

The Corporation of the Municipality of Brockton



By-Law 2019-027

Being a By-Law to Accept a Tender for Construction of the Lang Municipal Drain in the Municipality of Brockton

Whereas the Council for the Corporation of the Municipality of Brockton Council deems it expedient to accept a tender for the construction of the Lang Municipal Drain in the Municipality of Brockton;

Now Therefore the Council of the Corporation of the Municipality of Brockton enacts as follows;

- 1.0 That The Corporation of the Municipality of Brockton Council hereby accepts the tender of Robinson Farm Drainage Limited in the amount of \$283,298.00 plus H.S.T. for the construction of the Lang Municipal Drain in the Municipality of Brockton as described in the attached Schedule "A" Instructions to Tenderers on the same terms and conditions as outlined in the attached Schedule "A" Instructions to Tenderers.
- 2.0 That the Mayor and Clerk are hereby authorized to sign on behalf of the Council for The Corporation of the Municipality of Brockton, any contracts and other documents required to authorize such purchase to proceed, and to affix the corporate seal of the Municipality of Brockton.
- 3.0 This By-Law shall come into full force and effect upon final passage.
- 4.0 This By-Law may be cited as the "Lang Municipal Drain Tender Acceptance By-Law".

Read, Enacted, Signed and Sealed this 12th day of March, 2019.

Mayor – Chris Peabody

Clerk – Fiona Hamilton

FORM OF TENDER AND AGREEMENT

Lang Municipal Drain 2018
Municipality of Brockton

TO: Members of Municipal Council
RE: Construction of the Lang Municipal Drain 2018

The undersigned, having carefully examined the Plan, Profiles, Specifications and the site of the work, and understanding all conditions, hereby offers to enter into a Contract to supply all materials and to construct the said work for the Municipality complete and ready for use in accordance with the Plan, Profiles and Specifications on file at the office of the Engineer, which Drawings and Specifications form the basis of the proposal for the following prices.

To Wit:

TOTAL CONSTRUCTION COSTS

\$ 283 298⁰⁰

13% H.S.T.

\$ 36 828⁷⁴

TOTAL TENDER
LANG MUNICIPAL DRAIN 2018

\$ 320,126⁷⁴

A Certified cheque is required as Tender security in the amount of \$20,000.00 payable to the Municipality and a copy of the Scope of Work are enclosed.

Work **shall** begin after

April 1, 2019

Work **shall** be completed on or before

May 15, 2019

The Contractor shall comply with the above completion date. Failure to do so will render the Tender liable for rejection by the Municipality.

OFFERED ON BEHALF OF THE CONTRACTOR

ACCEPTED ON BEHALF OF THE MUNICIPALITY

Company Robinson Farm Drainage Limited

Authorized Signature Mason Robinson

Address 34834 Cassidy Road Ailsa Craig

Ontario N0M 1A0

Telephone (519) 293-3645 Date Feb 15 2019

Mayor _____

Clerk _____

Date _____

[Seal]

This proposal or Form of Tender and Agreement when signed and offered by the Contractor shall constitute a formal and binding Contract when accepted and signed on behalf of the Municipality.

SCOPE OF WORK

Lang Municipal Drain 2018
Municipality of Brockton
Reference No. 1631

Labour, Equipment and Materials

A) MAIN DRAIN (OPEN)

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	Clearing, Grubbing & Mulching (Sta. 0+000 to Sta. 0+192)	I.s.		\$ 6,000 ⁰⁰
2)	Open ditch excavation (Sta. 0+000 to Sta. 0+192)	I.s.		\$ 2,000 ⁰⁰
TOTAL CONSTRUCTION COSTS MAIN DRAIN (OPEN)				<u>\$ 8,000⁰⁰</u>

B) MAIN DRAIN (CLOSED)

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	Stripping and stock piling topsoil (Approximately 15 metre width)	1,088 m	\$ 5 ⁰⁰	\$ 5,440 ⁰⁰
2)	Supply 750mm diameter, solid high density polyethylene outlet pipes complete with rodent grates (320 kPa, CSA B182.8, split coupler joining system, Twin pipe system (Sta. 0+330 to Sta. 0+336)	12 m	\$ 190 ⁰⁰	\$ 2,280 ⁰⁰
	Installation of 750mm diameter, H.D.P.E. outlet pipes complete with quarry stone rip-rap protection and geotextile filter material (Mirafi 180N or equivalent, approximately 40 m2, Twin pipe system (Sta. 0+330 to Sta. 0+336)	I.s.		\$ 3,500 ⁰⁰
3)	Supply 675mm diameter concrete field tile (2400D)	391 m	\$ 65 ⁰⁰	\$ 25,415
a)	Installation of 675mm diameter concrete field tile by means of excavator on crushed stone bedding (Twin pipe system Sta. 0+336 to Sta.0+470)	268 m	\$ 50 ⁰⁰	\$ 13,400 ⁰⁰
b)	Installation of 675mm diameter concrete field tile by means of a wheel trencher (Sta. 0+798 to Sta. 0+921)	123 m	\$ 25 ⁰⁰	\$ 3,075

4)	Supply 825mm diameter concrete field tile (2400D)	241 m	\$ 95 ⁰⁰	\$ 22,895 ⁰⁰
	Installation of 825mm diameter concrete field tile by means of a wheel trencher (Sta. 0+470 to Sta. 0+711)	241 m	\$ 25 ⁰⁰	\$ 6,025 ⁰⁰
5)	Supply 750mm diameter concrete field tile (2400D)	75 m	\$ 22 ⁰⁰	\$ 1,650 ⁰⁰
	Installation of 750mm diameter concrete field tile by means of a wheel trencher (Sta. 0+711 to Sta. 0+786)	75 m	\$ 78 ⁰⁰	\$ 5,850 ⁰⁰
6)	Supply 600mm diameter concrete field tile (2400D)	298 m	\$ 54 ⁰⁰	\$ 16,092 ⁰⁰
	Installation of 600mm diameter concrete field tile by means of a wheel trencher (Sta. 0+921 to Sta. 1+219)	298 m	\$ 25 ⁰⁰	\$ 7,450 ⁰⁰
7)	Supply 750mm diameter, solid high density polyethylene pipe (320 kPa, CSA B182.8, split coupler joining system) (Sta. 0+786 to Sta. 0+798)	12 m	\$ 130 ⁰⁰	\$ 1,560 ⁰⁰
	Installation of 750mm H.D.P.E. pipe by means of excavator on crushed stone bedding (Sta. 0+786 to Sta. 0+798)	12 m	\$ 100 ⁰⁰	\$ 1,200 ⁰⁰
8)	Supply 350mm diameter concrete field tile	175 m	\$ 19 ⁰⁰	\$ 3,325 ⁰⁰
	Installation of 350mm diameter concrete field tile by means of a wheel trencher (Sta. 1+251 to Sta. 1+329) (Sta. 1+341 to Sta. 1+438)	175 m	\$ 20 ⁰⁰	\$ 3,500 ⁰⁰
9)	Supply 375mm diameter solid high density polyethylene pipe (320 kPa, CSA B182.8 split coupler joining system)	24 m	\$ 35 ⁰⁰	\$ 840 ⁰⁰
a)	Installation of 375mm H.D.P.E. pipe laneway crossing by means of excavator on crushed stone bedding (Sta. 1+329 to Sta. 1+341)	12 m	\$ 75 ⁰⁰	\$ 900 ⁰⁰
b)	Installation of 375mm H.D.P.E. pipe by means of excavator on crushed stone bedding (Sta. 1+239 to Sta. 1+251)	12 m	\$ 65 ⁰⁰	\$ 780 ⁰⁰
10)	Supply 200mm diameter solid high density polyethylene pipe (320 kPa, CSA B182.8 split coupler joining system)	12 m	\$ 20 ⁰⁰	\$ 240 ⁰⁰
	Installation of 200mm H.D.P.E. pipe by means of excavator on crushed stone bedding (for stub to Lot 10, Concession 5)	12 m	\$ 50 ⁰⁰	\$ 600 ⁰⁰
11)	Supply & install 900mm x 2400mm concrete catch basin (Sta. 0+357)	1 ea.	\$ 5,200 ⁰⁰	\$ 5,200 ⁰⁰

12)	Supply & install 900mm x 2400mm concrete junction box (Sta. 0+470)	1 ea.	<u>\$4600⁰⁰</u>	<u>\$4600⁰⁰</u>
13)	Supply & install 900mm x 1200mm concrete junction box (Sta. 0+711 & Sta. 1+203)	2 ea.	<u>\$2,000⁰⁰</u>	<u>\$4,000⁰⁰</u>
14)	Supply & install 600mm x 600mm concrete catch basin (Sta. 1+341 & Sta. 1+438)	2 ea.	<u>\$1500⁰⁰</u>	<u>\$3,000⁰⁰</u>
15)	Supply & install 750mm diameter high density polyethylene 45 deg. elbow (320 kPa, CSA B182.1, c/w bell ends, Sta. 0+792)	1 ea.	<u>\$500</u>	<u>\$500⁰⁰</u>
16)	Supply & install 375mm diameter high density polyethylene 45 deg. elbows (320 kPa, CSA B182.1, split coupler joining system, Sta. 1+239 & Sta. 1+245)	2 ea.	<u>\$350⁰⁰</u>	<u>\$700⁰⁰</u>
17)	Construction of a plunge pool at the outlet (Sta. 0+330 to Sta. 0+320)	I.s.		<u>\$4,000⁰⁰</u>
	Sub-Total			<u>\$148,017⁰⁰</u>
18)	Open Ditch Enclosure (Approximately 5,200m ³)			
a)	Open ditch cleanout prior to ditch enclosure to salvage and stock pile available topsoil	834 m	<u>\$2.50</u>	<u>\$2,085⁰⁰</u>
b)	Loading and hauling of excess subsoil from tile drain installation to backfill existing open ditch (Approximately 780m ³)	780 m ³	<u>\$7.00⁰⁰</u>	<u>\$5,460⁰⁰</u>
c)	Stripping topsoil from designated fill site & replacing and leveling back over fill site	7,000 m ²	<u>\$0.30</u>	<u>\$2100⁰⁰</u>
d)	Loading and hauling of fill material from designated fill site to backfill existing open ditch (Approximately 4,420m ³)	4,420 m ³	<u>\$7.00</u>	<u>\$30,940⁰⁰</u>
e)	Levelling & fine grading of topsoil over backfilled ditch and new tile drain with an approved bulldozer	I.s.		<u>\$3,000⁰⁰</u>
	Sub-Total			<u>\$43,585⁰⁰</u>

19) Work to be done on Concession Road 4 East
Road Allowance (Sta. 1+219 to Sta. 1+239)

a) Stripping and stock piling topsoil (Approximately 15 metre width)	10 m	\$ 20. ⁰⁰	\$ 200. ⁰⁰
b) Supply 525mm diameter solid high density polyethylene pipe (320 KPa, CSA B182.8 bell & spigot joining system)	20 m	\$ 65. ⁰⁰	\$ 1,300. ⁰⁰
Installation of 525mm H.D.P.E. pipe by means of excavator on crushed stone bedding (Sta. 1+219 to Sta. 1+239)	20 m	\$ 300. ⁰⁰	\$ 6,000. ⁰⁰
c) Supply 450mm diameter H.D.P.E. pipe (320 kPa) Solid Pipe	14 m	\$ 48. ⁰⁰	\$ 672. ⁰⁰
Installation of 450mm H.D.P.E. pipe by means of excavator on crushed stone bedding (Sta. 1+223 to Sta. 1+237)	14 m	\$ 100	\$ 1,400. ⁰⁰
d) Supply & install 900mm x 1200mm concrete ditch inlet catch basins (Sta. 1+219 & Sta. 1+239)	2 ea.	\$ 2,400. ⁰⁰	\$ 4,800. ⁰⁰
e) Asphalt patch - 50mm HL4	6 t	\$ 200. ⁰⁰	\$ 1,200. ⁰⁰
Sub-Total			\$ 15,572.⁰⁰

**TOTAL CONSTRUCTION COSTS
MAIN DRAIN (CLOSED)**

\$ 207,174.⁰⁰

C) BRANCH "A"

	Description	Quantity	\$/Unit	Total
1)	Stripping and stock piling topsoil (Approximately 15 metre width)	457 m	\$ 5. ⁰⁰	\$ 2,285. ⁰⁰
2)	Supply 300mm diameter concrete field tile	200 m	\$ 20. ⁰⁰	\$ 4,000. ⁰⁰
	Installation of 300mm diameter concrete field tile by means of a wheel trencher (Sta. 0+000 to Sta. 0+200)	200 m	\$ 20. ⁰⁰	\$ 4,000. ⁰⁰
3)	Supply 250mm diameter concrete field tile	257 m	\$ 16. ⁰⁰	\$ 4,112. ⁰⁰
	Installation of 250mm diameter concrete field tile by means of a wheel trencher (Sta. 0+200 to Sta. 0+457)	257 m	\$ 20. ⁰⁰	\$ 5,140. ⁰⁰
4)	Supply & install 600mm x 600mm concrete catch basin (Sta. 0+457)	1 ea.	\$ 1,800. ⁰⁰	\$ 1,800. ⁰⁰

**TOTAL CONSTRUCTION COSTS
BRANCH "A"**

\$ 21,337.⁰⁰

D) BRANCH "B"

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	Stripping and stock piling topsoil (Approximately 15 metre width)	194 m	\$ 5 ⁰⁰	\$ 970 ⁰⁰
2)	Supply 450mm diameter concrete field tile	182 m	\$ 28 ⁰⁰	\$ 5,096 ⁰⁰
	Installation of 450mm diameter concrete field tile by means of a wheel trencher (Sta. 0+000 to Sta.0+182)	182 m	\$ 23 ⁰⁰	\$ 4,186 ⁰⁰
3)	Supply 450mm diameter H.D.P.E. pipe (320 kPa) Solid Pipe	12 m	\$ 45 ⁰⁰	\$ 540 ⁰⁰
	Installation of 450mm diameter concrete field tile by means of excavator on crushed stone bedding (Sta. 0+182 to Sta.0+194)	12 m	\$ 100 ⁰⁰	\$ 1,200 ⁰⁰
4)	Supply & install 900mm x 1200mm concrete catch basin (Sta. 0+194)	1 ea.	\$ 2,400 ⁰⁰	\$ 2,400 ⁰⁰
TOTAL CONSTRUCTION COSTS BRANCH "B"				\$ 14,392⁰⁰

E) PROVISIONAL ITEMS

A Provisional Item is an item that may or may not be required as a part of the Contract. The decision as to whether a Provisional Item will form part of the Contract will be at the discretion of the engineer at time of construction. Payment for Provisional Items will only be made for work authorized in writing (text or email) by the Engineer. Payment for work performed under a Provisional Item shall be based on the Unit Price bid in the Scope of Work below.

	<u>Description</u>	<u>Quantity</u>	<u>\$/Unit</u>	<u>Total</u>
1)	Additional costs associated with installation of concrete field tile due to poor soil conditions. Additional costs include the supply of all labour, equipment and materials required.			
a)	825mm diameter concrete field tile (2400D)			
	150mm depth of stone bedding and backfill up to haunches (no geotextile).	75 m	\$ 22 ⁰⁰	\$ 1,650 ⁰⁰
	300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filte material).	75 m	\$ 30 ⁰⁰	\$ 2,250 ⁰⁰
b)	750mm diameter concrete field tile (2400D)			
	150mm depth of stone bedding and backfill up to haunches (no geotextile).	75 m	\$ 22 ⁰⁰	\$ 1,650 ⁰⁰
	300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filte material).	75 m	\$ 30 ⁰⁰	\$ 2,250 ⁰⁰
c)	675mm diameter concrete field tile (2400D)			
	150mm depth of stone bedding and backfill up to haunches (no geotextile).	75 m	\$ 21 ⁰⁰	\$ 1,575 ⁰⁰
	300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filte material).	75 m	\$ 30 ⁰⁰	\$ 2,250 ⁰⁰
d)	600mm diameter concrete field tile (2400D)			
	150mm depth of stone bedding and backfill up to haunches (no geotextile).	100 m	\$ 21 ⁰⁰	\$ 2,100 ⁰⁰
	300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filte material).	100 m	\$ 28 ⁰⁰	\$ 2,800 ⁰⁰
e)	450mm diameter concrete field tile.			
	150mm depth of stone bedding and backfill up to haunches (no geotextile).	50 m	\$ 20 ⁰⁰	\$ 1,000 ⁰⁰
	300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filte material).	50 m	\$ 27 ⁰⁰	\$ 1,350 ⁰⁰

f) **350mm diameter concrete field tile.**

150mm depth of stone bedding and backfill up to haunches (no geotextile).

50 m \$ 20⁰⁰ \$ 1,000⁰⁰

300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filter material).

50 m \$ 26⁰⁰ \$ 1,300⁰⁰

g) **300mm diameter concrete field tile.**

150mm depth of stone bedding and backfill up to haunches (no geotextile).

50 m \$ 20⁰⁰ \$ 1,000⁰⁰

300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filter material).

50 m \$ 25⁰⁰ \$ 1,250⁰⁰

h) **250mm diameter concrete field tile.**

150mm depth of stone bedding and backfill up to haunches (no geotextile).

75 m \$ 20⁰⁰ \$ 1,500⁰⁰

300mm depth of stone bedding and backfill up to haunches (bedding wrapped in no geotextile filter material).

75 m \$ 25⁰⁰ \$ 1,875⁰⁰

- 2) Supply and place quarry stone rip-rap including geotextile filter material underlay.

50 m² \$ 50⁰⁰ \$ 2,500⁰⁰

- 3) Wheel machine lift outs due to stoney conditions.

5 ea. \$ 220⁰⁰ \$ 1,100⁰⁰

- 4) Additional stripping, stock piling and levelling of top soil not covered in the above items.

500 m² \$ 33 \$ 165⁰⁰

- 5) Tile Connections

a) 100mm diameter tile drain

10 ea. \$ 110⁰⁰ \$ 1,100⁰⁰

b) 150mm diameter tile drain

5 ea. \$ 120⁰⁰ \$ 600⁰⁰

c) 200mm diameter tile drain

1 ea. \$ 130 \$ 130⁰⁰

TOTAL ESTIMATED PROVISIONAL ITEMS

\$ 32,395⁰⁰

**TOTAL CONSTRUCTION COSTS
LANG MUNICIPAL DRAIN 2018**

\$ 283,298⁰⁰

Summary of Construction Costs

A) MAIN DRAIN (OPEN)	\$ 8,000 ⁰⁰
B) MAIN DRAIN (CLOSED)	\$ 207,174 ⁰⁰
C) BRANCH "A"	\$ 21,337 ⁰⁰
D) BRANCH "B"	\$ 14,392 ⁰⁰
E) PROVISIONAL ITEMS	\$ 32,395 ⁰⁰
TOTAL CONSTRUCTION COSTS LANG MUNICIPAL DRAIN 2018	\$ 283,298⁰⁰
H.S.T. 13%	\$ 36,828 ⁷⁴
TOTAL TENDER LANG MUNICIPAL DRAIN 2018	\$ 320,126⁷⁴

The Engineer's Estimated Construction Costs do not include Provisional Items (Section E)

The **"TOTAL CONSTRUCTION COSTS"** on the **"FORM OF TENDER AND AGREEMENT"** shall include **PROVISIONAL ITEMS** (Section 'E' above) and shall be considered the Contractor's bid price.