



City of Niagara Falls

Contract 2020-515-20 City Wide CIPP Sewer Rehabilitation Program

ADDENDUM # 1

This Addendum shall form an integral part of the contract document for the above noted project and shall be read in conjunction therewith. This Addendum shall, however, take precedence over all requirements of the previously issued contract documents, including plans, 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 Form of Tender for submission at the time of tendering. **Tenders not including this Addendum, signed as required, may be rejected as informal.**

1. Can you please provide the CCTV videos for the sewer to be lined and/or rehabilitated listed under SPCS-31 item 6.2, this will enable us estimate the amount of prepping and cleaning involved.
 - **CCTV reports have been uploaded to the project tender and are available on the City of Niagara Falls "Bid Opportunities" website. Video reports are not available at this time.**
2. Can you please provide maps showing the exact MH's locations, street identifications and pipe lengths in order to enable us to inspect the sites and identify the possible shot layouts during bidding stage.
 - **New maps have been uploaded to the project tender and are available on the City of Niagara Falls "Bid Opportunities" website.**
3. As the amount of Flushing and CCTV is almost double the amount for the full MH to MH Lining, Can we assume that the difference is to cover the lines that will be rehabilitated using CIPP spot repair only, if not and this extra length included pipes that needs only flushing and CCTV we need to know their locations to enable us evaluate their traffic requirements.
 - **The quantities listed for flushing and inspection are the quantities required to flush and inspect all sewers listed for repair.**
4. Can you please advise how the bidder will know the required traffic control and traffic management (items A3 for years 2 and 3) without knowing the scope. Would you please consider adding a provisional items with estimated amount that covers flaggers and /Or pay duty officers for year 2 and year 3, those items will be paid only (if required) when the scope is known.
 - **Bidders shall assume required level of effort for traffic control based on the quantities of rehabilitation in each contract year.**
5. Would you please provide the bypass requirement that need to be considered in our lining / Rehabilitation price.
 - **Bidders are advised to assume dry weather flow equivalent to 85% of the sewer capacity.**
6. Can you please provide the design depth to be used to evaluate the CIPP thicknesses during the bidding stage.
 - **Sewer depths have been added to the tables in Sections 6.2 and 6.3. Please note, depths provided are not guaranteed. The contractor must verify size and elevations in the field prior to construction.**

7. Can you please advise if we as a qualified bidders are required to register to bid for this job or this requirement is only for bidders who didn't not pre-qualified under (RFPQ28-2020).
 - **Tenders submissions will only be accepted from bidders who pre-qualified under RFPQ28-2020.**
8. In order for the grouting scope identified under SPCS -33 item 6.3 not to be overlooked by the contractor, would the city be willing to add a grouting item that covers this scope.
 - **The costs associated with grouting and installation of spot repairs shall be included in the unit prices bid for this item.**
9. Can you please advise the length required to be priced under item B5 (Service Connection Repairs using top hats), also are those connections all located on the sewers to be lined or could they might be located on different sections that does not involved a different type of rehabilitation
 - **All Service Connection Repairs are located on the sewers to be repaired using full length CIPP or CIPP spot repairs. Top Hats shall extend a minimum of 450mm into the service lateral.**
10. Can you please advise if V4 is required under bypass or without bypass.
 - **Appropriate flow control measures shall be implemented to ensure a minimum of 80% of the height of the pipeline is visible for the entire inspection.**
11. The ASTM F2561 is very prescriptive and is basically written for the LMK system. Because the mainlines are to be structurally lined, it is not necessary that there be a full hoop in the mainline portion of the lateral liner, provided that a gasketed hydrophilic seal is still provided. A full hoop in the mainline will further reduce (needlessly) the cross sectional area of the rehabilitated mainline pipe. We just want to confirm that the owner is indeed ok with a true TopHat style liner which incorporates a hydrophilic sealing element but does not provide a 360 degree wrap with the mainline?
 - **A 360-degree wrap around the mainline is not required, however a hydrophilic seal is required.**
12. CIPP spot repair list (item 6.3 – SPCS 33 and 34) identified 2 laterals that needs to be rehabilitated using top hat connection repairs, are those 2 laterals part of B3 or they should be additional.
 - **All Top Hat repairs installed will be paid under Schedule of Quantities Item B5 Service Connection Repairs.**
13. What are the difference between item B5 and P2.a?
 - **Item B5 is for the installation of a sealing section at the sewer main and lateral, a true "Top Hat" style repair liner will be acceptable under this item, where item P2 is for CIPP lining repair of the sewer lateral from the main to property line.**
14. Should item B5 service connection repairs include V1, V3 and V4 or an additional item will be added similar to P1a and P2a.
 - **All CCTV inspections for the service connection repairs completed under item B5 will be paid for under section B1 in the Schedule of Quantities.**
15. What are the requirements for CIPP spot repair and lateral lining test samples.
 - **Testing is not required for CIPP spot repair and lateral lining.**

16. If cleanouts are required for the Service Connection Repairs, are the associated costs for the installation, vac-tee, restoration etc. to be included into the per unit pricing for each liner.
 - **Cleanouts are not required for Service Connection Repairs. Item B5 is for the installation of a “Top Hat” style repair at the main. If a cleanout is required to install the Service Connection Repair under item B5 it is to be included in the unit price including all associated restorations.**

17. If a cleanout is not required to install the service Connection Repairs (Shorties) or the Service Lateral Repairs (to property line), it is acceptable to but a Zero ‘0’ in the line item for “New Cleanout Installation”.
 - **If a cleanout is not required to complete the work a bid of zero (0) would be acceptable under item P2 b).**

18. Tables provided in the Special Provisions – Contract Item Supplements pages SPCS-31 to SPCS-34 do not match quantities provided in Schedule of Quantities.
 - **Pages SPCS-31 to SPCS-34 have been revised. Please note, some spot repair locations require more than one repair within a single pipe segment. This information is provided in the “Repair” column of the table.**

19. Is the City willing to extend the closing date at this time.
 - **The closing date will remain as noted in the contract.**

20. Form of Tender – Schedule of Quantities and Unit Priced – Year 1 – **Remove page FT4-2 and replace with “FT4-2 rev1” attached.**

21. Special Provisions – Contract Items Supplemental – **Remove page SPCS-31 to SPCS-34 and replace with “SPCS-31 rev1 to 34 rev1” attached.**

22. Special Provisions – Contract Items Supplemental – **Remove page SPCS-38 and replace with “SPCS-38 rev1” attached.**

Date Issued: December 02, 2020

Issued By: 

Kurtis Bottrell, C.E.T.
 Infrastructure Services Supervisor,
 Municipal Works

The Tenderer shall take due notice of all revisions/clarifications and make allowance to his/her unit prices.

Signature of Company Representative:	
Name (Please Print):	
Company Name:	
Date:	

SCHEDULE OF QUANTITIES AND UNIT PRICES - YEAR 1

CONTRACT NO. 2020-515-20

CITY WIDE SEWER REHABILITATION PROGRAM

ITEM NO.	SPEC NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
SECTION 'B' - SEWER REHABILITATION						
B1	SPCS	Flushing and Inspection				
		a) Flushing and Mainline V1 Inspection	4,125	m	\$ _____	\$ _____
		b) Flushing and Mainline V3 Inspection	4,125	m	\$ _____	\$ _____
		c) Flushing and Mainline V4 Inspection	4,125	m	\$ _____	\$ _____
		d) Maintenance Hole V3 Inspection	7	ea.	\$ _____	\$ _____
		e) Maintenance Hole V4 Inspection	7	ea.	\$ _____	\$ _____
B2	SPCS	CIPP Lining - Including Flow Control, Pipe Preparation and V2 Inspection				
		a) 200 mm Diameter Sewers	1384	m	\$ _____	\$ _____
		b) 225 mm Diameter Sewers	105	m	\$ _____	\$ _____
		c) 250 mm Diameter Sewers	828	m	\$ _____	\$ _____
		d) 300 mm Diameter Sewers	55	m	\$ _____	\$ _____
		e) 375 mm Diameter Sewers	477	m	\$ _____	\$ _____
		f) 600 mm Diameter Sewers	350	m	\$ _____	\$ _____
B3	SPCS	CIPP Spot Repair - Including Flow Control, Pipe Preparation and V2 Inspection				
		a) 250	10	ea.	\$ _____	\$ _____
		b) 450	2	ea.	\$ _____	\$ _____
		c) 600	3	ea.	\$ _____	\$ _____
B4	SPCS	Maintenance Hole Repairs	7	ea.	\$ _____	\$ _____
B5	SPCS	Service Connection Repairs	250	ea.	\$ _____	\$ _____
TOTAL SECTION 'B' - SEWER REHABILITATION \$						

6.2. Full Length CIPP Repair List

i. The following sewer segments are to be repaired under this item:

PipeID	Road	Material	Diameter	Length	US Depth	DS Depth	Survey Direction and Video Filename
SGM_03966	ELDORADO AV	Concrete	250	90			Downstream - 89066; Upstream - SGM_03966_SMH_03527_20190416
SGM_03974	KALAR RD	Concrete	250	93	2.4	2.7	Upstream - SGM_03974_SMH_03526_20190418
SGM_04504	PITTON RD	Concrete	250	92	2.9	3	Downstream - SGM_04504_SMH_03505_20190423; Upstream - SGM_04504_SMH_03504_20190423
SGM_05204	BELAIRE AV	Concrete	250	95	2.8		Downstream - SGM_05204_SMH_03517_20190416
SGM_05596	BOND ST	Vitrified Clay	200	107	2.02	3.1	Downstream - SGM_05596_SMH_05011_20181127
SGM_05597	BOND ST	Vitrified Clay	225	105	2.02	1.4	Upstream - SGM_05597_SMH_04978_20181112
SGM_05598	STRANG DR	Clay	200	123	2.25	3.1	Downstream - SGM_05598_SMH_05009_20181128
SGM_05599	STRANG DR	Clay	200	111	2.25	1.35	Upstream - SGM_05599_SMH_05010_20181113
SGM_05548	WEINBRENNER RD	Asbestos Cement	250	73	3.1	5.3	Downstream - SGM_05548_SMH_05105_20181214
SGM_05551	CHIPMAN CR	Clay	375	116	2.4	3.4	Downstream - SGM_05551_SMH_05158_20181106
SGM_05552	USSHER ST	Clay	200	50	2.45	4.4	Downstream - SGM_05552_SMH_05146_20181126
SGM_05600	CALLAN ST	Clay	200	93	1.64	2.45	Upstream - SGM_05600_SMH_05004_20181215
SGM_05601	CALLAN ST	Clay	200	131	1.83	2.1	Upstream - SGM_05601_SMH_05007_20181129
SGM_05609	CALLAN ST	Clay	200	125	2.9	2.6	Upstream - SGM_05609_SMH_04981_20181107
SGM_05623	PARLIAMENT	Clay	200	116	2.3	2.5	Upstream - SGM_05623_SMH_05090_20181211



PipeID	Road	Material	Diameter	Length	US Depth	DS Depth	Survey Direction and Video Filename
	AV						
SGM_05627	CHAMPLAIN DR	Clay	200	112	2.7	3.1	Downstream - SGM_05627_SMH_05088_20181210
SGM_05673	CATTELL DR	Clay	200	57	4	4.85	Upstream - SGM_05673_SMH_05138_20181101
SGM_05676	CATTELL DR	Clay	375	100		5.24	Upstream - SGM_05676_SMH_05130_20181213
SGM_05680	CATTELL DR	Clay	375	62	4.92	3.2	Downstream - SGM_05680_SMH_05059_20181212
SGM_05681	CATTELL DR	Clay	375	73	3.2	4.98	Downstream - SGM_05681_SMH_05060_20181212
SGM_05698	MUNDARE CR	Clay	250	85	2.68	3.24	Upstream - SGM_05698_SMH_05001_20181211
SGM_05699	MUNDARE CR	Clay	250	77	2.92	2.68	Upstream - SGM_05699_SMH_05002_20181205
SGM_05747	USSHER ST	Clay	300	55	2.65	2.55	Downstream - SGM_05747_SMH_05155_20181031
SGM_05748	USSHER ST	Clay	200	82	2.55	2.65	Downstream - SGM_05748_SMH_05156_20181031
SGM_05749	USSHER ST	Clay	200	117	2.45	2.55	Downstream - SGM_05749_SMH_05146_20181031
SGM_05752	SARAH ST	Clay	200	78	2.5	2.75	Upstream - SGM_05752_SMH_04987_20181102
SGM_05757	SARAH ST	Clay	375	126	2.95	0	Upstream - SGM_05757_SMH_05150_20181106
SGM_05760	CORRY CR	Clay	250	66	3.03	3.54	Upstream - SGM_05760_SMH_05057_20181212
SGM_05762	CORRY CR	Clay	250	82	3.56	3.3	Upstream - SGM_05762_SMH_05148_20181102
SGM_05763	CORRY CR	Clay	250	75	3.3	3.7	Downstream - SGM_05763_SMH_05148_20181106
SGM_05797	BRIDGEWATER ST	Vitrified Clay	200	82	1.49	1.78	Downstream - SGM_05797_SMH_04962_20181119
SGM_05809	CHIPPAWA PY	Concrete	600	17	7.6	8	Upstream - SGM_05809_SMH_04878_20190115
SGM_05810	CHIPPAWA PY	Concrete	600	129	8	7.7	Downstream - SGM_05810_SMH_04875_20181219
SGM_05815	CHIPPAWA PY	Concrete	600	93	7.1	7.6	Downstream -

PipeID	Road	Material	Diameter	Length	US Depth	DS Depth	Survey Direction and Video Filename
							SGM_05815_SMH_04881_20190107
SGM_05847	FRONT ST	Concrete	600	111	4.4	6.5	Upstream - SGM_05847_SMH_04880_20181203

CIPP Spot Repair List

i. Spot Repairs shall be completed at the following locations

PipeID	Road	Material	Dia. (mm)	Length (m)	US Depth (m)	DS Depth (m)	Repair	Reference Video Filename and Survey Direction
SGM_03973	PITTON RD	Concrete	250	92	3		Inject grout and install 1m spot repair to seal Infiltration Running at 4m and 89m	Downstream - SGM_03973_SMH_03519_20190423
SGM_05136	BURWOOD AV	Asbestos Cement	250	76	2.9	3.4	Inject grout and install 1m spot repair to seal Infiltration Gushing at 55m	Upstream - SGM_05136_SMH_04400_20190415
SGM_05160	HARMONY AV	Asbestos Cement	250	96	3.1	4.4	Inject grout and install 1m spot repair to seal Infiltration Gushing at 75m	Upstream - SGM_05160_SMH_04391_20190415
SGM_05206	KALAR RD	Concrete	250	132			Inject grout and install 1m spot repair to seal Infiltration Running at 19m and Infiltration Gushing at 99m	Downstream - SGM_05206_SMH_04425_20190423
SGM_05450	NASSAU AV	Reinforced Concrete	600	41	7.1	7.2	Inject grout and install 1m spot repair to seal Infiltration Gushing at 14.8m	Downstream - SGM_05450_SMH_04850_Sep 18
SGM_05453	WEINBRENNER RD	Reinforced Concrete	600	61	6.9	7.4	Inject grout and install 1m spot repair to seal Infiltration Gushing at 47.5m	Downstream - SGM_05453_SMH_04815_Sep 17

PipeID	Road	Material	Dia. (mm)	Length (m)	US Depth (m)	DS Depth (m)	Repair	Reference Video Filename and Survey Direction
SGM_05585	WELLAND ST	Polyvinyl Chloride	250	81	3.1	3.4	Trim intruding connection, inject grout and install 1m spot repair and Top Hat connection repair to seal Infiltration and Hole at 58.5m	Downstream - SGM_05585_SMH_05035_20181218
SGM_05735	BRIDGEWATER ST	Reinforced Concrete	450	93	4.6	4.9	Install Top Hat connection repair at 39.1m. Inject grout and install 1m spot repair to seal Infiltration Gushing at 41.9m	Downstream - SGM_05735_SMH_04941_20190104
SGM_05753	HARLEYFORD CR	Clay	250	68	2.5	2.55	Inject grout and install 1m spot repair to seal Infiltration Running at 58.5m	Downstream - SGM_05753_SMH_04991_20181102
SGM_05756	HARLEYFORD CR	Clay	250	37	2.55	2.75	Fill void, install 1m spot repair to seal hole.	Upstream - SGM_05756_SMH_04987_20181101
SGM_05761	CORRY CR	Clay	250	61	3.54	3.56	Inject grout and install 1m spot repair to seal Infiltration Running at 40m	Downstream - SGM_05761_SMH_05057_20181212
SGM_05819	FRONT ST	Concrete	600	88	3.4	4.1	Inject grout and install 1m spot repair to seal Infiltration Running at 30.6m	Downstream - SGM_05819_SMH_4873_20181220

Chemical Resistance	Concentration (%)
Tap Water (ph 6-9)	100
Nitric Acid	5
Phosphoric Acid	10
Sulfuric Acid	10
Gasoline	100
Vegetable Oil	100
Detergent	0.1
Soap	0.1

12. Furnish certified data that demonstrates the ability of the liner material to resist chemical attack as per ASTM D543 testing

6.7. Liner Design

1. The Contractor shall submit liner designs to the Contract Administrator for review a minimum of two weeks prior to installation.
2. Liner designs shall be stamped by a Professional Engineer licensed to practice in the Province of Ontario.
3. Liner design submissions shall show all calculations, assumptions, the liner thickness and finished inside diameter.
4. The liners shall be designed by the Contractor in accordance with ASTM F1216 as a Fully Deteriorated Gravity Pipe and the following parameters. The provisions of Appendices X1 and X2 in ASTM F1216 are mandatory.
 - i. Design Method: ASTM F1216-07A, Appendix XI
 - ii. Pipe Condition: Fully Deteriorated
 - iii. Design Life: 50 years
 - iv. Safety Factor: 2 (on external load)
 - v. Traffic Loading: Total external pressure on the pipe to include an allowance for an AASHTO HS20 concentrated live load.