices set forth in this Tender, hereby offer to furnish all machinery, labour, tools, apparatus, and other means of construction, furnish all materials except as otherwise specified in the Contract, and to complete the work in strict accordance with the drawings and contract documents referred to above, for the total tender price of: _____

_____ Dollars ($_____) including contingency and *excluding H.S.T.*.

ADDENDA

We acknowledge that we have received Addendum/Addenda No. inclusive, and that all changes specified in the Addendum/Addenda have been included in the prices submitted.

COMMENCEMENT AND COMPLETION

We agree to commence work as specified to proceed continuously to completion specified as **130 working days**.
Top asphalt and permanent line painting completion date May 29, 2020.

TENDER IS OPEN TO ACCEPTANCE & IRREVOCABLE

We agree that this tender is to continue open to acceptance and irrevocable until the formal contract has been executed by the successful tenderer for the said work, and the bond or bonds as specified have been executed by the approved surety or sureties, and that the Corporation may, at any time, within 90 (ninety) calendar days of the closing date, accept this tender without notice, whether any tender has been previously accepted or not.

** to be filled in by the Tenderer.*

OFFERED ON BEHALF
OF THE CONTRACTOR

Insert Workplace Safety & Insurance Board Account No.

_____
Signature

_____
Signature

Company Name

_____
Address

Contractor's Seal

_____
Witness

_____
Date

_____
Witness

NOTE:

(a) If the Tenderer is a Corporation, the Corporate Seal must be affixed under the signature of a duly authorized officer or officers of the Corporation.

(b) If the Tenderer is not a Corporation or a Partnership, the Tenderer must sign in the presence of a witness who must also sign.

(c) If the Tenderer is a Partnership, each member of the Partnership must sign in the presence of a witness who must also sign.

SCHEDULE OF TENDER UNIT PRICES

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 1: GENERAL						
1.01	**A1**	**Bonding**	L.S.	1		$
1.02	**A2**	**Preconstruction Survey**	L.S.	1		$
1.03	**A3 SSP5**	**Site Office**	L.S	1		$
1.04	**A4 SSP6**	**Construction Layout**	L.S.	1		$
1.05	**A5**	**Clearing and Grubbing**				
		a) Remove existing brush & shrubs	m^2	2,200	$	$
		b) Trim existing tree branches	m	15	$	$
		c) Relocate / remove existing boulder	m^2	270	$	$
1.06	**A6**	**Tree Relocation**	ea	15	$	$
1.07	**A7 SSP7**	**Install, Maintain and Remove Silt Control Devices**				
		a) Rock check dam, OPSD 219.210	ea	1	$	$
		b) Light duty silt fence barrier, OPSD 219.110	m	210	$	$
1.08	**A8 SSP8**	**Construction Signs, Traffic Control, and Traffic Management Plan**	L.S.	1		$
1.09	**A9**	**Contingency Allowance**	L.S.	1		$ 500,000.00
					Total Section 1	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 2: ROADS						
2.01	**B2**, B35	**Earth Excavation**				
		a) Complete roadway excavation within road allowance and disposal	m^3	14,730	$	$
		b) Disposal of contaminated excess material	m^3	1,000	$	$
2.02	**B3 SSP14**	**Granular "A"**	t	48,015	$	$
2.03	**B6**	**Subdrain**	m	3,030	$	$
2.04	**B7**	**300mm Dia CSP Culvert**	m	6	$	$
2.05	**B8 SSP16**	**Concrete Curb and Gutter**				
		a) Straight and curved sections as per OPSD 600.040 tangent	m	2,200	$	$
		b) Straight and curved sections as per OPSD 600.080	m	730	$	$
		c) Barrier curb, OPSD 600.110	m	100	$	$
		d) Termination curb OPSD 608.010	ea	2	$	$
		e) Recessed catch basin detail for CB	ea	1	$	$
		f) Recessed catch basin detail for DCB	ea	1	$	$
2.06	**B9 B29 SSP17**	**Construct concrete sidewalk any width, OPSD 310.010, OPSD 310.020, OPSD 310.050**				
		a) 125mm thick concrete sidewalk	m^2	2,010	$	$
		b) 150mm concrete at residence driveway	m^2	40	$	$
		c) 200mm thick concrete at commercial and industrial driveway with wiremesh	m^2	55	$	$
2.07	**B9 SSP17**	**Construct Salsa Red Concrete Boulevard/Median Island any width, OPSD 310.010, OPSD 310.020, OPSD 310.050**				
		a) 125mm thick red concrete boulevard	m^2	690	$	$
		b) 125mm thick red concrete boulevard at median island	m^2	360	$	$
2.08	**B11**	**Asphalt Milling**				
		a) 50 mm depth	m^2	930	$	$
		b) 40 mm depth	m^2	370	$	$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2.09	**B12**	**Supply and Application of Tack Coat**	m^2	20,700	$	$
2.10	**B13**	**Adjustment of Appurtenances**				
		a) Adjust existing manhole frame and cover up to 300mm	ea	4	$	$
		b) Adjust existing manhole frame and cover up to 450mm	ea	3	$	$
		c) Adjust existing valve and curb boxes	ea	5	$	$
		d) Install concrete collar for proposed manhole	ea	19	$	$
		e) Install concrete collar for valve box within roadway	ea	2	$	$
2.11	**SSP50**	**Supply & Place Hot Mix Asphalt**				
		a) Superpave Category D PGAC 64-28 (Polymer Modified)				
		i) SP 19.0				
		1) Montrose Rd (120mm thickness, 2 lifts)	t	6,210	$	$
		2) Charnwood Ave trench restoration	t	45	$	$
		3) Kinsmen Ct trench restoration	t	12	$	$
		ii) SP 12.5 FC2 (echelon paving including MTV in 2020)				
		1) Montrose Road 50mm thickness	t	2,590	$	$
		2) Charnwood Ave 40mm thickness	t	25	$	$
		3) Kinsmen Ct trench restoration	t	6	$	$
		b) Supply and place HL8 HS hot mix asphalt, QPR 2000 high performance bituminous cold patch or approved equivalent (50mm thickness) for storm sewer temporary trench restoration	t	170	$	$
		c) Supply and place HL8 HS hot mix asphalt, QPR 2000 high performance bituminous cold patch or approved equivalent (50mm thickness) for sanitary sewer/watermain temporary trench restoration	t	200	$	$
2.12		**Asphalt Sidewalks and Driveways**				

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
		a) Asphalt driveway restoration - (fix gravel base prior to asphalt paving)				
	B15 SSP50	i) Asphalt driveways - residential (50mm SP 9.5 + 200 mm Granular "A")	m^2	70	$	$
		ii) Asphalt driveways - commercial (40 mm SP 9.5 + 50 mm SP 19 + 300 mm Granular "A")	m^2	390	$	$
		b) Multi-use trail (50 mm SP 9.5 + 200 mm Granular "A")	m^2	1,200	$	$
2.13	B18	**Granular Driveway**				
		a) Residential - 200mm Granular 'A'	m^2	70	$	$
		b) Industrial - 375 mm Granular 'A'	m^2	40	$	$
2.14	B19	**Regrading/restoration of Ditches and Swales**	m	200	$	$
2.15	B20	**Hand Laid Riprap with Filter Cloth**	m^2	20	$	$
2.16	B21 SSP18	**Topsoil and Sod**				
		a) Boulevard grading and sodding including 100mm topsoil	m^2	800	$	$
2.17	B22 SSP19	**Topsoil, Seed and Mulch**				
		a) Boulevard grading and hydraulic mulching and seeding including 100mm topsoil	m^2	4040	$	$
		b) Reinstate existing asphalt trail and sidewalk by hydraulic mulching and seeding including 100mm topsoil	m^2	320	$	$
2.18	B23	**Supply and Apply Calcium Chloride**	t	20	$	$
2.19	B27	**Removal of Existing Items**				
		a) Guide rail including extruder	m	30	$	$
		b) Remove Existing Storm Sewer Appurtenances				
		i) Maintenance Holes	ea	2	$	$
		ii) Catchbasins	ea	1	$	$
		iii) Double Catchbasins	ea	1	$	$
		iv) Ditch inlets	ea	1	$	$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
		c) Remove/Abandon Existing Pipes and Culverts				
		i) Existing CSP (any size)	m	320	$	$
		ii) Existing sewer pipe (any size)	m	70	$	$
		d) Remove Sewer				
		i) sewer pipe - all sizes	m	12	$	$
		e) Remove existing watermain				
		i) Removal and disposal of existing watermain pipe and fittings (all sizes)	m	12	$	$
		ii) Remove valve boxes	ea	3	$	$
		f) Disposal of asphalt material including road, sidewalk and driveway and median to an approved recycle site.	m^2	11,150	$	$
		g) Removal and disposal of concrete sidewalk and driveway and to an approved site	m^2	240	$	$
		h) Removal and disposal of curb and/or curb and gutter to an approved site	m	430	$	$
		i) Remove and return sign and post to the Region	ea	6	$	$
2.20	**B34**	**Tactile Warning Surfaces**	ea	36	$	$
2.21	**SSP20**	**Pavement markings (Durable in 2020):**				
		a) Supply and apply approved traffic paint and reflectorized glass beads for all truck mounted applications:				
		i) Directional broken dividing lines	m	1,565	$	$
		ii) Directional solid dividing lines	m	920	$	$
		ii) Bike Lane	m	1,990	$	$
		iv) Hatch	m	795	$	$
		b) Supply and apply approved traffic paint and reflectorized glass beads for all hand machine pavements marking applications:				
		i) Stop bars (600 mm wide)	m	65	$	$
		ii) Pavement symbols	ea	36	$	$
		iii) Pedestrian crossings	m	360	$	$
		c) Layout and application of pre-marking	L.S.	1		$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2.22	SSP20	**Pavement markings (Paint-Temporary):**				
		a) Supply and apply approved traffic paint and reflectorized glass beads for all truck mounted applications:				
		i) Directional broken dividing lines	m	1,565	$	$
		ii) Directional solid dividing lines	m	920	$	$
		ii) Bike Lane	m	1,990	$	$
		iv) Hatch	m	795	$	$
		b) Supply and apply approved traffic paint and reflectorized glass beads for all hand machine pavements marking applications:				
		i) Stop bars (600 mm wide)	m	65	$	$
		ii) Pavement symbols	ea	36	$	$
		iii) Pedestrian crossings	m	360	$	$
		c) Layout and application of pre-marking	L.S.	1		$
2.23	SSP21	**Traffic Signs**				
		a) Supply and install 100mm x 100mm wood post	ea	1	$	$
		b) Supply and install U- channel post	ea	19	$	$
		c) Install Signs				
		i) KEEP RIGHT Rb-25	ea	2	$	$
		ii) RIGHT LANE ENDS - Wa-23 R	ea	1	$	$
		iii) HAZARD MARKER - Wa-33L	ea	2	$	$
		iv) TRAFFIC SIGNALS AHEAD - Wb-2	ea	2	$	$
		v) SIGNAL CONTROL 'NEW' - Wb-3	ea	2	$	$
		vi) INTERSECTION SIGN - Wa-11A	ea	2	$	$
		vii) ONE WAY - Rb-21	ea	2	$	$
		viii) BIKE LANE - sign	ea	10	$	$
		d) Relocate Existing Signs on Pole&Post, including new brackets	ea	2	$	$
		e) Relocate existing sign and post	ea	14	$	$
2.24	SSP22	**Replace existing wood fence**	m	40	$	$
2.25	SSP23	**Relocate Steel Post and Wire Fence**	L.S.	1		$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2.26	**SSP24**	**Landscaping**	L.S.	1		$
					Total Section 2	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 3 : STORM SEWER						
3.01	**C1 SSP26**	**Sewers (Depth is surface to invert)**				
		a) 300mm diameter storm sewer, PVC DR 35 with CLASS 'B' bedding, and Granular 'A' cover and backfill				
		i) STM CBMH 6 to Existing culvert (Avg. depth 2.5 m)	m	6	$	$
		b) 375mm diameter storm sewer, PVC DR 35 with CLASS 'B' bedding, and Granular 'A' cover and backfill				
		i) STM MH 10 to STM MH 11 (Avg. depth 2.9 m)	m	105	$	$
		ii) STM MH 7 to Ex. Box Culvert (Avg. depth 2.0 m)	m	3	$	$
		c) 450mm diameter storm sewer, 65-D RC pipe, CSA A256 with Class 'B' bedding and Granular 'A' cover and backfill				
		i) STM MH 16 to STM MH 1 (Avg. depth 3.5 m)	m	78	$	$
		ii) STM CBMH 11A to STM MH 11 (Avg. depth 3.1 m)	m	14	$	$
		d) 525mm diameter storm sewer, 65-D RC pipe, CSA A256 with Class 'B' bedding and Granular 'A' cover and backfill				
		i) STM MH 11 to STM MH 12 (Avg. depth 3.2 m)	m	43	$	$
		e) 600mm diameter storm sewer, 65-D RC pipe, CSA A256 with Class 'B' bedding and Granular 'A' cover and backfill				
		i) STM MH 1 to STM MH 2 (Avg. depth 5.0 m)	m	150	$	$
		ii) STM MH 12 to STM MH 13 (Avg. depth 3.5 m)	m	90	$	$
		iii) STM MH 2A to STM MH 2 (Avg. depth 4.3m)	m	16	$	$
		iv) Plug to STM MH 3 (Avg. depth 4.5m)	m	20	$	$
		f) 675mm diameter storm sewer, 65-D RC pipe, CSA A256 with Class 'B' bedding and Granular 'A' cover and backfill				
		i) STM MH 2 to STM MH 3 (Avg. depth 4.5 m)	m	61	$	$
		ii) STM MH 13 to STM MH 14 (Avg. depth 3.1 m)	m	50	$	$
		iii) STM MH 14 to STM MH 17 (Avg. depth 3.0m)	m	9	$	$
		iv) STM MH 17 to STM MH 15 (Avg. depth 2.9m)	m	25	$	$
		v) STM MH 15 to Ex. STM MH S3 (Avg. depth 3.0m)	m	20	$	$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
		g) 825mm diameter storm sewer, 65-D RC pipe, CSA A256 with Class 'B' bedding and Granular 'A' cover and backfill				
		i) STM MH 3 to STM MH 4 (Avg. depth 4.5 m)	m	97	$	$
		ii) STM MH 4 to STM MH 5 (Avg. depth 3.1 m)	m	150	$	$
3.02	**C2 SSP26**	**Installation of New Storm Leads**				
		a) Roadside catchbasin leads PVC DR-35 with Class 'A' bedding and Granular 'A' cover and backfill				
		i) 250 mm diameter	m	310	$	$
		ii) 300 mm diameter	m	50	$	$
		iii) 375mm diameter catchbasin lead	m	15	$	$
		b) Private storm sewer leads PVC DR-28 with Class 'B' bedding, Granular 'A' cover and backfill -				
		i) 100 mm diameter	m	20	$	$
		ii) 150 mm diameter	m	10	$	$
3.03	**C4 SSP27**	**Reconnect Private Existing Sewer Laterals**	ea	3	$	$
3.04	**C5**	**Flush and T.V. Inspection of Storm Sewers**				
		a) New Sewers	m	685	$	$
		b) CB Leads	m	580	$	$
		c) Private laterals	ea	3	$	$
3.05	**C6 SSP28**	**Pre-Cast Concrete Manholes, Catch Basins and Ditch Inlets (Depth is rim to invert)**				
		a) Maintenance holes - standard 1200mm diameter circular precast concrete maintenance hole complete as per OPSD 701.010 (2-3m)	ea	2	$	$
		b) Maintenance holes - standard 1200mm diameter circular precast concrete maintenance hole complete as per OPSD 701.010 (3-4m)	ea	2	$	$
		c) Maintenance holes - standard 1200mm diameter circular precast concrete maintenance hole complete as per OPSD 701.010 (4-5m)	ea	2	$	$
		d) Maintenance holes - standard 1500mm diameter circular precast concrete maintenance hole	ea	5	$	$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
		complete as per OPSD 701.011 - (3-4m)				
		e) Maintenance holes - standard 1500mm diameter circular precast concrete maintenance hole complete as per OPSD 701.011 - (4-5m)	ea	2	$	$
		f) Maintenance holes - standard 2400mm diameter circular precast concrete maintenance hole complete as per OPSD 701.013 - (3-4m)	ea	1	$	$
		g) Catchbasin maintenance holes - standard 1200mm diameter circular precast concrete as per OPSD 701.030 (2-3m)	ea	3	$	$
		h) Precast concrete catchbasin				
		i) single, OPSD 705.010	ea	30	$	$
		ii) double, OPSD 705.020	ea	6	$	$
		iii) ditch inlet - 3:1, OPSD 705.030	ea	2	$	$
		iv) existing catchbasin relocation	ea	2	$	$
3.06	**SSP31**	**Connect existing 250 mm dia storm sewer to Storm MH 17**	ea	1	$	$
3.07	**SSP31**	**Connect existing 300 mm dia storm sewer to Storm MH 17**	ea	1	$	$
3.08	**SSP31**	**Connect proposed 675mm dia sewer to existing storm MH at Charnwood Ave**	ea	1	$	$
3.09	**SSP31**	**Connect existing 1350 dia sewer to proposed Storm MH 5**	ea	1	$	$
3.10	**SSP30**	**Proposed 600mm diameter sewer concrete plug including restoration**	ea	2	$	$
					Total Section 3	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 4: SANITARY SEWER						
4.01	**C1 SSP26**	**Sewers (Depth is surface to invert)**				
		a) 200mm sanitary sewers PVC SDR 35 with Granular 'A' bedding, cover and backfill				
		i) Plug TO MH 'A' (Avg. 5.4)	m	21	$	$
		ii) PLUG TO MH 'B' (Avg. 5.2m)	m	12	$	$
		iii) Plug TO MH 'D' (Avg. 5.1m)	m	12	$	$
		b) 250mm sanitary sewers PVC SDR 35 with Granular 'A' bedding, cover and backfill				
		i) MH 'A' TO MH 'B' (Avg. 5.7m)	m	62	$	$
		ii) MH 'B' TO MH 'C' (Avg. 7.6m)	m	150	$	$
		iii) MH 'C' TO MH 'D' (Avg. 6.9m)	m	120	$	$
		iv) MH 'D' TO Ex. San MH (Avg. 4.8m)	m	50	$	$
4.02	**C2 SSP27**	**Sanitary lateral**				
		a) 200mm sanitary lateral PVC SDR 35 connection to sewer between MH 'B' and MH 'C' with Granular 'A' bedding, cover and backfill	m	11	$	$
4.03	**C5**	**Flush and T.V. Inspection of Sanitary Sewers**	m	430	$	$
4.04	**C6 SSP28**	**Pre-Cast Concrete Manhole (Depth is rim to invert)**				
		a) Maintenance holes - standard 1200mm diameter circular precast concrete maintenance hole complete as per OPSD 701.010 (4-5m)	ea	1	$	$
		b) Maintenance holes - standard 1200mm diameter circular precast concrete maintenance hole complete as per OPSD 701.010 with safety landing (6-7m)	ea	2	$	$
		c) Maintenance holes - standard 1200mm diameter circular precast concrete maintenance hole complete as per OPSD 701.010 with safety landing (7-8m)	ea	1	$	$
4.05	**SSP31**	**Connect proposed 250 mm dia Sanitary MH on Kinsmen Ct**	ea	1	$	$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
4.06	**SSP32**	**Proposed 200mm diameter sewer pvc plug including restoration**	ea	2	$	$
					Total Section 4	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 5: WATERMAIN						
5.01	**D1 SSP33**	**Watermains**				
		a) Watermain and large water services PVC DR-18 pipe by open cut				
		i) 150 mm	m	140	$	$
		ii) 200 mm	m	750	$	$
		iii) 250 mm	m	18	$	$
		b) Watermain and large water services fusible PVC DR 18 pipe by directional drill				
		i) 200 mm	m	200	$	$
		c) Watermain connections - including all required bends, sleeves, tees, reducers, thrust restraints and appurtenances to connect to existing watermain -				
		i) Proposed 200 mm to existing 300mm WM	ea	1	$	$
		ii) Proposed 200 mm to existing 200mm WM	ea	1	$	$
		iii) Proposed 250 mm to existing 250mm WM	ea	1	$	$
5.02	**D2 SSP34**	**Water Valves, Boxes and Tapping Sleeve and Valve**				
		a) Water valves and valve boxes				
		i) 150 mm diameter valve & box	ea	3	$	$
		ii) 200 mm diameter valve & box	ea	6	$	$
		b) Supply and install tapping sleeve, gate valve and valve box complete to finished grade				
		i) 200 x 200 mm	ea	1	$	$
		ii) 200 x 300 mm	ea	1	$	$
		c) 25 mm diameter blow-off assembly (OPSD 1104.030) including restoration	ea	3	$	$
5.03	**D3 SSP35**	**Hydrant sets, complete with anchor tee, OPSD 1105.01**	ea	10	$	$
5.04	**D9**	**250mm Dia Watermain Insulation**	m^2	11	$	$
5.05	**D10**	**Cathodic Protection of Watermains and Appurtenances**				

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
		Cathodic protection - supply and install zinc anodes complete with size and packaging as outlined in the specifications -				
		a) Type DZP 550-12 at all services, fittings, valves & plugs	ea	33	$	$
		b) 3 each - Type DZP 1110-24	ea	10	$	$
5.06	**D13 SSP42**	**Watermain Disinfection and Testing**	L.S.	1		$
					Total Section 5	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 6: ELECTRICAL						
6.01	**SSP49**	**Street Lighting**				
		Supply and Install rigid ducts (thick wall rigid pvc only)				
		a) 1x50mm	m	1,628	$	$
		b) 2x50mm	m	135	$	$
6.02	**NRS 2020 SSP49**	Supply and install junction boxes				
		a) 330 x 600mm	ea	35	$	$
6.03	**SSP49**	Supply and install grounding				
		a) Ground rods or plates	ea	26	$	$
		b) Ground wire #6 RWU 90 insulated	m	1,738	$	$
		c) Ground wire bare #6 AWG	m	65	$	$
6.04	**SSP49**	Supply and install LV cable in rigid ducts:				
		a) #2 RWU 90	m	2,284	$	$
		b) #6 RWU 90	m	4,428	$	$
		c)3x#12 RWU 90 riser	m	468	$	$
6.05	**SSP49**	Supply and install sectional steel poles - base mounted				
		a) Tye 6 - 10.5m	ea	26	$	$
6.06	**SSP49**	Supply and install street light arm and luminaire.				
		b) 160 watt led with 2.4m arm and 15A KTK fuse kits	ea	36	$	$
6.07	**SSP49**	Relocate base mounted steel pole c/w luminaire and arm	ea	1	$	$
6.08	**NRS 2001 2002 SSP49**	Supply and install concrete footings				
		a) Type 6 - Concrete pole base 2.6m deep	ea	26	$	$
6.09	**SSP49**	Removal of Electrical Equipment (OPSS 610)	L.S.	1		$
					Total Section 6	**$**

REVISED **Addendum No. 2**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 7: TRAFFIC SIGNALS						
7.01	**NRS 2001 2002; SSP51**	**Concrete Footings, Pads and Concrete Pole Bases (anchor assembly supplied by Region)**				
		a) Type 1 - Concrete Pole base 1.22m deep	ea	4	$	$
		i) Additional hydrovac excavation (PROVISIONAL)	ea	4	$	$
		b) Type 6 - Concrete Pole base 2.60m deep	ea	9	$	$
		i) Additional hydrovac excavation (PROVISIONAL)	ea	9	$	$
7.02	**NRS 2003M; SSP51**	**Concrete Controller Base including 1.0m x 1.0m x 150mm concrete pad at cabinet door**				
		a) Type M - Concrete base for Traffic Controller Cabinet	ea	1	$	$
7.03	**SSP51**	**Conduit * Includes fish rope, sweeps and all reinstatement Common Trench or Directional Drill ***				
		a) Supply and install 1-100mm and 1-50mm PVC Conduits	m	270	$	$
		b) Supply and install 1-50mm PVC Conduits (Signal Plant)	m	115	$	$
		c) Supply and install 1-100mm PVC Conduits	m	55	$	$
		d) Supply and install 2-100mm PVC Conduits	m	10	$	$
7.04	**SSP51**	**Cable - Install (supplied by Region) Including sufficient length of cable for all connections and drip loops**				
		a) Install 4 conductor cable (cameras, 3 section heads)	m	70	$	$
		b) Install 7 conductor cable (ped heads)	m	140	$	$
		c) Install 25 conductor cable (traffic signals)	m	310	$	$
		d) Install Beldon cable - BLACK/RED (audible push buttons)	m	620	$	$
		e) Install Beldon cable - BLACK/WHITE (loops)	m	925	$	$
		f) Install coaxial cable(vehicle pre-emption detector)	m	20	$	$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
7.05	**SSP51**	**Cable - Supply and Install Including sufficient length of cable for all connections and drip loops**				
		a) Supply and Install #6 cable - black/white (illumination underground)	m	225	$	$
		b) Supply and Install #6 cable - green (ground)	m	270	$	$
		c) Supply and Install #8 cable - black/white (power supply)	m	35	$	$
		d) Supply and Install 12/2 cable (illumination riser)	m	65	$	$
7.06	**NRS 2020; SSP51**	**Junction Boxes (supplied by Region) - Install 330 x 600mm junction box (signal plant)**	ea	18	$	$
7.07	**NRS 2130 2140; SSP51**	**Poles (supplied by Region) including all necessary mounting hardware**				
		a) Install Sectional Steel Poles - Direct Buried Type 6 - 7.0m (power pole)	ea	1	$	$
		b) Install Spun Aluminum Poles - Base Mounted Type 1 - 4.0m tall (pedestrian pole)	ea	4	$	$
		c) Install Sectional Steel Poles - Base Mounted				
		i) Type 6 - 6.3m tall (signal pole w/o luminaire/camera)	ea	5	$	$
		ii) Type 6 - 10.5m tall (signal pole with luminaire/camera)	ea	4	$	$
7.08	**SSP51**	**Signal Mast Arms (supplied by Region) Install traffic signal mast arm of appropriate length to position signal head at standard location - 1.2m to 7.6m mast arm**	ea	7	$	$
7.09	**SSP51**	**Luminaire Mast Arms (supplied by Region) Install luminaire mast arm of appropriate length at standard position and location - 0.6m to 3.0m mast arm**	ea	6	$	$
7.10	**NRS 2520 2521; SSP51**	**Loops - to be cut into final lift of base asphalt. Includes sawcutting, sealant, excavation and wire to loop junction box**				

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
		a) Supply and install 2.4m x 15.0m - Duplex	ea	9	$	$
		b) Supply and install 2.0m x 10.0m - Duplex	ea	1	$	$
		c) Supply and install 2.0m x 4.0m - Duplex	ea	1	$	$
7.11	**SSP51**	**Grounding Rods - Supply and install grounding rods including all wires necessary for connection**	ea	12	$	$
					Total Section 7	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 8: INTERCONNECT						
8.01	**SSP51**	**Conduit * Including fish rope, sweeps and all reinstatement - Common Trench or Directional Bored * - Supply and install 1-50mm PVC Conduit (Interconnect)**	m	1,180	$	$
8.02	**SSP51**	**Cable - Install (supplied by Region) including sufficient length of cable for all connection and drip loops. - Install Fibre Optic communication cable (interconnect)**	m	1,230	$	$
8.03	**SSP51**	**Junction Boxes (supplied by Region) - Install 330 x 600mm junction box (interconnect)**	ea	5	$	$
					Total Section 8	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 9: RETAINING WALL STRUCTURES						
9.01	**SSP52**	**Protection Systems**	m^2	53	$	$
9.02	**SSP52**	**Earth Excavation for Structure**	m^3	70	$	$
9.03	**SSP52**	**Dewatering Structure Excavations**	L.S.	1		$
9.04	**SSP52**	**Granular Bedding**	m^3	15	$	$
9.05	**SSP52**	**Backfill to Structure**	m^3	44	$	$
9.06	**SSP52**	**Site Grading**	L.S.	1		$
9.07	**SSP52**	**Mass Concrete**	m^3	1.5	$	$
9.08	**SSP52**	**Concrete in Retaining Walls**	m^3	20	$	$
9.09	**SSP52**	**Pedestrian Railing**	m	13	$	$
9.10	**SSP52**	**Reinforcing Steel Bars**	t	2	$	$
9.11	**SSP52**	**Stainless Steel Reinforcing Steel Bars**	t	0.071	$	$
9.12	**SSP52**	**GFRP II Reinforcing Bars**	m	22	$	$
9.13	**SSP52**	**Dowels into Concrete**	ea	28	$	$
					Total Section 9	**$**

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SECTION 10 : PROVISIONAL						
10.01	**SSP9**	**Trench or road sub-excavation 50mm crusher-run stone**	m^3	30	$	$
10.02	**SSP10**	**Concrete**				
		a) 15 MPa concrete	m^3	10	$	$
		b) 20 MPa concrete	m^3	10	$	$
		c) 25 MPa concrete	m^3	10	$	$
		d) 32 MPa concrete	m^3	10	$	$
10.03	**SSP12**	**Unshrinkable fill**	m^3	10	$	$
10.04	**SSP13**	**19 mm Clear Stone**	t	10	$	$
10.05	**B1**	**Test Pits**				
		a) By mechanical digging				
		i) depth up to 0.5 m	ea	5	$	$
		ii) depth up to 1.0 m	ea	5	$	$
		iii) depth up to 2.0 m	ea	5	$	$
		iv) depth up to 4.0 m	ea	3	$	$
		b) by vacuum methods				
		i) depth up to 0.5 m	ea	5	$	$
		ii) depth up to 1.0 m	ea	5	$	$
		iii) depth up to 2.0 m	ea	5	$	$
		iv) depth up to 4.0 m	ea	3	$	$
		v) depth up to 6.0 m	ea	1	$	$
10.06	**B3 SSP14**	**Granular 'A' for temporary driveway or pedestrian access**	t	50	$	$
10.07	**B10**	**Sawcutting Asphalt Pavement**	m	50	$	$
10.08	**B24**	**Application of Water for Dust Control**	m^3	200	$	$
10.09	**B41**	**Traffic pole base adjustment**	ea	1	$	$
10.10	**C2 SSP27**	**Sewer Laterals (All sizes)**	m	15	$	$
10.11	**C4**	**Reconnect Existing Sewer Laterals (All sizes)**	ea	1	$	$
10.12	**SSP11**	**Rock Excavation hoe-ramming**	m^3	30	$	$

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
10.13	**D5**	**Main Stop (20 mm)**	ea	2	$	$
10.14	**D4 SSP36**	**Water Services (20mm)**	m	20	$	$
10.15	**D6 SSP37**	**Curb Stops (20mm)**	ea	2	$	$
10.16	**D7 SSP38**	**Curb Box (20mm)**	ea	2	$	$
10.17	**D8 SSP39**	**Reconnect Water Services (20mm)**	ea	1	$	$
10.18	**SSP45**	**Leaking and Damaged Water Service Repair**	m	10	$	$
10.19	**SSP46**	**Additional Bends, Tees & Fittings**	ea	5	$	$
10.20	**SSP47**	**Water Valve Cleaning & Exercising**	ea	1	$	$
10.21	**SSP48**	**Existing Watermain Repairs**	ea	1		
10.22	**SSP52**	**Subexcavation**	m^3	15	$	$
					Total Section 10	**$**

TENDER SUMMARY

SECTION 1: GENERAL	$
SECTION 2: ROADS	$
SECTION 3 : STORM SEWER	$
SECTION 4: SANITARY SEWER	$
SECTION 5: WATERMAIN	$
SECTION 6: ELECTRICAL	$
SECTION 7: TRAFFIC SIGNALS	$
SECTION 8: INTERCONNECT	$
SECTION 9: RETAINING WALL STRUCTURES	$
SECTION 10 : PROVISIONAL	$
TOTAL TENDER PRICE (excluding H.S.T.)	$

Contract No. 2019-T-105
(RN19-05)

Reconstruction of Road 98 (Montrose Road)
from Regional Road 49 (McLeod Road)
to Charnwood Avenue
In the City of Niagara Falls

TENDERER'S EXPERIENCE IN SIMILAR WORK

UNLESS THIS LIST IS PROPERLY COMPLETED, THE TENDER MAY BE DISQUALIFIED

YEAR COMPLETED	DESCRIPTION OF WORK	FOR WHOM WORK PERFORMED	VALUE

REVISED **Addendum No. 2**

STATEMENT "B"

Contract No. 2019-T-105
(RN19-05)

Reconstruction of Road 98 (Montrose Road)
from Regional Road 49 (McLeod Road)
to Charnwood Avenue
In the City of Niagara Falls

(a) Harmonized Sales Tax:

The Contractor shall **NOT** include any amount in his tender price for the Harmonized Sales Tax (H.S.T.). Any amount to be levied with respect to the H.S.T. will be included as a separate item on the payment certificate. The appropriate H.S.T. levy will be paid to the Contractor in addition to the amount approved by the Contract Administrator for work performed under the contract and will, therefore, not affect the amount of the contract. The Contractor will be required to make the appropriate remittance to Revenue Canada in accordance with the legislation.

i) Total Tender Price including contingency and excluding HST $

ii) Estimated Cost of Harmonized Sales Tax..... $

iii) Total Contract Amount [(i) + (ii)] ..... $

iv) H.S.T. Registration Number: _____

_____ _____
Company Name **Contractor's Signature(s)**

_____
Address **Contractor's Seal**

Witnesses: _____

_____

STATEMENT "C"

Contract No. 2019-T-105
(RN19-05)

Reconstruction of Road 98 (Montrose Road)
from Regional Road 49 (McLeod Road)
to Charnwood Avenue
In the City of Niagara Falls

ACCESSIBILITY REGULATIONS FOR CONTRACTED SERVICES CONFIRMATION FORM

If the nature of your business with the Regional Municipality of Niagara (the "Region") creates the opportunity that any of your staff, contractors or any others associated with you would interact with the public on behalf of the Owner, it is necessary that the Owner ensure those providing service on our behalf have received the Customer Service Training in order that we retain our compliance with the requirements of the *Accessibility for Ontarians with Disabilities Act 2005.*

Please sign below to ensure you are the person able to bind your company. Companies whose employee's role may require them to interact with the public on behalf of the Owner, shall receive the CUSTOMER SERVICE STANDARD TRAINING of the ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT 2005.

If you have any questions, please contact the **Accessibility Advisory Coordinator** at 905-980-6000, ext. 3252 or email **accessibility@niagararegion.ca**

Please enclose this form with your bid submission.

Company Name: _____

Signature of Authorized Individual: _____

Position: _____

STATEMENT "D"

Contract No. 2019-T-105
(RN19-05)

Reconstruction of Road 98 (Montrose Road)
from Regional Road 49 (McLeod Road)
to Regional Road 20 (Lundy's Lane)
In the City of Niagara Falls

LIST OF SUB-CONTRACTORS

The bidders shall list hereunder the names of all sub-contractors intended to be used in the execution of this work subject to the approval of the Contract Administrator.

All work not performed directly by the Contractor's forces shall be included in this list. All changes to this list must be approved by the Contract Administrator.

SUB-TRADE	NAME OF SUB-CONTRACTOR	ADDRESS OF SUB-CONTRACTOR