

Corporation of the Township of Hamilton

Rehabilitation of the Lander Road Culvert

Contract No. PW2018-04



Culvert Location

April 2018

INDEX

CORPORATION OF THE TOWNSHIP OF HAMILTON REHABILITATION OF THE LANDER ROAD CULVERT CONTRACT NO. PW2018-04

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CLOSING TIME AND DATE: **11:30 A.M., LOCAL TIME, THURSDAY, MAY 3, 2018**

Specifications and Tender Forms will be available for download as of **THURSDAY, APRIL 12, 2018** from the Township of Hamilton website, <http://www.hamiltontownship.ca/content/bid-opportunities>.

ADDENDUM INFORMATION:

All Bidders are to note that any Addendum(s) to any tender/formal quotation or RFP will be posted on the municipal website (www.hamiltontownship.ca). It is the bidder's responsibility to check the website often for any Addenda.

SECTION A - TENDER FORM

PROJECT: TENDER FOR CONTRACT NO. PW2018-04
REHABILITATION OF THE LANDER ROAD
CULVERT

AUTHORITY: CORPORATION OF THE TOWNSHIP OF HAMILTON

CONTRACT ADMINISTRATOR: G.D. JEWELL ENGINEERING INC.
1 – 71 MILLENNIUM PARKWAY
BELLEVILLE, ONTARIO K8N 4Z5
Telephone: 613.969.1111 Fax: 613.696.8988

TENDERER:

Name

Address (include Postal Code)

Telephone and Fax Numbers

Name of Person Signing

Position of Person Signing

TENDERS RECEIVED BY:

Mr. Paul Dowber
Treasurer
8285 Majestic Hills Drive
P.O. Box 1060
COBOURG, Ontario K9A 4W5

SECTION A - TENDER FORM

To: Mayor and Members of Council
Township of Hamilton

Re: Contract No. PW2018-04
REHABILITATION OF THE LANDER ROAD CULVERT

Dear Mayor and Members of Council:

The Contractor has carefully examined the Plans, Provisions, Specifications and Conditions described herein as part of the work to be done under this Contract. The Contractor understands and accepts the said Plans, Provisions, Specifications and Conditions, and, for the prices set forth in this Tender, hereby offers to furnish all machinery, 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 said Plans, Provisions, Specifications and Conditions.

The Contractor understands and accepts that the quantities shown are approximate only, and are subject to increase, decrease, or deletion entirely if found not to be required.

Notification of acceptance may be given and delivery of the form of Agreement made by prepaid post, addressed to the Contractor at the address contained in this Tender.

In accordance with the first paragraph of this Tender, the Contractor hereby offers to complete the work specified for Contract No. PW2018-04

The Owner reserves the right to delete any part without cost to the Owner when it is deemed in the best interest of the Owner to do so. The Owner reserves the right to select the lowest Total Cost after deletion of parts when the Owner's budget does not allow completion of all work tendered. Lowest or any tender not necessarily accepted.

PART A – GENERAL

ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
A1	SP #A1	Mobilization / Demobilization	L.S.		
A2	577, SP #A2	Stream Protection	L.S.		
A3	SP #A3	Quality Control Testing	L.S.		
A4	543, SP #A4	Traffic Control	L.S.		
SUBTOTAL PART A					

ITEMIZED BID

CONTRACT NO. PW2018-04

PART B – ROADWORKS

ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
B1	180, 510, SP #B1	Removal of Bituminous Material	125 m ²		
B2	206, 510, SP#B2	Roadway Earth Excavation/Grading	L.S.		
B3	314, 501,1010, SP#B3	Granular A (Roadway)	60 tonnes		
B4	511, SP#B4	Rock Protection	50 m ²		
SUB-TOTAL PART B					

ITEMIZED BID

CONTRACT NO. PW2018-04

PART C – STRUCTURE WORKS

ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
C1	MUNI 928, SP#C1	Concrete Removal – Full Depth	L.S.		
C2	MUNI 928, SP#C1	Concrete Removal – Partial Depth, Type C	1 m ³		
C3	902, SP#C2	Earth Excavation for Structure	L.S.		
C4	902, SP#C2	Rock Excavation for Structure (Provisional)	1 m ³		
C5	902, SP#C3	Dewatering Structure Excavations	L.S.		
C6	SP#C4	Granular A Bedding	10 tonnes		
C7	904, SP#C5	Mass Concrete	4 m ³		
C8	904, SP#C5	Concrete in Footings	L.S.		
C9	904, SP#C5	Concrete in Substructure	L.S.		
C10	904, SP#C5	Concrete in Structure	L.S.		
C11	904, SP#C5	Concrete in Wingwalls	L.S.		
C12	929, SP#C6	Abrasive Blast Cleaning of Reinforcing Steel	7 m ²		

ITEMIZED BID

CONTRACT NO. PW2018-04

ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
C13	904, 905, SP#C7	Dowels Into Concrete – 15M	12 ea.		
C14	MUNI 905, SP# C8	Reinforcing Steel Bar	L.S.		
C15	421, 510 206 SP#C9	2440mm x 1750mm CSP Pipe Arch Culvert	3.2 m		
C16	902, SP#C10	Granular Backfill to Structure	L.S.		
SUB-TOTAL PART C					

BID SUMMARY

SUB-TOTAL – PART A \$ _____

SUB-TOTAL – PART B \$ _____

SUB-TOTAL – PART C \$ _____

SUB-TOTAL – PARTS A+B+C \$ _____

13% H.S.T. \$ _____

TOTAL TENDER PRICE \$ _____

SECTION A - TENDER FORM

BIDDER'S REFERENCES

Bidders are advised that they are required to submit three (3) references on the form provided. Failure to do so may result in the bid not being accepted by the Township. References provided shall **not** be representatives employed by the Township of Hamilton or G.D. Jewell Engineering Inc. As requested by the Township, references will be checked by the Contract Administrator or Township during the Tender review process.

Year _____

Description of Contract _____

Name of Organization _____

Contact Person _____

Telephone Number _____

Value of Contract _____

Year _____

Description of Contract _____

Name of Organization _____

Contact Person _____

Telephone Number _____

Value of Contract _____

Year _____

Description of Contract _____

Name of Organization _____

Contact Person _____

Telephone Number _____

Value of Contract _____

(This Form shall be completed and attached to the Tender Submitted)

SECTION A - TENDER FORM

LIST OF SUB-CONTRACTORS

Bidders are advised that they are required to submit a list of Contractor's or Subcontractors on the form provided. Failure to do so may result in the bid not being accepted by the Township. All Contractors and Subcontractors must demonstrate they have a minimum of **five (5)** years successfully completing the type of work they will be performing under this Contract.

Discipline	Name of Contractor or Subcontractor	Phone Number	Contact Name

In accordance with OPS General Conditions Clause 3.09, the Contractor cannot change subcontractors without prior approval from the Township.

(This Form shall be completed and attached to the Tender Submitted)

SECTION A - TENDER FORM

SCHEDULE OF TENDER DATA

The work specified in the Contract shall be performed in strict accordance with the following Schedule:

- | | | | |
|----|-----------------------------------|---|--|
| A. | TENDER FORM: | General4141
Itemized Bid
Bidder's References
List of Subcontractors
Schedule of Tender Data | Pages 1 and 2
Pages 3 to 7
Page 8
Page 9
Page 10 |
| B. | INSTRUCTIONS TO TENDERERS | | Pages 11 to 16 |
| C. | SPECIAL PROVISIONS - GENERAL | | Pages 17 to 29 |
| D. | SPECIAL PROVISIONS - TENDER ITEMS | | Pages 30 to 43 |
| E. | GENERAL CONDITIONS | | Pages 44 |
| F. | CONTRACT DRAWINGS | | Pages 45 |

It shall be the Contractor's responsibility to obtain the applicable edition of the following Ontario Provincial Standard Specifications.

OPSS No.	Date	OPSS No.	Date	OPSS No.	Date
MUNI.127	Apr. 2018	511	Nov. 2013	MUNI.929	Apr. 2012
128	Apr. 2006	543	Dec. 1990	MUNI.930	Nov 2014
MUNI.180	Nov. 2016	577	Nov. 2006		
MUNI.206	Nov. 2013	902	Nov. 2010		
MUNI.314	Nov. 2015	MUNI.904	Nov. 2012		
MUNI.501	Nov. 2017	MUNI.905	Nov. 2017		
MUNI.510	Nov. 2017	MUNI.928	Apr. 2012		

The Contractor, by this Tender, offers to complete the work of this Contract in strict accordance with the terms contained herein.

The bidder certifies that it has met all of its obligations to comply with the Provincial and Federal Sales Tax requirements, so that it is able to do business in Ontario.

Yes _____ No _____

The Bidder hereby acknowledges receipt of the following Addenda to the Bid Documents:

Addendum No. _____	Date of Issue _____	Initials _____
Addendum No. _____	Date of Issue _____	Initials _____

Failure to acknowledge all Addenda issued **may** result in the bid being rejected.

By my/our signature hereunder, I/we hereby identify this as the Schedule of Tender Data, Plans and Specifications, for Contract No. PW2018-04, executed by me/us bearing date the _____ day of _____, 2018 and we have fully read all related documents to tender data as listed above.

SIGNATURE: _____ POSITION _____

NAME OF FIRM _____ (COMPANY SEAL)

Privacy Legislation

Federal legislation governs the collection and use of personal information from individuals. We represent and warrant to the owner that we have obtained the CONSENT of any and all employees whose personal information we have supplied to the owner in this tender. This personal information, which includes, but is not limited to, the employees' names, education, work and project history, professional designations and qualifications. This CONSENT permits the owner to disclose this personal information to the Engineer (owner or agent) for the purpose of evaluating our bid. In the event that the tender is successful, this personal information may also be used in project administration, for contact purposes.

SECTION B - INSTRUCTIONS TO TENDERERS

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INSTRUCTIONS TO TENDERERS
CONTRACT NO. PW2018-04

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SECTION B - INSTRUCTIONS TO TENDERERS

1. GENERAL

SEALED Tenders plainly marked "Contract No. PW2018-04" will be received until:

11:30 A.M., LOCAL TIME, THURSDAY, MAY 3, 2018

and shall be addressed to: Mr. Paul Dowber
Treasurer
8285 Majestic Hills Drive
P.O. Box 1060 COBOURG,
Ontario, K9A 4W5

Tenders must be time-stamped at the above noted location to be considered. Late submissions will not be accepted and will be returned unopened without exception.

The use of the mail or courier services for delivery of a Tender will be at the risk of the Bidder. The Tender must come into the possession of the above-mentioned representative of the Township before the deadline for submission or the Tender will be returned to the Bidder unopened.

In the event that the Tender is hand delivered and is received past the deadline for submission, the Tender envelope will be time stamped and returned unopened to the deliverer immediately.

In the event that the Tender is received by a means other than 'in person' and is received past the submission deadline, it will be time stamped and returned unopened by courier.

Note: Since Tenders must be submitted in a sealed envelope, submissions by facsimile or electronic delivery, secured or otherwise, are not acceptable.

The onus unequivocally remains with the Bidder to ensure that Tenders are delivered to the Township, before the deadline for submission, in accordance with the submission instructions. Requests for adjustments to submitted Tenders by telephone, fax or electronically will not be considered.

The Township shall not be liable for any cost of preparation or presentation of Tenders, and all Tenders and accompanying documents submitted by the Bidder become the property of the Township and will not be returned. There will be no payment to Bidders for work related to and materials supplied in the preparation, presentation and evaluation of any Tender, nor for the Contract negotiations whether they are successful or unsuccessful.

The Township, its elected officials, employees and agents shall not be responsible for any liabilities, costs, expenses, loss or damage incurred, sustained or suffered by any Bidder, prior or subsequent to, or by reason of the acceptance, or non-acceptance by the Municipality of any Tender, or by reason of any delay in the acceptance of any Tender.

2. DECLARATIONS

- a) I/We declare that no person, firm or corporation other than the one whose signature or the signature of whose proper officers is or are attached to this Request for Tender, has any interest in this Tender or in the Contract.
- b) I/We further declare that this Tender is made without any connection, knowledge, comparison of figures or arrangement with any other contractor, firm or person making a similar Tender and is in all respects fair and without collusion or fraud.

SECTION B - INSTRUCTIONS TO TENDERERS

- c) I/We further declare that no Township of Hamilton employee, or member of Council (or their families) is, or will become interested directly or indirectly as a contracting party or otherwise in or in the performance of the Contract or in the supplies, work or business to which it relates or in any portion of the profits of it, or of any such supplies to be used therein or any of the monies to be derived from it.
- d) I/We further declare that the statements contained in the Tender are in all respects true.
- e) I/We further declare that I/We have examined the locality and site(s) of the proposed Equipment, as well as all the specifications relating to them, prepared, submitted and rendered available on behalf of the Township of Hamilton and are hereby acknowledged to be an integral part of the Contract. I/We hereby propose and offer to enter into the Contract on the terms and conditions and under the provisions set forth in the Tender, and to accept in full payment for it the sums calculated in accordance with the actual measured quantities and unit prices attached to this Tender.

3. BLANK FORM OF TENDER

One copy of the Tender, on the forms provided, shall be submitted. All information requested shall be shown in the tender, in the space provided.

4. RIGHT TO ACCEPT OR REJECT TENDERS

The Authority reserves the right to reject any or all tenders or to accept any tender should it be deemed to be in its best interest to do so.

Tenders which are incomplete, conditional or obscure, or which contain additions not called for, erasures, alterations, or irregularities of any kind, may be rejected as informal.

5. UNACCEPTABLE TENDERS

Each Item in the Tender Form shall include a reasonable price for such Item. Under no circumstances will an unbalanced tender be considered. The Authority and the Contract Administrator will be the sole judge of such matters, and should any tender be considered to be unbalanced, then it will be rejected by the Authority.

6. ABILITY AND EXPERIENCE OF TENDERER

The Authority reserves the right to reject any tender where satisfactory evidence of sufficient capital, plant and experience to successfully prosecute and complete the work in the specified time, is not furnished by the Tenderer.

All Contractors and Subcontractors must demonstrate they have a minimum of five (5) years successfully completing the type of work they will be performing under this Contract. Contractors and Subcontractors shall be listed on the form provided in the Tender Form - List of Subcontractors section of the Tender Documents.

In accordance with OPS General Conditions Clause 3.09, the Contractor cannot change subcontractors without prior approval from the Township.

SECTION B - INSTRUCTIONS TO TENDERERS

7. REFERENCES

Bidders are advised that they are required to submit three (3) references on the form provided in the Tender Form section of the Tender Documents. Failure to do so may result in the bid not being accepted by the Township. As requested by the Township, references will be checked by the Contract Administrator or Township during the Tender review process.

8. HARMONIZED SALES TAX (HST)

The Tenderer shall NOT include any amount in his Tender unit prices for the Harmonized Sales Tax. The HST will be shown on each payment certificate and will be paid to the Contractor in addition to the amount certified for payment and will, therefore, not affect the Contract unit prices.

9. EXECUTE CONTRACT DOCUMENTS

Tenders shall be open for acceptance for a period of 60 days after the closing date. After this time the tender may only be accepted with the consent of the successful Tenderer.

The successful Tenderer shall execute the Contract Documents within 10 calendar days of receipt of notification of Acceptance of Tender.

Failure by the successful Tenderer to meet the above requirements will entitle the Authority to cancel the award of the Contract and to retain the tender deposit as compensation for damages sustained due to the successful Tenderer's default. The Authority may then award the Contract to one of the other Tenderers or take such other action as it chooses.

10. COMMENCEMENT OF WORK

The successful Tenderer shall commence work at the site within 7 calendar days of the official commencement date as specified in the written order issued in accordance with GC7.01.02 of the General Conditions.

11. LOCATION

The work is located within the Township of Hamilton at the following location:

The Lander Road Culvert is located on Lander Road, approximately 0.55km west of Burnham Street North.

The culvert is located at coordinates: 44.110590, -78.238637

12. SOILS INFORMATION AND CROSS-SECTIONS

A geotechnical investigation was not completed for this project

SECTION B - INSTRUCTIONS TO TENDERERS

13. TENDERERS TO INVESTIGATE

Tenderers must satisfy themselves by personal examination of the site and by such other means as they may prefer as to the actual conditions and requirements of the work.

The Tenderer shall carefully examine all plans and profiles so that the unit prices tendered are commensurate with the nature of the work.

It shall be the Contractor's responsibility to thoroughly inspect the site of the proposed works, determine the location of any buried or obstructing services and make satisfactory arrangements for interference with such service with the proper jurisdictional agency.

14. INQUIRIES DURING TENDERING

The Tenderer is advised that inquiries regarding the interpretation of the plans or specifications shall be directed by email to the Contract Administrator, G.D. Jewell Engineering Inc., Attention: Chris Bent, (chris@jewelleng.ca). Only written inquiries will be accepted, and shall be submitted no later than 10:00AM on Monday, April 30th, 2018, via email.

15. AWARD OF THE CONTRACT

The award of this Contract is subject to the approval of the Council of the Township of Hamilton.

16. DEFINITION OF OWNER/AUTHORITY AND ENGINEER/CONTRACT ADMINISTRATOR

Wherever the word "Owner" or "Authority" or "Corporation" appears in this Contract, it shall be interpreted as meaning the "Corporation of the Township of Hamilton".

Wherever the word "Ministry", "M.T.C." or "M.T.O" appears it shall be deemed to mean the "Ministry of Transportation, Ontario" or the "Corporation of the Township of Hamilton".

Wherever the word "Contract Administrator" or "Engineer" appears in this Contract it shall be deemed to mean the Consultants, G.D. Jewell Engineering Inc., or such other officers, as may be authorized by the Authority to act in any capacity.

17. ADDENDA

The Contractor shall ensure that all addenda issued during the tendering period are signed and attached as part of the submitted bid. The Contractor must also sign and acknowledge addenda in the space provided on the Form of Tender. Failure to do so may result in the submitted Tender being rejected.

SECTION B - INSTRUCTIONS TO TENDERERS

18. UTILITIES

Plans illustrating proposals for the relocation of utilities are available for inspection at the office of the Contract Administrator.

For additional information regarding existing utilities the Contractor may contact the following personnel:

Union Gas:
Tel: 613-968-6789

Bell Canada:
Tel: 705-876-2234

Township of Hamilton:
Mr. Paul Heffeman
Tel: 905-342-2810

Hydro One:
Tel. 888-871-3514

Cogeco:
Tel: 613-544-6311

19. SCOPE/LIMITS OF WORK

Due to budget constraints, the Township reserves the right to reduce or delete Items in the Contract and/or revise the limits of construction with no adjustment to unit prices. Clause G.C.8.01.02 of the General Conditions is revised in that there will be no additional payment for overhead cost as a result of any reduction of Tender quantities.

20. TENDER OPENING MEETING

The Tender opening meeting is scheduled to take place shortly after the closing time on the closing date at the Township of Hamilton offices, 8285 Majestic Hills Drive, RR4, Cobourg, Ontario, interested bidders are invited to attend.

21. PROVISIONAL ITEMS

After the tender closing the Items in the Itemized Bid noted as being "Provisional" may have quantities modified or may be deleted from the Contract at the sole discretion of the Owner without negotiating with the bidders regardless of the percentage of the Tender the individual or combined "Provisional Items" represent. No consideration for loss of overhead costs will be considered should these Items be deleted from the Contract.

SECTION C - SPECIAL PROVISIONS - GENERAL

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SPECIAL PROVISIONS-GENERAL
CONTRACT NO. PW2018-04

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SECTION C - SPECIAL PROVISIONS - GENERAL

1. PLAN QUANTITY ITEMS

Measurement for payment of the Items designated (P) in the Itemized Bid is by plan quantity, as may be revised by adjusted plan quantity.

2. GUARANTEED MAINTENANCE

Section GC7.16 of the General Conditions is revised in that the Contractor shall guarantee and maintain the entire work called for under this Contract for a period of twenty-four (24) months.

The Contractor shall make good in a permanent manner, satisfactory to the Authority, any and all defects or deficiencies in the work, both during the construction and during the period of maintenance as aforesaid. The Contractor shall commence repairs on any work identified as defective under this clause within 48 hours of receipt of notice from the Authority or the Contract Administrator.

The decision of the Authority and the Contract Administrator shall be final as to the necessity for repairs or for any work to be done under this Section.

3. CONTRACT TIME AND LIQUIDATED DAMAGES

(1) Time

Time shall be the essence of this Contract.

For purposes of this Contract, GC1.04 of the General Conditions is revised, in that Contract Time means the time stipulated herein for Completion of the Work as defined in Clause GC1.06.

(2) Progress of the Work and Contract Time

The Contractor shall mobilize to site and begin work on or before **July 3RD, 2018**.

The Contractor shall accomplish completion of this Contract as defined in GC1.06 of the General Conditions on or before **August 31ST, 2018**.

If the Contract time above specified is not sufficient to permit completion of the work by the Contractor working a normal number of hours each day or week on a single daylight shift basis, it is expected that additional and/or augmented daylight shifts will be required throughout the life of the Contract to the extent deemed necessary by the Contractor to insure that the work will be completed within the Contract time specified. Any additional costs occasioned by compliance with these provisions will be considered to be included in the prices bid for the various Items of work and no additional compensation will be allowed therefore.

(3) Liquidated Damages

It is agreed by the parties to the Contract that in case all the work called for under the Contract is not completed by the date specified, or as extended in accordance with Section GC3.07 of the General Conditions, a loss or damage will be sustained by the Authority. Since it is and will be impracticable and extremely difficult to ascertain and determine the actual loss or damage which the Authority will suffer in the event of and by reason of such delay, the parties hereto agree that the Contractor will pay to the Authority the sum of **ONE THOUSAND DOLLARS (\$1,000.00)** as liquidated damages for each and

SECTION C - SPECIAL PROVISIONS - GENERAL

every calendar day's delay in achieving completion of the work beyond the date prescribed. It is agreed that this amount is an estimate of the actual loss or damage to the Authority which will accrue during the period in excess of the prescribed date for completion.

The Authority may deduct any amount under this paragraph from any moneys that may be due or payable to the Contractor on any account whatsoever. The liquidated damages payable under this paragraph are in addition to and without prejudice to any other remedy, action or other alternative that may be available to the Authority.

4. CONTRACTOR'S AUTHORIZED REPRESENTATIVE

Authorized representative as referenced in GC7.01.10 is defined as an employee of the Contractor.

5. OPS GENERAL CONDITIONS

Wherever in this Contract reference is made to the General Conditions, it shall be interpreted as meaning the OPS General Conditions of Contract, OPSS MUNI 100, November 2006 (Municipal oriented, where applicable).

6. LAYOUT BY CONTRACTOR

Prior to the commencement of any construction layout, the Contractor shall verify the accuracy of all temporary and permanent benchmarks and primary alignment control shown on the Contract Drawings. The Contractor shall also perform random checks on all survey control points and existing centreline road profiles. The Contractor shall provide a Summary Report of all aforementioned checks made to the Contract Administrator prior to the commencement of construction layout. Any discrepancies between the Contract Drawings and field checks shall be reported immediately to the Contract Administrator.

Costs associated with field verification work undertaken by the Contractor shall be included in the Contractor's tender bid.

The Contractor shall be responsible for all layout necessary for construction in full accordance with the provisions of Section GC7.02 "Layout" of the General Conditions of the Contract.

7. PAYMENTS

Except as herein provided, payments under this Contract will be made in accordance with Section GC8.02.03 of the General Conditions.

Notwithstanding the provisions of the General Conditions respecting certification and payment, the Authority may withhold 2-1/2 percent of the total value of work performed beyond the expiration of 46 days from the date of publication of the Certificate of Substantial Performance, to enable the Contract Administrator to produce the final detailed statement of the value of all work done and material furnished under the Contract. As a condition of holdback reduction from 10% to 2-1/2%, the Contractor shall supply a Statutory Declaration as defined in GC8.02.03.07.03(b) and advertise the Certificate of Substantial Performance per GC8.02.03.04.03.

As a condition of Progress Payment Certificate processing, the Contractor must provide a current WSIB Clearance Certificate and a Statutory Declaration in support of each Progress Payment Certificate and an updated project schedule as directed by the Contract Administrator.

SECTION C - SPECIAL PROVISIONS - GENERAL

All interim monthly certificates are not conclusive as to the value or quality of services provided and payment certificates are subject to reopening and readjustment.

The Completion Payment Certificate to include release of the remaining holdback will be issued within 120 days after the date for completion as specified under GC1.06. The date for interest due to late payment shall commence following 180 days after the date of completion of the work.

As a condition of the final holdback payment, the Contractor shall provide the required Property Owner's Releases as specified elsewhere, as appropriate. Acceptance by the company of the final holdback payment shall constitute a waiver of claims by the company against the Municipality, except those previously made in writing in accordance with the Contract and still unsettled.

The Contractor shall include in his price for the publication of the Certificate of Substantial Performance. Publication is mandatory whether Contractor requests Substantial Performance or not.

The Contractor is advised that the Authority may withhold payment on Interim and Holdback Release Certificates up to 30 calendar days from the date of receipt of the executed Payment Certificates.

Payments made hereunder, including final payment shall not relieve the Contractor from its obligations or liabilities under the Contract.

The Authority shall have the right to withhold from any sum otherwise payable to the Contractor such amount as may be sufficient to remedy any defect or deficiency in the work pending correction of it.

The Contractor shall include in his price for the publication of the Certificate of Substantial Performance. Publication is mandatory whether Contractor requests Substantial Performance or not.

8. UTILITIES

Sections GC2.01 and GC7.12 02) of the General Conditions are deleted in their entirety and are replaced by the following:

The Contractor shall be responsible for the protection of all utilities at the job site during the time of construction.

The Authority will be responsible for the relocation of utilities where required. However, no claims will be considered which are based on delays or inconvenience resulting from the relocation not being completed before the start of this Contract.

The location and depth of underground utilities shown on the Contract drawings are based on the investigations made by the Authority. It is, however, the Contractor's responsibility to contact the appropriate agencies for further information in regard to the exact location of all utilities, to exercise the necessary care in construction operations and to take such other precautions as are necessary to safeguard the utilities from damage.

9. HAUL ROADS

When so required by the Contract Administrator, payment for maintenance and restoration of haul roads will be made for the materials provided and the work performed as specified, at tender prices, or at negotiated prices.

SECTION C - SPECIAL PROVISIONS - GENERAL

10. DUST CONTROL

As a part of the work required under Section GC7.06 of the General Conditions, the Contractor shall take such steps as may be required to prevent dust nuisance resulting from his operations either within the right-of-way or elsewhere or by public traffic where it is the Contractor's responsibility to maintain a roadway through the work.

Where the work requires the sawing of asphalt or the sawing or grinding of concrete, blades and grinders of the wet type shall be used together with sufficient water to prevent the incidence of dust, wherever dust would affect traffic or wherever dust would be a nuisance to residents of the area where the work is being carried out.

The cost of all such preventative measures shall be borne by the Contractor.

11. TRAFFIC CONTROL, FLAGGING

Flagging for traffic control on this Contract shall be in conformance with the procedure outlined in OTM Book 7 (Ontario Traffic Manual), and as per the requirements of the Ontario Health and Safety Act Reg. 213/91, Section 69.1.

12. CONTRACTOR'S SUPPLY OF CONSTRUCTION SIGNS

In accordance with Section GC7.07 of the General Conditions, the Contractor is responsible for the supply, erection, maintenance and subsequent removal of all temporary traffic controls, including signs, lights, barricades, delineators, cones, detour signage, etc., required on the work.

Traffic controls shall be provided in general accordance with the latest edition of the "OTM Book 7".

A Traffic Control Plan indicating all traffic signage layout and types in a neat legible manner shall be submitted for approval by the Contract Administrator a minimum of two weeks prior to construction commencement and shall be in accordance with the latest edition of the "OTM Book 7". Revisions to the Traffic Control Plan shall be made to reflect ongoing changes on the project as needed and shall be approved by the Contract Administrator.

Traffic controls shall be operational before work affecting traffic begins.

If required, a minimum of seven (7) TC-67 signs, for each location, shall be supplied and erected by the Contractor at Contract limits with approved text, as directed by the Contract Administrator.

13. MAINTENANCE OF TRAFFIC

The Contractor will be permitted to close streets for short duration to thru traffic only when full depth excavation works are being completed, but must submit a Traffic Control Plan to the Contract Administrator for approval. At all other times, the Contractor may wish to temporarily close one (1) lane of traffic in accordance with the procedures outlined in the latest edition of OTM Book 7 (Ontario Traffic Manual), to facilitate the surface improvements.

Local traffic, to residents within the project limits, shall be maintained at all times.

It is understood that implementation of traffic controls will require ongoing review and adjustment to suit construction operations.

SECTION C - SPECIAL PROVISIONS - GENERAL

No deviation from the above procedure will be allowed except with the approval of the Engineer.

Notwithstanding the preceding, the Contractor shall at all times maintain the roadway surface within the Contract limits in a condition satisfactory to the Engineer and such that any emergency vehicles may have immediate access to any building located within the limits of this Contract. The Contractor shall be responsible for all signing at the Contract limits and within the Contract limits. The Contractor shall ensure the signing is properly maintained while in use. It shall be the Contractor's responsibility to directly notify Police, Fire, Hospital and Ambulance services of road closures at least 24 hours in advance of such closures and to notify these same authorities when such closures are no longer in effect.

It is the responsibility of the Contractor to visit the site to become familiar with existing traffic volumes and patterns. No specific AADT (Average Annual Daily Traffic) is available at this time. However, the Contractor shall take into consideration all traffic into and out of the job site area as will occur during regular working hours.

No claims for delays due to traffic will be considered for compensation.

The Contractor shall be responsible for all detour signing outside Contract limits.

14. EMERGENCY AND MAINTENANCE MEASURES

Whenever the construction site is unattended by the general superintendent, the name, address and telephone number of a responsible official of the contracting firm, shall be given to the Contract Administrator. This official shall be available at all times and have the necessary authority to mobilize workmen and machinery and to take any action as directed by the Contract Administrator in case emergency or maintenance measures are required regardless whether the emergency or requirement for maintenance was caused by the Contractor's negligence, act of God, or any cause whatsoever.

Should the Contractor be unable to carry out immediate remedial measures required, the Authority will carry out the necessary repairs, the costs for which shall be charged to the Contractor.

15. MANAGEMENT AND DISPOSAL OF EXCESS MATERIAL

The requirements of OPSS 180 shall apply to this Contract, revised as follows:

- .1 Section 180.03, Definitions, shall be amended by the addition of the following:

Work area: means the road allowance, right-of-way, and property with a boundary common to the road allowance or right-of-way within the Contract limits.

- .2 Subsection 180.07.02, Conditions on Management by Re-Use, shall be amended by the addition of the following:

Recycled hot mix asphalt or excess bituminous pavement shall not be used as trench backfill or bedding.

The Contractor shall be responsible for obtaining a copy of applicable Form Nos. OPSF 180, OPSF 180-1, OPSF 180-2, 180-3, 180-4 and OPSF 180-5 for use where appropriate with respect to disposal of excess material.

If disposal of Material is within Township limits, the Contractor is required to have the property owner get a Township Fill Permit.

SECTION C - SPECIAL PROVISIONS - GENERAL

16. OCCUPATIONAL HEALTH AND SAFETY ACT 1991 - DESIGNATED SUBSTANCES

In accordance with the requirements of Part III 30.(1) of the Occupational Health and Safety Act, the Authority has determined that the designated substances as listed hereunder are present on any of the site within the limits of this Contract.

Designated Substance	Identified on this Site	Location
Acrylonitrile	Not Tested	
Arsenic	Not Tested	
Asbestos	Not Tested	
Benzene	Not Tested	
Coke Oven Emissions	Not Tested	
Ethylene Oxide	Not Tested	
Isocyanates	Not Tested	
Lead	Not Tested	
Mercury	Not Tested	
Silica	Not Tested	
Vinyl Chloride	Not Tested	

It is the responsibility of the Contractor to ensure that all sub-contractors performing work under this Contract have received a copy of this specification, where Designated Substances are identified as being present at the site of the work.

The Contractor shall comply with the governing Ministry of Labour Regulations respecting protection of workers, removal, handling and disposition of the Designated Substances encountered on this Contract.

Prior to commencement of this work, the Contractor shall provide written notification to the Ministry of the Environment at 300 Water Street, Peterborough, Ontario, K9J 8M5, of the location(s) proposed for disposal of Designated Substances. A copy of the notification shall be provided to the Contract Administrator a minimum of two weeks in advance of work starting.

In the event that the Ministry of the Environment has concerns with any proposed disposal location, further notification shall be provided until the Ministry of the Environment's concerns have been addressed.

All costs associated with the removal and disposition of Designated Substances herein identified, shall be deemed to be included in the appropriate tender Items.

Should a Designated Substance not herein identified be encountered in the work, then management of such substance shall be treated as Extra Work.

The requirements of Section GC4.03 of the General Conditions of the Contract shall apply.

SECTION C - SPECIAL PROVISIONS - GENERAL

17. WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM (WHMIS)

Reporting

Section GC4.03.06 is deleted and replaced with the following:

Prior to the commencement of work the Contractor shall provide, to the Contract Administrator, a list of those products controlled under WHMIS which he expects to use on this Contract. Related Material Safety Data Sheets shall accompany the submission. All containers used in the application of products controlled under WHMIS shall be labeled.

The Contractor shall notify the Contract Administrator of changes to the list in writing and provide the relevant Material Safety Data Sheets.

18. SPILLS REPORTING

Spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants that are a result of the Contractor's operations that cause or are likely to cause adverse effects shall forthwith be reported to the Contract Administrator. Such spills or discharges and their adverse effects shall be as defined in the Environmental Protection Act R.S.O. 1980.

All spills or discharges of liquid, other than accumulated rain water, from luminaires, internally illuminated signs, lamps, and liquid type transformers under the control of the Contractor, and all spills or discharges from this equipment that are a result of the Contractor's operations shall, unless otherwise indicated in the Contract, be assumed to contain PCB's and shall forthwith be reported to the Contract Administrator.

This reporting will not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.

19. PROTECTION OF WATER QUALITY

At all times, the Contractor shall maintain existing stream flows and shall control all construction work so as not to allow sediment or other deleterious materials to enter streams.

No waste or surplus organic material including topsoil is to be stored or disposed of within 30 metres of any watercourses. Run-off from excavation piles will not be permitted to drain directly into watercourses but shall be diffused onto vegetative areas a minimum of 30 metres from the watercourse. Where this measure is not sufficient or feasible to control sediment entering the watercourses, sedimentation traps or geotextile coverage will be required.

If dewatering is required, the water shall be pumped into a sedimentation pond or diffused onto vegetated areas a minimum of 30 metres from the watercourses and not pumped directly into the watercourses.

No machinery shall enter the creek bed of any watercourse. Movement of construction equipment in the vicinity of any creeks shall be limited to the minimum required for construction.

The Contractor shall not carry out equipment maintenance or refueling or store fuel containers within 100 metres of any watercourse. The Contractor shall not stockpile construction debris or empty fuel/pesticide containers within the Contract limits.

SECTION C - SPECIAL PROVISIONS - GENERAL

20. ENVIRONMENTAL PROTECTION PLAN

The Contractor's attention is drawn to the following environmental protection requirements, which will impact construction activities within or in close proximity to all bodies of water. These measures are in addition or complimentary to the works included for erosion and sediment control under other Items in the Tender.

- Sediment and erosion control Items included in this Contract shall be implemented prior to any other construction in the vicinity of any watercourses, in order to prevent any sediment from entering the watercourse (including soil from exposed banks) and to prevent any downstream transport of re-suspended sediment. All disturbed areas shall be stabilized upon completion of works or attainment of final grades.
- Temporary erosion and sedimentation works should be maintained until vegetation has been re-established to a sufficient degree so as to provide adequate protection to disturbed work areas.
- All sediment traps, check dams and silt fence will be cleaned, as a minimum, when they are 50% filled. Maintenance of these devices is essential. Lack of co-operation on the part of the Contractor will be considered as a major violation to the Plan and the Contract and will result in a shutdown of the project operations until maintenance is performed to the Engineer's satisfaction.
- All disturbed areas shall be topsoiled (if necessary) and re-vegetated immediately after final grading is completed.
- Construction procedures and handling/storage of toxic materials shall conform to Ontario Ministry of the Environment regulations.
- Stockpile or spoil materials shall be prevented from entering any watercourse. No grading or concrete pours shall occur over or close to the water without adequate barrier measures in place beforehand. The Contractor shall advise the Engineer in advance of placement of any stockpiled material so that the Engineer can determine what protective measure, if any, are necessary.
- Any in-water works (i.e. channel tie-ins, pumping, etc.) will only be permitted during the period from July 1 to September 15.
- All activities, including maintenance procedures, must be controlled to prevent the entry of petroleum product, silt, debris, rubble, concrete or other deleterious substances into the watercourse. Vehicular refueling and maintenance, including the storage of fuel containers, must be conducted 30 m away from the watercourse banks.
- Maintenance of all proposed vegetation, once established, will be a critical component of the Contract during the guarantee period. All temporary erosion and sediment control structures constructed (except dewatering traps) will remain in place during this period unless the Engineer requests their removal. Prior to the end of the guarantee period, if all vegetation has established successfully, these measures shall be removed (upon notification by the Engineer) as noted under their particular Items in the Special Provisions - Tender Items.
- All dewatering discharges must be directed to a dewatering trap. Materials from the excavation of the trap shall be removed from the site or controlled as the Engineer directs. The Contractor shall be wholly responsible for the adequate design and maintenance of the dewatering system (i.e., pumps, cofferdams, etc.). The design will be subject to the review and approval of the Engineer before any work proceeds.

SECTION C - SPECIAL PROVISIONS - GENERAL

- Maintain continuous and uninterrupted flow downstream of the construction site. Extreme reduction in stream discharge and water level above and below the site must be avoided.
- No machinery shall enter the creek bed of any watercourse. Movement of construction equipment in the vicinity of watercourses shall be limited to the minimum required for construction.
- All construction work in areas which in the Engineer's opinion may have adverse effects on the watercourse shall be monitored by a designated representative of the Contractor to ensure compliance with the Plan.
- All clauses pertaining to the construction/placement of erosion and sediment controls in the Special Provisions-General and the Contract Items, will form an integral part of the project Environmental Protection Plan.

21. TRAFFIC AND STREET SIGNS

The Contractor will be responsible for the removal and salvage of existing traffic and street signs and mailboxes the Contractor shall be responsible for re-erection, following completion of contract items that will affect the placement of the signs/mailboxes.

Scheduling for sign removal shall be as approved in advance by the Contract Administrator.

Regulatory signs such as "Stop" and "Yield" must be maintained throughout.

22. GARBAGE COLLECTION

The Contractor will be responsible for ensuring that garbage collection, including recyclables, is maintained and when necessary, the Contractor shall make arrangements directly with the collecting agency, to permit and coordinate pick-up.

23. PREPARATION AND POSTING OF REQUIREMENTS FOR WORK IN CONFINED SPACES

Clause GC7.01.06 of the OPS General Conditions of Contract is amended by the addition of the following:

Detailed written procedures addressing the confined space requirements of the Occupational Health and Safety Act and Ontario Regulations for Construction Projects, Ontario Regulation 213/91, shall be clearly posted at the project site and available to all personnel, including the Contractor's workers, Authority staff, Contract Administrator, and Ministry of Labour inspectors.

The procedures must include the rescue procedures to be followed during a rescue or evacuation of all personnel from an unsafe condition or in the event of personal injury.

The Contractor shall have personnel trained in rescue procedures readily available on site.

24. CONFINED SPACE ENTRY

Without relieving the Contractor of his responsibilities under the Occupational Health and Safety Act the Contractor shall be responsible for the supply of personal protective equipment for the use of the Contract Administrator, in connection with confined space entry while the Contractor is operating on site.

SECTION C - SPECIAL PROVISIONS – GENERAL

The following equipment shall be made available on request:

- Mechanical Ventilation Equipment
- Gloves
- Gas Detector (C95-80)
- Full body harness securely attached to a rope
- Rope
- Gas mask or dust, mist or fume respirator (optional)
- 30 minute self-contained breathing apparatus (need not be worn but, if required, be readily available to supply air for instant egress)
- 7 minute Escape Pack
- Explosion-proof temporary lighting
- Adequate clothing to ensure protection against abrasions and contamination.

In addition the Contractor shall provide a competent person who shall inspect all safety equipment prior to use to ensure that it is in good working order and appropriate for the task at hand.

25. ENTRY ONTO PRIVATE PROPERTY

The Contractor shall not enter private property or property which is to be acquired to construct the works without the prior consent of the Contract Administrator. This requirement will be strictly enforced.

26. STORAGE AREAS

Clause GC3.06.01 of the General Conditions of Contract is amended by the addition of the following:

The use of the road right-of-way as a long term storage area is not allowed under this Contract. The storage of materials and movement of equipment will only be allowed for normally accepted construction practices.

27. GENERAL LIABILITY INSURANCE

The Contractor shall provide General Liability Insurance in accordance with Clause GC6.03.02.01 of the General Conditions of the Contract. The Corporation of the Township of Hamilton and G.D. Jewell Engineering Inc. shall be named as additional insureds.

28. CONSTRUCTION LIEN ACT

The Contractor shall give the Authority notice in writing, immediately, of all lien claims or potential lien claims coming to the knowledge of the Contractor or his agents.

When a claim for lien is filed by a sub-contractor, labour or material supplier or equipment renter acting under the Contractor, and proceedings are commenced by the Authority to vacate the lien, the Contractor agrees and shall forthwith pay to the Authority, in addition to their reasonable legal fees therefore, all interest costs and expenses incurred by the Authority and an additional sum equal to ten percent (10%) of the sum found to be owing as liquidated damages, and such remedy shall be in addition to any other remedy available to the Authority under the Contract Documents.

SECTION C - SPECIAL PROVISIONS – GENERAL

Where any lien claimant asks from the Authority the production for inspection of the Contract Documents or the state of the accounts between the Authority and the Contractor, the Contractor shall be liable for an administration fee of Two Hundred Dollars (\$200.00) for each request made as compensation for the preparation of such accounting or for the preparation of the Contract, or both, as the case may be, and the Contractor acknowledges that such administrative fee shall be properly deductible, if the Authority should so choose, from monies otherwise payable to the Contractor under the terms of the Contract Documents.

Where an application is brought to a judge of a competent jurisdiction to compel production of any particular document to a lien claimant, the Contractor further agrees to indemnify the Authority from reasonable legal fees incurred in appearing on such an application and in addition agrees to pay to the Authority its reasonable costs incurred in producing such documents to the extent that the same is made necessary under the disposition of the matter by such judge, and the Contractor further agrees that such reasonable costs and fees incurred by the Authority as stated herein may be properly deductible from monies otherwise payable to the Contractor under the terms of the Contract Documents.

29. VARIATIONS IN TENDER QUANTITIES

Clause GC.8.01.02 (b) of the General Conditions of Contract is amended as follows:

The last sentence beginning “Alternatively” and ending “paid” is deleted and replaced by “The Municipality shall not be liable to the Company for loss of anticipated profit”.

30. PROPERTY OWNER CLAIMS DURING CONSTRUCTION

The Contractor shall be the primary contact for claims made by homeowners and other property owners within the project limits during construction processes. The Contractor shall inform the Contract Administrator of said claims, immediately upon receipt. The Contractor shall inform the Township, in writing, their intentions with regard to resolution of said claim within twenty-four (24) hours of receipt.

If it is deemed by the Township that the Contractor is not adequately providing and/or retaining the services to resolve a claim by homeowners within the project limits during construction, the Township may elect to holdback sufficient funds to resolve the claim. All claims, negotiations, and/or mediation completed under this Contract, including Arbitration, shall be completed in Accordance with clauses and subclauses of GC 3.13 and 3.14 of the General Conditions of Contract

The application of this clause shall not make the Township or Contract Administrator liable in any way for subsequent performance, and in no way relieves the Contractor from his continuing responsibilities in accordance with this Contract.

31. GROUND AND SURFACE WATER

The contractor shall be responsible for handling of all ground and surface water during construction.

SECTION C - SPECIAL PROVISIONS – GENERAL

32. PROPERTY OWNER’S RELEASE OF PRIVATELY OWNED LAND USED BY THE CONTRACTOR

Upon completion of the Contract, the Contractor shall provide the Authority with two (2) copies of a form of release signed by each property owner, upon whose land he has entered for purposes associated with the Contractor’s operations but not for the purpose of undertaking works stipulated in the Contract:

Date

To: **Mr. Paul Heffernan**
Manager of Operational Support & Infrastructure
Corporation of the Township of Hamilton
8285 Majestic Hills Drive, P.O. Box 1060
COBOURG, Ontario. K9A 4W5

Re: Contract No. PW2018-04

Dear Sir:

I hereby certify that _____
(Name of Contractor)

have fulfilled the terms of our agreement and have left my property in a satisfactory condition.

I have accepted their final payment and release _____
(Name of Contractor)

and the Corporation of the Township of Hamilton from further obligations.

Yours very truly,

.....
Signature

Property Owner’s Name.....Lot.....Concession.....

Township of
(Please complete above in printing)

Final payment will not be released to the Contractor until all the applicable forms of release have been signed by the property owners and received by the Authority.

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

Special Provision No A1	
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ITEM A1 **MOBILIZATION / DEMOBILIZATION**

Scope

Payment at the Contract Price for the above tender item shall be full compensation for all labour, equipment, and material required to do the following work:

- Mobilization including set up of appropriate sanitary facilities and secure work areas, transportation of equipment;
- Provision of insurance;
- Providing an initial construction schedule and updating it on a bi-weekly basis;
- Site security;
- Stakeout of existing utilities and services;
- Communications with property owners;
- Attendance at preconstruction and all site meetings;
- Demobilization removal of equipment, materials etc.

Partial payments will be made on the following basis:

- 60% of the tender amount will be paid upon providing satisfactory proof insurance, mobilization and providing an initial construction schedule.

The remaining 40% will be paid at the completion of the project.

Special Provision No. A2	
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ITEM A2 **STREAM PROTECTION**

Scope

Under this item the Contractor is required to supply and install all labour, equipment, and materials for the protection of the watercourse, its water quality and fish habitat during the project. Installation, maintenance and removal of the mitigation measures listed below, as necessary to achieve this protection, are required:

- Heavy Duty Silt Fence Barriers as per OPSD 219.130
- Straw Bale Flow Checks as per OPSD 219.180
- Temporary Rock Flow Checks as per OPSD 219.210
- Turbidity Curtains as per OPSD 219.260 and 219.261

In addition, this item shall include, but is not limited to:

- Restoration of the water body and water body banks to conditions existing at commencement of construction or as otherwise specified on the drawings;
- Provide all protection measures to ensure that no deleterious material from any operation enters the water course with particular concern for demolition debris and sediment from runoff;
- No refuelling of vehicles, equipment, etc. or storage of fuel is to take place within 30m of a watercourse;
- Stationary equipment operating within 30m of the watercourse shall have hydrocarbon spill containment measures in place;
- Disturbed areas at the construction site are to be stabilized and re-vegetated after completion of the project and the site is to be restored to a pre-construction state or better

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

The Contractor will be required to contain all debris from entering the water. No in-water work is permitted between March 15th and June 30th, or after September 15th, of any given year. The Contractor shall submit an environmental protection plan, subject to the approval of the Contract Administrator, prior to commencing the work.

Basis of Payment

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and material required to do the work:

Payment for this item shall be made as follows:

- a. 50% upon installation of water course protection measures;
- b. 30% for maintenance prorated over construction period;
- c. 20% for removal of all water course protection measures and restoration of site to pre-construction state or better

Special Provision No. A3	
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ITEM A3

QUALITY CONTROL TESTING

Basis of Payment

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and materials required to perform all inspection and testing by a qualified geotechnical firm approved by the Contract Administrator as specified in the Contract Documents. This includes, but is not necessarily limited to the following:

- Testing of granular materials and on site materials to be used as fill, including sieve testing of granular materials;
- Compaction testing of backfill granular materials, placed in the Work;
- Testing as required to ensure that cement and aggregates used in concrete production meet the specifications;
- Required testing to ensure concrete can be produced by the concrete supplier as specified;
- Testing of concrete placed in the structure for Compressive Strength, Air Content and Slump in accordance with OPSS 904.

Payment at the Contract Price for this item shall also include all costs required to submit the Certificates of Conformance as specified in the Contract Documents.

Special Provision No. A4	
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ITEM A4

TRAFFIC CONTROL

Scope

Under this item, the Contractor shall supply and maintain all temporary signing, flagging, traffic and pedestrian protection as per the Ontario Traffic Manual Book 7 for the project including the signage required for the road closure for the culvert extensions, including all detour signage. The Contractor will be responsible for the detour signage as per the Ontario Traffic Manual Book 7.

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

The Contractor will be responsible for the signing of the detour route. The detour route must be signed in each direction. Detour route shall be via County Road 18 to County Road 9.

The Contractor shall provide and install a minimum of four (4) project information TC-67 signs with wording and locations to be approved by the Consultant.

Access is to be provided to the properties near the limits of the Work at all times with all signage provided by the Contractor.

The Contractor shall be required to install two (2) Contractor identification signs, as directed by the Consultant. Each sign shall include the Contractors name and phone number. The removal and restoration of all traffic control devices forms part of this item.

The Contractor's signage scheme and detour route scheme must be submitted to the Consultant for review and approval a minimum of fifteen (15) days prior to commencement of the project.

Included under this item shall also be all labour, equipment and material required to notify in writing all emergency services, school boards, garbage collection, and recycling services of the closure. The Contractor shall provide a copy of the notification for review a minimum of fifteen (15) days prior to closing the roadway.

Included under this item shall be all necessary fencing, signage, etc, to close off the road to traffic and pedestrians. Contractor must remain on call during evenings, weekends, holidays, etc, to maintain fences, signage etc.

Special Provision No. B1	
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ITEM B1 **REMOVAL OF BITUMINOUS MATERIAL**

Scope

Under this item the Contractor will be required to remove and dispose of the existing surface treatment material, full depth, as defined on the contract drawings. This item shall be paid by square metre regardless of the depth removed. The limits of removal may be extended at the Consultant's discretion.

All material shall be disposed of off-site at a location approved by the Township of Hamilton to receive such material.

All costs associated with complying with this item shall be borne by the Contractor.

Special Provision No. B2	
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ITEM B2 **ROADWAY EARTH EXCAVATION/GRADING**

Scope

Under this item the Contractor shall supply all labour, materials, and equipment required to complete all earth excavation/grading to allow for the installation of the new roadway structure, as per the Contract Drawings. This shall include the removal of any unsuitable materials from the road base.

This shall include the removal of all material to install the minimum depths of Granular A and Granular B Type II, and the benching of slopes as per OPSD 208.010.

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

All surplus material shall be disposed of off-site by the contractor at his expense.

Special Provision No. B3	
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ITEM B3 **GRANULAR A (ROADWAY)**

Scope

Under this item the Contractor will be required to supply, place and compact a minimum compacted depth of 150mm of Granular "A" material for component base construction, as necessary to provide the final roadway platform to the designated profile grades as detailed on the Contract Drawings. All water required for compaction and dust control shall be included under this item.

It shall be the Contractor's responsibility to engage an independent certified laboratory to complete all testing of materials in accordance with OPSS and as directed by the engineer. The engineer must be supplied with certification and compaction test results from the designated geotechnical firm that the compaction of Granular "A" meets OPS Specifications prior to the placement of the base course asphalt.

Compaction testing of Granular "A" shall be paid under the item Quality Control Testing.

Special Provision No. B4	
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ITEM B4 **ROCK PROTECTION**

Under this item the Contractor shall supply and install a minimum depth of 600mm of rock protection on Class II geotextile. The supply and installation of geotextile shall be included under this item. The rock shall be placed at the inlet and outlets of the culvert, as well as in the bottoms of the CSP extensions, as directed by the Consultant.

The rock protection shall have a D50 of 300mm and the following gradation:

Percentage Passing	Diameter (in mm)	Stone Weight (kg)
100%	450	130
80%	350	70
50%	300	40
20%	200	10

The rock shall be a mix of various rock, broken rock, cobbles, and boulders with gradation as specified above. The rock provided shall be clean and free of fine material.

Rock protection shall be placed in a random but stable manner. Where rock protection is to be placed on a slope, the placing shall commence at the lower end of the slope.

The Contractor, at his expense, shall complete all excavation and disposal of material required to complete the work detailed as part of this item.

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

Special Provision No. C1	
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ITEM C1	CONCRETE REMOVAL – FULL DEPTH
ITEM C2	CONCRETE REMOVAL - PARTIAL DEPTH, TYPE C

The disposal of the excess materials off-site is to be included in the applicable unit price.

928.07.03.03.01 General

Section 928.07.03.03.01 of OPSS 928 is amended as follows:

Removals shall be as shown on the contract drawings. A visual and delamination survey shall be completed by the contract administrator to confirm the extent of removals and if additional removal areas are required.

928.10 BASIS OF PAYMENT

Section 918.10 of OPSS 928 is deleted in its entirety and replaced with the following:

928.10.01 Concrete Removal – Full Depth - Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, equipment and materials to do the following work:

- Removal of the deck top and headwall/curb of the existing concrete culvert to the limits as shown in the Contract Drawings;
- Roughening/scarifying of existing concrete surfacing to receive new concrete against.

928.10.02 Concrete Removal – Partial Depth, Type C

Payment at the Contract price for the above tender items shall be full compensation for all labour, equipment and materials to do the following work:

- Removal of deteriorated concrete from the existing culvert walls as shown in the Contract Drawings and as determined by the Contract Administrator;

Special Provision No. C2	
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ITEM C4	EARTH EXCAVATION FOR STRUCTURE
ITEM C5	ROCK EXCAVATION FOR STRUCTURE

902.02 REFERENCES

Section 902.02 of OPSS 902, December, 1983, is amended by the addition of the following:

OPSS 510

902.03 DEFINITIONS

Section 902.03 of OPSS 902, December 1983, is amended by the addition of the following:

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

Quality Verification Engineer: means an Engineer with a minimum of five (5) years' experience related to excavation and backfilling of structures, or alternatively has demonstrated expertise by providing satisfactory quality verification services for the work at a minimum of two (2) projects of similar scope to the Contract. The Quality Verification Engineer shall be retained by the Contractor to certify that the work is in general conformance with the contract documents and issue the certificate(s) of conformance.

902.04 SUBMISSION AND DESIGN REQUIREMENTS

Section 902.04 of OPSS 902, December, 1983, is deleted and replaced with the following:

902.04.01 Site Survey

Prior to commencing the work, the Contractor shall submit to the Consultant a condition survey of property and structures that may be affected by the work. The survey shall include, but not be limited to, the locations and conditions of adjacent properties, buildings, underground structures, utility services and structures such as walls abutting the site.

902.04.02 Working Drawings

Working drawings for protection systems shall be according to OPSS 539.

Where unwatering is required, the Contractor shall be responsible for the design of the unwatering scheme for the intended purpose. The design of temporary structures or protection system for unwatering shall be according to OPSS 539.

902.05.04 Protection System

Section 902.05 of OPSS 902, December, 1983, is amended by the addition of the following:
Protection systems shall be according to OPSS 539.

902.07.01 Protection Schemes

Subsection 902.07.01 of OPSS 902, December, 1983, is amended by replacing the word "Engineer" in the last paragraph with the words "Consultant".

902.07.02 Excavation

Subsection 902.07.02 of OPSS 902, December, 1983, is deleted and replaced with the following:

902.07.02.01 General

For excavation, the Contractor shall be responsible for preventing any deterioration of the foundation soil or rock, surface water from entering and eroding the face of the excavation, and build up of hydrostatic pressures which may have harmful effects upon the temporary or permanent structures.

902.07.02.02 Excavation for Foundation

The excavation for foundation shall be inspected and approved by the Quality Verification Engineer prior to the installation of mass concrete and granular bedding. Immediately after the inspection and prior to commencement of subsequent activity, a certificate of conformance stating that the work is in general conformance with the contract documents shall be issued by the Quality Verification Engineer and shall be submitted to the Contract Administrator. The certificate of conformance shall bear the seal of the Quality Verification Engineer. All costs associated with the Certificate of Conformance shall be included under the item, *Quality Control Testing*.

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

The Contractor shall be responsible for maintaining the stability of the excavation if any excavation below stream or channel bed is carried out.

The Contractor shall be responsible for restoring the over excavated area to its original conditions.

In the event that bedrock is encountered, a maximum width of 500mm from each vertical face of the footings/limits of granular bedding to the bedrock, and a maximum depth of 200mm from the underside of the footings and bedding, will be paid under the *Rock Excavation* item. Any excavation beyond these limits will be deemed as over excavation and shall be filled with mass concrete or native material at the Contractor's expense.

902.07.02.03 Excavation for Backfill and Frost Tapers

Excavation for backfill and frost tapers shall be carried out in accordance with the Contract Drawings. The Contractor shall be responsible for restoring the over excavated portion with backfill and shall be compacted according to OPSS 501.

902.09 MEASUREMENT FOR PAYMENT

902.09.01 Structures

Subsection 902.09.01 of OPSS 902, is deleted and replaced by the following:

"Earth Excavation for Structure" applies to the specific structure designated, and is measured by Lump Sum quantity.

902.10 BASIS FOR PAYMENT

**902.10.01 Rock Excavation for Structure - Item
Earth Excavation for Structure - Item**

Subsection 902.10.01 of OPSS 902 is deleted and replaced with the following:

Payment at the contract price for the tender item "Earth Excavation for Structure" and "Rock Excavation for Structure" shall be full compensation for all labour, equipment and material for all excavation required for the structure excavation, excavation for frost tapers as per OPSD 3101.150, protection of adjacent works, placing and compacting material in fill in accordance with OPSS 206 and management of any surplus or unsuitable excavated material, including the cost of disposal areas, all according to the requirements of this specification. In addition, the placement of native materials on the stream face of the abutments to the existing ground elevations shall be included under this item.

Any over excavation in the bedrock shall be backfilled with 30MPa concrete at the Contractors expense.

All costs associated with providing the required Certificate of Conformance for the excavation for the foundation shall be included under the item, *Quality Control Testing*.

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

Special Provision No. C3	
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ITEM C5

DEWATERING STRUCTURE EXCAVATIONS

902.07.06 Dewatering Structure Excavation

Subsection 902.07.03 of OPSS 902 is amended by addition of the following:

The Contractor shall be wholly responsible for the adequacy of his method of dewatering. Water from dewatering operations shall be discharged in a manner that will minimize siltation of the watercourse utilizing sediment traps.

The Contractor is advised that as per the province's Water Takings EASR Regulations and Exemptions presentation dated March 2016, this project is not subject to a Permit to Take Water (PTTW) or an EASR, provided that water is controlled by an active in-stream diversion for construction. The proposed dewatering plan must meet the following conditions to comply with the exemption from Section 34 of the Ontario Water Resources Act:

- Water being diverted is being returned directly to the same waterbody;
- The water contains no visible contaminants;
- Erosion and sediment control measures are installed and properly used;
- The water taking and discharge flow rate is controlled to ensure no downstream or upstream impacts relating to quality and quantity of water.

Controlling the water with an approach that does not meet the above-noted criteria is a possibility, however, the Contractor would be responsible with meeting the reporting and submission requirements of the Ontario Water Resources Act.

Prior to commencement of work, the Contractor shall submit a dewatering plan to the Contract Administrator (CA) for their review. The design and effectiveness of the dewatering and stream protection plan is the responsibility of the Contractor. The Contractor will be required to contain all debris from entering the water. No in-water work is permitted between March 15th and June 30th, or after September 15th, of any calendar year. The Contractor will not be permitted to proceed with the installation of the dewatering plan until approved by the CA.

The Contractor shall carry out all work necessary to prevent disturbance to the founding material. Concrete shall be placed in the dry, unless otherwise specified in the contract.

902.09 MEASUREMENT FOR PAYMENT

Section 902.09 of OPSS 902 is amended by the addition of the following.

902.09.03 Non-Measurement

902.09.04 Dewatering Structure Excavations

There will be no measurement for the above item when designated in the tender as Lump Sum.

902.10 BASIS OF PAYMENT

Section 902.10.02 of OPSS 902 is deleted in its entirety and replaced with the following:

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

902.10.02 Dewatering Structure Excavations

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and material required to place the new structure and granular backfill in the dry.

For payment purposes, 50% of the work under this item is completed when the dewatering method is installed and proved effective. A further 25% will be paid upon the installation of the structure. The remaining 25% will be paid upon the removal of the dewatering method and the restoration of the embankments to the conditions that existed prior to construction.

Special Provision No. C4	
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ITEM C6 GRANULAR A BEDDING

Scope

Included under this item shall be the supply and installation of quarried Granular A bedding material to be installed below the CSPA pipe extensions, as shown in the Contract Drawings.

The Granular A bedding shall be placed in lifts not exceeding 300mm and shall be compacted to 100% SPMDD. The Contractor will be required to place all bedding materials in the dry.

Be advised the excavation for foundation shall be inspected and approved by the Quality Verification Engineer prior to the installation of the mass footing and granular bedding. Immediately after the inspection and prior to commencement of subsequent activity, a certificate of conformance stating that the work is in general conformance with the contract documents shall be issued by the Quality Verification Engineer and shall be submitted to the Contract Administrator. The certificate of conformance shall bear the seal of the Quality Verification Engineer. All costs associated with the Certificate of Conformance shall be included under the item, *Quality Control Testing*.

Special Provision No. C5	
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ITEM C7	MASS CONCRETE
ITEM C8	CONCRETE IN FOOTINGS
ITEM C9	CONCRETE IN SUBSTRUCTURE
ITEM C10	CONCRETE IN STRUCTURE
ITEM C11	CONCRETE IN WINGWALLS

904.07 CONSTRUCTION

904.07.03.15 Field Sampling and Testing of Concrete

904.07.03.15.01 General

Section 904.07.03.15.01 of OPSS 904 is amended by addition of the following:

All costs related to on-site sampling and subsequent testing of concrete in accordance with the requirements of this specification shall be included under the item *Quality Control Testing*. The Contractor shall provide the Contract Administrator with original copies of all test reports.

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

The Contractor shall be responsible for ensuring only concrete that is in accordance with the submitted mix design, and which meets the specification requirements for air content, slump, temperature and delivery time, is included in the work.

904.08 QUALITY ASSURANCE

Section 904.08 of OPSS 904 is deleted and replaced by the following:

904.08.01 General

The Contractor will perform all tests as specified.

Strength testing of field or laboratory cured cylinders and all other tests shall be in conformance with OPSS 1350.

904.08.02 Acceptance

The determination of strength, yield, uniformity, slump, temperature and air content of the concrete shall be in conformance with OPSS 1350.

904.10 BASIS OF PAYMENT

Section 904.10 of OPSS 904 is deleted in its entirety and replaced with the following:

904.10.01 Mass Concrete

Payment at the contract price for this tender item shall be full compensation for all labour, equipment, and material required to do the following work:

- Construct the mass concrete leveling pads as detailed in the Contract Drawings;
- Provide any hot or cold weather concrete protective measures as required.

904.10.02 Concrete in Footings

Payment at the contract price for this tender item shall be full compensation for all labour, equipment, and material required to do the following work:

- Construct the footings as detailed in the Contract Drawings;
- Provide any hot or cold weather concrete protective measures as required.

904.10.03 Concrete in Substructure

Payment at the contract price for this tender item shall be full compensation for all labour, equipment, and material required to do the following work:

- Construct the concrete below the culvert invert as specified in the Contract Drawings;
- Provide any hot or cold weather protection measures as required.

904.10.04 Concrete in Structure

Payment at the contract price for this tender item shall be full compensation for all labour, equipment, and material required to do the following work:

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

929.10 BASIS OF PAYMENT

Abrasive Blast Cleaning of Reinforcing Steel - Item

Subsection 929.10.01 is amended by the addition of the following:

When the contract does not contain a separate tender item for providing access to the work, the contract price for the abrasive blast cleaning items requiring the access shall include full compensation for all labour, equipment and materials to provide such access.

Special Provision No. C7	
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ITEM C13 DOWELS INTO CONCRETE

904.07.10 Dowels into Concrete and into Rock

Section 904.07.10 of OPSS 904 is modified by addition of the following.

Dowels into concrete shall be anchored using HILTI HIT HY150 MAX adhesive. Holes shall be hammer drilled holes using carbide bits, to the depth, diameters and spacing as specified on the contract drawings. After installation, anchors are to be left undisturbed for the curing time as recommended by the manufacturer of the adhesive.

Section 904.10.02 of OPSS 904 is deleted in its entirety and replaced with the following:

904.10.02 Dowels into Concrete and into Rock

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and material to do the following work:

- Drill and place dowels as detailed on the Contract Drawings.

Supply of the dowels is not included in this but is to be included as part of the supply of reinforcing steel.

Special Provision No. C8	
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ITEM C14

REINFORCING STEEL BAR

905.05 MATERIALS

905.05.01 Steel Reinforcement

Steel reinforcement shall be according to OPSS 1440.

Reinforcement steel shall be produced by a manufacturer approved by the Owner.

The imperial and soft-converted metric bar size substitutions for metric bar sizes shown in Table 2 will be permitted on a one-for-one basis without adjustment.

Other imperial and soft-converted metric reinforcing stainless steel bar sizes may be substituted for metric bar sizes, subject to the following:

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

a) The area of substituted steel reinforcement for the concrete component per linear metre or per gross cross-section area, as applicable, shall not be less than that shown for the concrete component on the Contract Documents.

b) The spacing of substituted steel reinforcement for the concrete component shall be according to CAN/CSA-S6 and the Structural Manual.

Nominal cross-sectional areas of metric and imperial bar sizes used for determining substitutions shall be according to ASTM A 955M and CAN/CSA G30.18, respectively.

Reinforcing stainless steel bars, stainless steel spirals, and stainless steel spiral spacers shall be of a stainless steel type specified in Table 1.

Special Provision No. C9	
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ITEM C15 **2440 x 1750mm Ø CSPA CULVERT**

Under this item the Contractor shall supply and install the CSPA Pipe Culvert in the designated dimensions, thickness and lengths. The designated thickness shall be 3.5mm thickness, with a 152mm x 51mm corrugation profile.

All excavation to complete the installation and inlet and outlet cleanout shall be deemed to be included under this tender item. Culvert installation grades are to be installed as per the elevations shown the Contract Drawings.

Should rock be encountered, rock excavation shall be completed and compensated under Item C4, Rock Excavation.

Any dewatering required for the culvert extension installations shall be the responsibility of the Contractor and shall be included under Item C5.

Paid under Item B4, Rock Protection, the new culvert extensions shall have the bottom portion of the culvert lined with hand placed rip rap as shown in the Contract Drawings.

Also deemed under this item is the supply and installation of one (1) CSP coupling band to extend the existing CSP arch culvert at the north end.

The contractor is also to supply and install all anchor bolts as per the Contract Drawings under this item.

Measurement for payment under this item shall be by Linear Metre.

Special Provision No. C10	
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ITEM C16 **GRANULAR BACKFILL TO STRUCTURE**

The requirements of OPSS 902 shall apply to the above item, except as otherwise specified below.

902.05 MATERIALS

Section 902.05 of OPSS 902 is modified by the addition of the following:

SECTION D - SPECIAL PROVISIONS – TENDER ITEMS

902.05.04 Backfill

The Contractor shall be responsible for ensuring the quality of the material used for backfill. The quality of the material shall be verified by test results from a qualified and recognized testing laboratory. The frequency of sampling and testing shall be according to ASTM D 75-87 and D 3665.

902.09 MEASUREMENT FOR PAYMENT

Section 902.09 of OPSS 902 is amended by the addition of the following:

902.09.03 Non-Measurement

902.09.03.01 Granular Backfill to Structure

There will be no measurement for the above item when designated in the tender as Lump Sum.

902.10 BASIS OF PAYMENT

Section 902.10.03 of OPSS 902 is deleted in its entirety and replaced with the following:

902.10.01 Granular Backfill to Structure - Item

Payment at the Contract Price for this item shall be full compensation for all labour and equipment required for the backfilling and compacting of the structure with Granular "B" Type II to the underside of the 150mm depth of Granular "A" road base material.

Included under this item shall be the supply and installation of filter fabric Terrafix 360R or an approved equivalent, between the limits of the new backfill and the existing materials, and between the granular bedding and existing ground, as detailed.

The structure excavation and backfill shall be completed as per the Contract Drawings, including the installation of the frost tapers as detailed.

All costs associated with compaction testing of the Granular "B" Type II at the midpoint of the backfill and at the final grade of the Granular "B" Type II, prior to the placement of Granular "A" shall be included under the item *Quality Control Testing*.

Granular "B" Type II must be compacted to 100% of its maximum dry density.

SECTION E

CORPORATION OF THE TOWNSHIP OF HAMILTON CONTRACT NO.

PW2018-04

**OPSS.MUNI 100 GENERAL CONDITIONS OF CONTRACT
(November 2006)**

The OPSS.MUNI 100 General Conditions have not been reproduced as part of these Contract Documents.

It will be the Contractor's responsibility to obtain current copies of these documents.

SECTION F

CORPORATION OF THE TOWNSHIP OF HAMILTON CONTRACT NO.

PW2018-04

CONTRACT DRAWINGS

Attached Separately