

THE REGIONAL MUNICIPALITY OF DURHAM



Tender for Contract D2017-012

**Road Rehabilitation and Hot Mix Paving at Various Locations
Throughout the Region of Durham**

TENDER SET



REGION OF DURHAM TENDER FOR CONTRACT D2017-012

“TOTAL SUM” TENDER SUBMISSION CHECKLIST

Bidders shall ensure that their bid is sealed in an envelope using the label provided in Information for Bidders Clause 1, page B-1, or similar, and that the following have been completed and included with their tender submission:

- ☐ **Form of Tender pages A-1 to A-4 ONLY including:**
 - ☐ **Offer and Declarations**, dated and signed by a signing officer with the authority to bind the Corporation.
 - ☐ **Total Sum Tendered Price**
 - ☐ **Similar or Related Projects Completed**
- ☐ **Copies of all addenda signature pages issued, signed by an authorized company official, or all addenda have been acknowledged in the Form of Tender.**
- ☐ **Required CCDC 220 2002 Bid Bond** bid security (reference Information for Bidders).
NOTE: AN AGREEMENT TO BOND FORM IS NOT REQUIRED
- ☐ **Any other items expressly required to be submitted at the time of tendering.**

Note: *The lowest priced compliant Bidder must complete and submit Form of Tender Appendices FOT-E to FOT-F within 5 business days of being requested to do so by the Region.*



FORM OF TENDER

Regional Municipality of Durham Tender for Contract D2017-012

Road Rehabilitation and Hot Mix Paving at Various Locations Throughout the Region of Durham

Please
Use
Ink

Name of Firm or Individual (The Contractor)

Street Address

City, Province

Telephone

Postal Code

Fax Number

E-mail Address

Bidder's H.S.T. Registration Number

Name of Person Signing for Firm

Position of Person Signing for Firm

Tenders Received By:

The Director

Legislative Services - Regional Clerk or designate

The Regional Municipality of Durham

605 Rossland Road East

Corporate Services – Legislative Services Division, Main Level

Whitby, Ontario L1N 6A3

Until 2:00 P.M.

THURSDAY, MARCH 30, 2017

Note: All Bidders must complete and submit pages A-1 to A-4 at the time of tendering.

OFFER AND DECLARATIONS

The Chair and Councillors
The Regional Municipality of Durham
605 Rossland Road East
Whitby, Ontario

**RE: TENDER FOR CONTRACT D2017-012
ROAD REHABILITATION AND HOT MIX PAVING AT VARIOUS LOCATIONS
THROUGHOUT THE REGION OF DURHAM**

I/We _____ (the "Bidder"), hereby declare, warrant, represent and agree to the Region as follows:

- 1) The Bidder has/have carefully examined the Provisions, Plans, Specifications, Terms and Conditions referred to in Appendix FOT-A - List of Documents attached hereto and forming part of this Tender and the Bidder understands and accepts the Provisions, Plans, Specifications, Terms and Conditions set out therein.
- 2) The Bidder has carefully examined the Site and location of the Work to be done under this Contract, and for the prices set forth in this Tender, shall furnish all machinery, tools, apparatus and other means of construction, furnish all materials, except as otherwise specified in the Contract Documents, and to complete the Work in strict accordance with the Contract Documents, including Addenda No. ____ to ____** inclusive, and such further detail drawings as may be supplied from time to time.
- 3) If this Tender is the lowest priced compliant bid, the Bidder will complete and submit Appendices FOT-E and FOT-F, attached hereto, and an electronic copy (on disk or by email) of their completed Appendix FOT-F prepared using Biddingo.com's *Contractor Bidding System (CBS)* software within 5 business days of being requested to do so by the Region's Purchasing Section. The Bidder acknowledges that failure to do so will be deemed to constitute a breach of the Tender's Terms and Conditions, resulting in forfeiture of the Bidder's Bid Security described in paragraph 9.
- 4) If this Tender is accepted by the Region, the Bidder shall supply any additional materials and equipment and execute any additional work, or to delete any work, as may be required, in strict conformity with the Contract and that the prices applicable to additions to the Work, or deletions therefrom, shall be determined in accordance with the Contract.
- 5) No person, partnership, firm or corporation other than the Bidder has any interest in this Tender or in the Contract for which this Tender is made unless stated below:

- 6) This Tender is made without any comparison of figures with other submitted tenders and without any connection to, arrangements with, or knowledge of, any other persons, firms or corporations making a tender for the same Work and is submitted in all respects fair and without collusion or fraud.
- 7) The Bidder further declares that no member of Regional Council and no officer or employee of the Region of Durham is, or will become, interested directly or indirectly as a contracting party, partner, shareholder, surety or otherwise in the performance of the contract, or in the supplies, work or business to which it relates, or in any portion of the profits thereof, or in any of the monies to be derived therefrom, unless otherwise stated below:

** The Bidder will insert here the number of addenda received by them during the tendering period and taken into account by them in preparing this tender.

OFFER AND DECLARATIONS (continued)

- 8) Attached to this Tender is a Bid Security in the form of a CCDC 220 2002 Bid Bond in the amount of **\$51,000.00** as required by the Information for Bidders and in the favour of the Regional Municipality of Durham. In addition to paragraph 3, the Region shall be entitled to claim the maximum value of the Bidder's Bid Bond (or a portion thereof) to fully compensate the Region for the cost difference between the successful Bidder's tender amount and the next acceptable bidder's tender amount if the Contractor fails to file with the Region the Contract Agreement, in quadruplicate, properly executed complete with the required bonds, insurance certificate, Workplace Safety and Insurance Board Certificate of Clearance, and copies of completed Form of Tender Appendices FOT-C and FOT-D within 10 business days from the date of Acceptance of the Tender.
- 10) In accordance with the preceding paragraphs of this Tender, the Contractor hereby offers to complete the Work specified for Contract D2017-012 for the following Total Sum Price:

TOTAL SUM TENDERED PRICE FOR CONTRACT D2017-012
(excluding all H.S.T.)

\$ _____

The Bidder agrees that in the event of a conflict between the Total Sum Tendered Price and the Appendix FOT-F - Schedule of Items and Unit Prices, the Bidder will adjust their Schedule of Items and Unit Prices accordingly to equal their bid Total Sum Tendered Price. The Total Sum Tendered Price amount shall take precedence. Note, these terms take precedence over Appendix A -Tender Irregularities in Purchasing By-Law 68-2000, as amended, and Appendix IFB-A on page B-8 of this Tender, that states: "Irregularity - Other mathematical errors which are not consistent with unit prices" and "Response - Two working days to initial corrections as made by the Region. Unit prices shall govern and the tender will be corrected accordingly. The Region reserves the right to waive initialing and accept tender as corrected."

The Region reserves the right to demand adjustment of the Bidder's submitted unit prices where such unit prices are deemed by the Region, in its sole discretion, to be significantly unbalanced. Where this right is exercised by the Region, the sum of the adjusted unit prices and extensions must equal the Total Sum Tendered Price. Failure to comply with this request may result in the Region adjusting submitted unit prices to reflect historical data and/or average tendered prices on file.

Dated at _____ this ____ day of _____ A.D. 20____

Signature ("I have the authority to bind the Corporation")

Position

Name of Firm

The signature of a signing officer with the authority to bind the Corporation is required for the bid to be valid. Failure to provide the signature will result in the tender being rejected.

SIMILAR OR RELATED PROJECTS COMPLETED

Firms bidding on this Tender are to have successfully completed at least three (3) projects of similar size and related scope of work as required in this tender within the past five (5) years.

Does your firm comply with this minimum requirement? Yes ☐ or No ☐

<u>Year</u>	<u>Description of Contract</u>	<u>For Whom Work Performed</u>	<u>Value \$</u>
_____	_____	_____ _____ (Contact Person) _____ (Telephone) _____ (Email)	_____
_____	_____	_____ _____ (Contact Person) _____ (Telephone) _____ (Email)	_____
_____	_____	_____ _____ (Contact Person) _____ (Telephone) _____ (Email)	_____

Reference Information for Bidders, Clause 5 - RIGHT TO ACCEPT OR REJECT TENDERS for details of minimum ability and experience requirements.

Bidders will be permitted to submit an alternate form for this page A-4 provided the information required on this page is included in the alternate form.

This is the 4th and last page to be submitted at time of tendering.



FORM OF TENDER

Regional Municipality of Durham Tender for Contract D2017-012

Road Rehabilitation and Hot Mix Paving at
Various Locations Throughout the Region of Durham

Appendices

The lowest priced compliant Bidder must complete and submit Appendices FOT-E and FOT-F and an electronic copy (on disk or by email) of their completed Appendix FOT-F, prepared using Biddingo.com's *Contractor Bidding System (CBS)* software, within 5 business days of being requested to do so by the Region's Purchasing Section. Failure to do so will be deemed to constitute a breach of the Tender's Terms and Conditions, resulting in forfeiture of the Bidder's Bid Security.

APPENDIX FOT-A

LIST OF DOCUMENTS

The following documents shall form the "Contract Documents" for Contract D2017-012:

A. FORM OF TENDER

The following pages must be completed and submitted by all Bidders at the time of tendering:

Description	Page No.
Title Page	A-1
Offer and Declarations	A-2 – A-3
Similar or Related Projects Completed	A-4

Appendices

The following pages are not required to be submitted at the time of tendering:

Appendix	Description	Page No.
FOT-A	List of Documents	A-6 – A-7
FOT-B	Schedule of Contingency Unit Prices	A-8
FOT-C	Bidder's Senior Staff (and Proposed Superintendent)	A-9
FOT-D	Confirmation of Favourable Health and Safety Practice Form	A-10
FOT-E	List of Proposed Subcontractors	A-11
FOT-F	Schedule of Items and Unit Prices	A-12 – A-22

B. INFORMATION FOR BIDDERS

B-1 – B-11

Region of Durham Information for Bidders
For Roadwork, Sanitary Sewer and Watermain Projects

C. SPECIAL PROVISIONS - GENERAL REQUIREMENTS

S-1 – S-13

- REVISIONS TO STANDARD SPECIFICATIONS

S-14 – S-25

- LOCATIONS AND DESCRIPTION OF WORK

S-26 – S-29

- TENDER ITEMS

S-30 – S-52

D. CONTRACT DRAWINGS AND STANDARD DETAIL DRAWINGS

(a) Ontario Provincial Standard Drawings

Applicable OPSD are listed in the Special Provisions.

Copies of the applicable drawings are not included. The Bidder shall be responsible to obtain the applicable specifications and drawings which are available online at:

<http://www.ragsa.mto.gov.on.ca/techpubs/OPS.nsf/OPSHomepage>

APPENDIX FOT-A

LIST OF DOCUMENTS (continued)

D. CONTRACT DRAWINGS AND STANDARD DETAIL DRAWINGS (continued)

(b) Region of Durham Standard Drawings

Applicable RMD Standard Drawings are listed in the Special Provisions. Copies of the applicable drawings are not included. The Bidder shall be responsible to obtain the applicable specifications and drawings which are available online at: at the Regional Municipality of Durham's web site <http://www.durham.ca/dcspecs>.

E. REGION OF DURHAM CONSTRUCTION SPECIFICATIONS FOR REGIONAL SERVICES

Revised April 2016

Copy not included but may be obtained online at:

<http://www.durham.ca/dcspecs>

F. ONTARIO PROVINCIAL STANDARD SPECIFICATIONS

Applicable OPS Specifications and revision dates are listed in the Special Provisions. Copies of the applicable OPS Specifications are not included but may be obtained online at:

<http://www.ragsa.mto.gov.on.ca/techpubs/OPS.nsf/OPSHomepage>

G. SUPPLEMENTARY GENERAL CONDITIONS OF CONTRACT

SGC-1 - SGC-25

Supplement to OPSS.MUNI 100 – OPS General Conditions of Contract

H. OPSS.MUNI 100 - OPS GENERAL CONDITIONS OF CONTRACT

Revised November 2006

Copy not included but may be obtained online at:

<http://www.ragsa.mto.gov.on.ca/techpubs/OPS.nsf/OPSHomepage>

APPENDIX FOT-B

SCHEDULE OF CONTINGENCY UNIT PRICES

By submitting this Tender, the Bidder agrees to the following Schedule of Additional Unit Price Contingency Items, for all applicable extra work ordered by the Contract Administrator on this contract. If used, any items included in this Contingency Schedule shall be paid under a Change Order. Reference Section 01210 of the Region's Construction Specifications.

The Bidder agrees that they are not entitled to any payment under any of these items except for additional work carried out by them in accordance with the Contract and as directed by the Contract Administrator.

Note: 2016 Contingency rates are printed here, however, once the Region has finalized the 2017 Contingency Unit Prices the new rates shall apply to all work performed under these Contingency items commencing on the date of publication of the 2017 Contingency Unit Prices.

ITEM NO.	ITEM	UNIT	2016 UNIT PRICE
1.	Stone Below Pipe Bedding		
.1	0.00 m to 3.75 m	m ³	\$ 69.00
2.	Extra Excavation in Trenches		
.1	0.00 m to 3.75 m	m ³	\$ 19.00
3.	Labour Rates (all inclusive)		
.1	Foreman (Including Pick-Up)	hour	\$ 88.00
.2	Common Labour	hour	\$ 57.00
.3	Skilled Labour	hour	\$ 60.00
.4	Truck Driver	hour	\$ 61.00
.5	Heavy Equipment Operator	hour	\$ 69.00
.6	Carpenter	hour	\$ 64.00

APPENDIX FOT-C

BIDDER'S SENIOR STAFF

<u>Name</u>	<u>Position</u>	<u>Qualifications & Experience</u>

Name of Proposed Superintendent:

List of Projects Supervised

<u>Year</u>	<u>Description of Project</u>	<u>For Whom Work Performed</u>	<u>Value (\$)</u>

Note: The successful Bidder must complete and submit Appendix FOT-C within 10 business days of being requested to do so by the Region.

APPENDIX FOT-D

**CONFIRMATION OF FAVOURABLE
HEALTH AND SAFETY PRACTICE FORM**

To Contractor(s):

The Region of Durham is committed to:

1. The prevention of workplace injury and illness to all workers at Regional work locations.
2. The belief that contractor safety is compatible with the safety policy of the Region and is good business.
3. Assuming a leadership role by citing contractors for any violations of the contract.

To ensure the Regional workplace is a healthy and safe working environment, contractors, constructors and subcontractors must have knowledge of and operate in compliance with the Occupational Health and Safety Act and any other legislation pertaining to employee health and safety.

For long term contracts, or contracts involving pre-selected contractors, the Region reserves the right to cancel (or place on probation) the contract of any contractor who is charged and/or convicted of offences under the Occupational Health and Safety Act while carrying out any part of a project with the Region.

Contractor's Statement of Responsibility

As a contractor retained to perform work for the Region of Durham, I /we accept the following health and safety responsibilities:

- I/we will comply with all procedures and requirements of the Occupational Health and Safety Act, Regional safety policies and procedures, department and site specific policies and procedures and all applicable legislation or regulations.
- I /we will work safely with skill and care so as to prevent accidental injury to ourselves, fellow employees and all other persons on the site of the work.
- For contracts or sub-contracts that involve commercial motor vehicles as defined by the Highway Traffic Act, I/we acknowledge possession of a current Carrier CVOR abstract with one of the following safety ratings: Excellent; Satisfactory; Conditional; or Satisfactory – Unaudited.
- I/we will advise the Region if the CVOR safety rating of our firm is changed to "Unsatisfactory" at any time during the course of the contract and, upon request, will provide the Region with a copy of the most recent Carrier CVOR abstract indicating the sanctions imposed by the Ministry of Transportation.

Contractor

Name of Person Signing for Contractor

Signature of Contractor

Date

Note: *The successful Bidder must complete and submit Appendix FOT-D within 10 business days of being requested to do so by the Region.*

APPENDIX FOT-E

LIST OF PROPOSED SUBCONTRACTORS

The lowest priced compliant Bidder shall list here the name of each proposed Subcontractor. For the Bidder's convenience and to ensure that a complete list is submitted, a list of possible sub-trades has been provided below. The Bidder shall make an entry against each possible sub-trade listed either by naming the proposed Subcontractor or by entering "By Own Forces", whichever applies. No blank spaces are to be left.

If, in addition, the Bidder proposes to sublet a part of the work which is not listed below, they shall add the sub-trade and the Subcontractor's name to the list.

<u>Sub-Trade</u>	<u>Proposed Subcontractor</u>
Pulverizing	
Hot Mix Asphalt Paving	
Curb and Gutter	
Sod	
Seed & Mulch	
Line Painting	
Electrical	

Notwithstanding the information provided by the Bidder, any requirements outlined in the Specifications shall govern.

Note: *The lowest priced compliant Bidder must complete and submit Appendix FOT-E within 5 business days of being requested to do so by the Region's Purchasing Section.*

APPENDIX FOT-F

SCHEDULE OF ITEMS AND UNIT PRICES

The lowest priced compliant Bidder must complete and submit an electronic copy (on disk or by email) of their completed Appendix FOT-F, prepared using Biddingo.com's *Contractor Bidding System (CBS)* software, within 5 business days of being requested to do so by the Region's Purchasing Section.

PREVIEW
YOU MUST BE A REGISTERED PLAN TAKER TO
DOWNLOAD AN UNMARKED VERSION OF THIS FILE

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
01 - RR 45 - Henry Street - Whitby						
Roadworks						
1.03	Removals					
1.03.09		Removal of Curb and Gutter SP	m	80.00		
1.03.17		Removal of Asphalt Pavement, Partial Depth (up to 50 mm depth) SP	m2	500.00		
1.03.43		Small Cold Planer SP	hr	11.00		
1.03.44		Large Cold Planer SP	hr	4.00		
1.08	Hot Mix Asphalt and Surface Treatments					
1.08.15		Extra Over - Hand Asphalt SP	t	5.00		
1.08.52		Hot Mix HL 3 - Surface (PGAC 64-28) SP	t	1,245.00		
1.08.73		Tack Coat SP	m2	11,105.00		
1.13	Adjustments to Existing Utilities					
1.13.01		Adjust Watermain Valve Box SP	ea	25.00		
1.13.20		Replace Top Section WV Box & Adjust SP	ea	1.00		
1.14	Maintenance Holes / Catch Basins					
1.14.24		Adjusting Maintenance Holes, Catch Basins and/or Watermain Valve Chambers (max. 300 mm) SP	ea	53.00		
1.14.26		Replace Maintenance Hole Frame and Cover or Catch Basin Frame and Grate SP	ea	2.00		
1.17	Concrete Curb and Gutter					
1.17.10		Concrete Curb and Gutter - All Types (Hand Placed) SP	m	80.00		
1.17.16		RMDSD S-101.020 Catch Basin Setback SP	ea	4.00		
1.20	Equipment Rentals					
1.20.04		Mechanical Sweeper, Self-Propelled with Water Attachment SP	hr	20.00		
1.20.11		Water Truck - Pressure Spray Bar and Nozzles SP	hr	8.00		
1.21	Labour on Extra Work					
1.21.01		Foreman and Truck SP	hr	4.00		
1.21.02		Specialized Labourer for Assistance to Homeowners SP	hr	4.00		
1.33	Pavement Marking, Waterborne Traffic Paint					
1.33.01		Broken White (10 cm, all patterns) SP	m	33.00		
1.33.10		Solid White (10 cm) SP	m	44.00		
1.33.12		Solid White (45 cm) for Stop Bars SP	m	8.00		

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
1.33.15		Solid Yellow (10 cm) SP	m	91.00		
1.33.20		Symbols - Arrow SP	ea	2.00		
1.34		Pavement Marking, Durable - Field Reacted Polymeric				
1.34.12		Solid White (45 cm) for Stop Bars SP	m	84.00		
1.34.14		Solid White (10 cm) Transverse for Crosswalk SP	m	111.00		
1.34.20		Symbols - Arrow SP	ea	2.00		
1.35		Pavement Marking, Durable - Field Reacted Polymeric or Thermoplastic				
1.35.01		Broken White (10 cm, all patterns) SP	m	167.00		
1.35.10		Solid White (10 cm) SP	m	1,556.00		
1.35.15		Solid Yellow (10 cm) SP	m	768.00		
4.12		Traffic Actuation Equipment				
4.12.01		Detector Loop SP	ea	2.00		
8.03		Mobilization and Traffic Control				
8.03.05		Paid Duty Police Officer for Intersections SP	hr	24.00		
8.03.06		Portable Variable Message Sign SP	mon	4.00		
8.03.07		Relocate Portable Variable Message Sign SP	ea	2.00		
01 - RR 45 - Henry Street - Whitby Total						

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
02 - RR 52 - Thornton Road						
Roadworks						
1.03	Removals					
1.03.09		Removal of Curb and Gutter SP	m	30.00		
1.03.43		Small Cold Planer SP	hr	8.00		
1.08	Hot Mix Asphalt and Surface Treatments					
1.08.09		Hot Mix HL 1 - Surface (PGAC 64-28) SP	t	930.00		
1.08.73		Tack Coat SP	m2	8,412.00		
1.13	Adjustments to Existing Utilities					
1.13.01		Adjust Watermain Valve Box SP	ea	13.00		
1.14	Maintenance Holes / Catch Basins					
1.14.24		Adjusting Maintenance Holes, Catch Basins and/or Watermain Valve Chambers (max. 300 mm) SP	ea	14.00		
1.14.26		Replace Maintenance Hole Frame and Cover or Catch Basin Frame and Grate SP	ea	3.00		
1.17	Concrete Curb and Gutter					
1.17.10		Concrete Curb and Gutter - All Types (Hand Placed) SP	m	30.00		
1.20	Equipment Rentals					
1.20.04		Mechanical Sweeper, Self-Propelled with Water Attachment SP	hr	4.00		
1.34	Pavement Marking, Durable - Field Reacted Polymeric					
1.34.20		Symbols - Arrow SP	ea	2.00		
1.35	Pavement Marking, Durable - Field Reacted Polymeric or Thermoplastic					
1.35.01		Broken White (10 cm, all patterns) SP	m	512.00		
1.35.15		Solid Yellow (10 cm) SP	m	695.50		
8.03	Mobilization and Traffic Control					
8.03.05		Paid Duty Police Officer for Intersections SP	hr	16.00		
8.03.06		Portable Variable Message Sign SP	mon	2.00		
8.03.07		Relocate Portable Variable Message Sign SP	ea	2.00		
02 - RR 52 - Thornton Road Total						

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
03 - Energy Drive - Clarington						
Roadworks						
1.03	Removals					
1.03.09		Removal of Curb and Gutter SP	m	31.00		
1.03.30		Removal of Asphalt Pavement 0510	m2	80.00		
1.03.43		Small Cold Planer SP	hr	20.00		
1.06	Granular Road Base and Shouldering					
1.06.01		Granular B, Type 1 Modified SP	t	150.00		
1.06.02		Granular A SP	t	60.00		
1.08	Hot Mix Asphalt and Surface Treatments					
1.08.09		Hot Mix HL 1 - Surface (PGAC 64-28) SP	t	1,395.00		
1.08.52		Hot Mix HL 3 - Surface (PGAC 64-28) SP	t	65.00		
1.08.73		Tack Coat SP	m2	11,010.00		
1.14	Maintenance Holes / Catch Basins					
1.14.24		Adjusting Maintenance Holes, Catch Basins and/or Watermain Valve Chambers (max. 300 mm) SP	ea	33.00		
1.14.26		Replace Maintenance Hole Frame and Cover or Catch Basin Frame and Grate SP	ea	1.00		
1.17	Concrete Curb and Gutter					
1.17.10		Concrete Curb and Gutter - All Types (Hand Placed) SP	m	31.00		
1.19	Sodding/Seeding					
1.19.03		Seed and Mulch SP	m2	125.00		
1.20	Equipment Rentals					
1.20.04		Mechanical Sweeper, Self-Propelled with Water Attachment SP	hr	4.00		
1.20.05		Loader/Backhoe SP	hr	16.00		
1.20.10		Tri-Axle Dump Truck SP	hr	8.00		
1.34	Pavement Marking, Durable - Field Reacted Polymeric					
1.34.12		Solid White (45 cm) for Stop Bars SP	m	17.00		
1.34.14		Solid White (10 cm) Transverse for Crosswalk SP	m	53.00		
1.34.20		Symbols - Arrow SP	ea	5.00		

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(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
1.35		Pavement Marking, Durable - Field Reacted Polymeric or Thermoplastic				
1.35.01		Broken White (10 cm, all patterns) SP	m	617.00	_____	_____
1.35.10		Solid White (10 cm) SP	m	240.00	_____	_____
1.35.15		Solid Yellow (10 cm) SP	m	30.00	_____	_____
1.38		Pick Up and Install New Traffic Signs				
1.38.01		Supply and Install Steel U-Channel Post for Traffic Signs SP	ea	1.00	_____	_____
1.38.02		Supply and Install 1 - 4x4 Wooden Post for Traffic Signs SP	ea	2.00	_____	_____
1.38.20		Pick Up Traffic Sign and Mount on Single Post SP	ea	5.00	_____	_____
7.02		Environmental Protection				
7.02.01		Straw Bale Flow Check Dams as per OPSD 219.180 0805	ea	4.00	_____	_____
7.02.03		Light-Duty Silt Fence Barriers as per OPSD 219.110 SP	m	90.00	_____	_____
8.03		Mobilization and Traffic Control				
8.03.06		Portable Variable Message Sign SP	mon	2.00	_____	_____
03 - Energy Drive - Clarington Total						_____

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
04 - Regional Road 13 - Brock						
Roadworks						
1.01	Surface Work and Preparation					
1.01.01	Grubbing	SP	L.S.	1.00		
1.03	Removals					
1.03.09	Removal of Curb and Gutter (Provisional)	SP	m	19.00		
1.03.42	In-Place Full Depth Reclamation of Bituminous Pavement and Underlying Granular	SP	m2	2,790.00		
1.03.43	Small Cold Planer	SP	hr	4.00		
1.03.44	Large Cold Planer	SP	hr	4.00		
1.04	Dust Suppressants					
1.04.01	Calcium Chloride (Solid)	0506,2501	t	1.00		
1.06	Granular Road Base and Shouldering					
1.06.02	Granular A	SP	t	1,600.00		
1.08	Hot Mix Asphalt and Surface Treatments					
1.08.10	Heavy Duty Binder Course (HDBC) (PGAC 64-28)	SP	t	640.00		
1.08.52	Hot Mix HL 3 - Surface (PGAC 64-28)	SP	t	1,248.00		
1.08.73	Tack Coat	SP	m2	12,612.00		
1.12	Culverts					
1.12.04	450 mm dia.	SP	m	8.00		
1.17	Concrete Curb and Gutter					
1.17.10	Concrete Curb and Gutter - All Types (Hand Placed) (Provisional)	SP	m	19.00		
1.19	Sodding/Seeding					
1.19.03	Seed and Mulch	SP	m2	1.00		
1.20	Equipment Rentals					
1.20.01	Gradall	SP	hr	50.00		
1.20.04	Mechanical Sweeper, Self-Propelled with Water Attachment	SP	hr	4.00		
1.20.05	Loader/Backhoe	SP	hr	8.00		
1.20.10	Tri-Axle Dump Truck	SP	hr	50.00		
1.33	Pavement Marking, Waterborne Traffic Paint					
1.33.03	Broken Yellow (10 cm, all patterns)	SP	m	247.00		
1.33.10	Solid White (10 cm)	SP	m	2,050.00		

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
1.33.15		Solid Yellow (10 cm) SP	m	600.00		
7.02		Environmental Protection				
7.02.01		Straw Bale Flow Check Dams as per OPSD 219.180 0805	ea	4.00		
7.02.03		Light-Duty Silt Fence Barriers as per OPSD 219.110 SP	m	200.00		
8.03		Mobilization and Traffic Control				
8.03.06		Portable Variable Message Sign SP	mon	2.00		
04 - Regional Road 13 - Brock Total						

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
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05 - Regional Road 13 Patches - Brock

Roadworks

1.03 Removals

1.03.43	Small Cold Planer SP	hr	4.00	_____	_____
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1.03.45	Medium Cold Planer SP	hr	16.00	_____	_____
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1.08 Hot Mix Asphalt and Surface Treatments

1.08.02	Hot Mix HL 3 - Surface (PGAC 58-28) SP	t	230.00	_____	_____
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1.08.15	Extra Over - Hand Asphalt SP	t	30.00	_____	_____
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1.08.73	Tack Coat SP	m2	2,000.00	_____	_____
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05 - Regional Road 13 Patches - Brock Total

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Add No.	Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price
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GENERAL**General Items****8.02 Contract Documentation****8.02.01 Bonds**

8.02.01.A	Performance Bond SP	L.S.	1.00	_____	_____
8.02.01.B	Labour and Material Payment Bond SP	L.S.	1.00	_____	_____
8.02.02	Insurance SP	L.S.	1.00	_____	_____
8.02.03	Warranty Security Holdback Financing SP	L.S.	1.00	_____	_____
8.02.04	Extension of Warranty Period to 24 Months SP	L.S.	1.00	_____	_____

GENERAL Total**Grand Total**

Regional Municipality of Durham
D2017-012
Form of Tender
Appendix FOT-F - Schedule of Items and Unit Prices
(all prices excluding H.S.T.)

Summary of Tender(Excluding HST)	Total
01 - RR 45 - Henry Street - Whitby	
Roadworks Total	
01 - RR 45 - Henry Street - Whitby Total	
02 - RR 52 - Thornton Road	
Roadworks Total	
02 - RR 52 - Thornton Road Total	
03 - Energy Drive - Clarington	
Roadworks Total	
03 - Energy Drive - Clarington Total	
04 - Regional Road 13 - Brock	
Roadworks Total	
04 - Regional Road 13 - Brock Total	
05 - Regional Road 13 Patches - Brock	
Roadworks Total	
05 - Regional Road 13 Patches - Brock Total	
GENERAL	
General Items Total	
GENERAL Total	
Grand Total	



**INFORMATION FOR BIDDERS
FOR
ROADWORK, SANITARY SEWER
AND WATERMAIN PROJECTS**

**TENDER FOR
CONTRACT D2017-012**

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CLAUSE

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**TENDER FOR
CONTRACT D2017-012**

INFORMATION FOR BIDDERS

1. GENERAL

- .1 Signed tenders will be received by The Director, Legislative Services - Regional Clerk or their designate at the address, date and time noted on page A-1 of the Form of Tender.
- .2 Bids must be submitted in a sealed envelope with the following label or similar attached thereto and identified with the tender number and should provide the Bidder's name and address.

TENDER

**The Director, Legislative Services - Regional Clerk or designate
The Regional Municipality of Durham
605 Rossland Road East
Corporate Services - Legislative Services Division, Main Level
Whitby, Ontario
L1N 6A3**

TENDER FOR CONTRACT D2017-012

- .3 The Tender must be legible, written in ink and **all items** must be bid, unless the tender specifically permits otherwise, with the unit price for every item and other entries clearly shown.
- .4 Tenders must not be qualified by any statement added to the tender form or alterations to the tender form unless specifically authorized in the tendering documents or the tender will be rejected.
- .5 All bids must be submitted on the Form of Tender annexed hereto.
- .6 Where the words "Region" or "Owner" are used herein, they shall refer to "The Regional Municipality of Durham".
- .7 Where the terms "Engineer" or "Contract Administrator" are used herein they shall refer to the person or firm authorized to act on behalf of the Region of Durham for the purpose of contract administration. **For this Contract, Mr. Dan Waechter, P.Eng., will assume this role and all communications related to Contract Administration shall be addressed accordingly.**
- .8 The use of the mail or courier services or any third party for delivery of a bid will be at the risk of the Bidder. The bid must be received by The Director, Legislative Services - Regional Clerk or their designate by the Closing Date and Time or it will be returned to the bidder unopened.
- .9 Bids will be opened at a public Bid Opening meeting at 2:15 p.m. on the day of the close of tenders.
- .10 Bid results will be posted on the Region's web site at www.durham.ca within 24 hours of the bids being opened.

2. INQUIRIES DURING TENDERING

- .1 Inquiries regarding a discrepancy in; an omission from; or the interpretation of the plans or specifications shall be directed in writing to the following Works Department personnel:

Sr. Project Coordinator Nathan Crawford Nathan.Crawford@durham.ca

- .2 Clarifications requested by bidders should be in writing not less than four Business Days before the Tender Closing Date. If required, a reply will be in the form of an addendum, issued by the Region's Purchasing Section. Addenda will be forwarded only to all **registered Document Takers** who have received tender documents, no later than **two (2) Business Days** prior to the Tender Closing Date. **(Refer to the Bidding Opportunities page of the Region's website for details on registration as a Document Taker.)**

- .3 Inquiries regarding tendering procedures shall be directed in writing to the following Purchasing Section personnel:

Procurement Officer Garnet Turner Garnet.Turner@durham.ca

3. BID SECURITY

- .1 The Tender shall be accompanied by a bid security, in the amount indicated in the Form of Tender, in the form of a CCDC 220 2002 Bid Bond which is available for purchase from the CCDC sales outlets listed on www.ccdc.org or by contacting the CCDC organization in Ottawa at (613) 236-9455.
- .2 The Bid Bond must be properly signed and sealed or witnessed by the surety firm and the principal. The surety firm used must be a duly licensed surety company authorized to transact the business of suretyship in the province of Ontario in accordance with the Insurance Act R.S.O., 1990, Chapter I.8 and must be acceptable to the Region of Durham.
- .3 **The Bid Bond must be enclosed in the same envelope as the tender.**
- .4 A Tender which does not comply with these requirements shall be considered an irregular tender and will be rejected except that if an alternate Bid Bond form is submitted which in all other respects meets the requirements of the CCDC 220 2002 form, or if an incorrect version of the CCDC 220 Bid Bond form is submitted, the Bidder may, at the Region's sole discretion, be given 48 hours, or two Business Days, to provide the correct CCDC 220 2002 form.

4. REGION'S TENDERING BY-LAW AND EVALUATION OF THE TENDERS

- .1 Bidders are advised that purchasing and tendering policies and procedures in the Regional Municipality of Durham are established under the Region's Purchasing By-law and amendments thereto. By submitting a tender for this contract the Bidder agrees to be bound by the terms and conditions of the Region's Purchasing By-law and any amendments thereto. Tender irregularities will be dealt with in accordance with Appendix IFB-A.
- .2 Adjustment by telephone, telegraph or letter to a tender already submitted **will not** be considered.
- .3 Bidders may withdraw a bid which has already been submitted provided the withdrawal request is received and authenticated by The Director, Legislative Services - Regional Clerk or their designate (or by the Purchasing Section as applicable to the Bid Document) prior to the closing date and time. Withdrawal requests must be submitted in writing by fax, registered mail, or courier. It is the Bidder's responsibility to ensure that the request is received before the closing date and time.

- .4 The Region reserves the right to request confirmation of the authenticity of the withdrawal request from a responsible official of the Bidder; by phone, fax, or email.
- .5 A bid that has been received and confirmed as withdrawn by The Director, Legislative Services - Regional Clerk or their designate prior to the closing date and time, and prior to being placed in the tender box, will be returned unopened to the Bidder at the return address on the Bid Submission.
- .6 A bid that has been received and confirmed as withdrawn by The Director, Legislative Services - Regional Clerk or their designate prior to the closing date and time, and after the bid is placed in the tender box, will be returned to the Bidder following the closing date and time along with the written confirmation of withdrawal by the Bidder. Such withdrawn Bid Submissions will be noted as withdrawn at the public recording of Bid Submissions, and will be given no further consideration.
- .7 The withdrawal of a bid does not disqualify a Bidder from submitting another bid in response to the same bid call, provided it is submitted in the manner stipulated in the Bid Document and received before the closing date and time. The bid bearing the most recent time and date stamp in the tender box shall be considered to be the intended bid, and the other one the withdrawn bid.
- .8 The Form of Tender **must** be signed in ink in the space provided with the signature of a duly authorized official of the organization bidding who has the authority to bind the Corporation. If a joint bid is submitted, it **must** be signed on behalf of each of the Bidders and if the signing authority for both Bidders is vested in one individual, he/she shall sign separately on behalf of each Bidder. Tenders not properly signed will be rejected.
- .9 Bidders shall acknowledge receipt of all addenda on page A-2 of the Form of Tender or submit and return all addenda signature pages signed by an authorized signing officer of the firm with the completed Tender. If, in the opinion of the Region, an addendum issued affects the price of the tender and the addendum signature page is not returned or the addendum is not acknowledged in the Form of Tender, then the tender submitted will be deemed non-compliant and rejected. If, in the opinion of the Region, an addendum does not affect the tender price and the addendum signature page is not submitted with the tender or the addendum is not acknowledged in the Form of Tender, then the bidder will be allowed two working days to submit the missing signed addendum signature page to the Region of Durham Purchasing Section.
- The bidder is solely responsible for ensuring receipt of all addenda posted on the Region's website and that they have been taken into account in the formation of their bid. In submitting a bid, the bidder acknowledges, understands and accepts the conditions noted in this article.
- .10 **Tenders shall be open for acceptance for a period of one hundred twenty (120) days after the closing date.** After this time the tender may only be accepted with the consent of the successful bidder.
- .11 The Region reserves the right to negotiate with the lowest compliant and acceptable Bidder (only) in a situation where the price tendered has exceeded the estimated budget for the construction works by less than 15% and there are insufficient funds available in the total project budget to cover the bid cost overage. Where the Region and the lowest compliant and acceptable Bidder agree on acceptable changes and the corresponding bid price reduction, the changes shall be documented as a post-bid addendum and contract. However, where acceptable changes and corresponding bid price reduction cannot be successfully negotiated with the lowest compliant and acceptable Bidder, the Region reserves the right to issue and invite the three lowest compliant bidders only to re-bid on modified bid documents under a new bid call with the original tender request being cancelled. Negotiated contracts will require further approvals by Regional Council.

It is agreed and understood that the one hundred twenty (120) day bid acceptance period may have to be extended by mutual agreement between the Region and the lowest compliant and acceptable Bidder to allow enough time for the negotiations to take place and be approved.

Where the amount by which the bid price must be reduced exceeds 15% of the lowest compliant and acceptable bid, the Region may immediately undertake proceeding to re-bid the contract on a modified bid document without any attempt to negotiate with the lowest compliant and acceptable Bidder.

5. RIGHT TO ACCEPT OR REJECT TENDERS

- .1 The Region reserves the right to accept or reject the lowest or any bid in whole or in part; to waive irregularities and omissions, if in so doing, the best interests of the Region will be served. No liability shall accrue to the Region for its decision in this regard.
- .2 Bidders expressly waive any right to make any claim against the Region for any matter arising from the exercise of its right under this Clause.
- .3 **Firms bidding on this Tender are to have successfully completed at least three projects of similar size and related scope of work as required in this Tender within the past five years. Bidders shall list these projects on page A-4 of the Form of Tender.** The Region reserves the right to request submission of a completed CCDC 11 - 2017, Contractor's Qualification Statement from any Bidder for evaluation purposes within two Business Days of request for the purpose of checking accuracy and compliancy of the three projects provided above and/or to obtain and consider other additional similar and related projects that the Bidder has completed.
- .4 Bidders and named Subcontractors (Form of Tender Appendix FOT-E) must each have and, if requested, be able to provide conclusive proof of acceptable qualifications and related business experience in performing the services required. The assessment of acceptable qualifications and related business experience will be based on a range of measures including, as appropriate, professional and technical qualifications and competence of the firm and the staff proposed for the work, the firm's financial resources, the equipment and other facilities available to provide the services, managerial capability, reliability, experience and reputation, personnel available, the firm's legal capacity to enter into a contract, their solvency and any outstanding litigation, their good standing regarding the payment of taxes and any history of false representation regarding qualifications and related experience.
- .5 Bidders must complete as directed the "Similar or Related Projects Completed" form in the Form of Tender and submit this form with their bid at the time of Tender closing. By providing this information, Bidders consent to the Region contacting the references provided or any obtained independently in order to obtain further information in relation to the quality and scope of work provided by the Bidder and named Subcontractors, if applicable, as well as information relating to any of the above assessment factors. The Region reserves the right to not award this Tender to any Bidder whose qualifications or experience are deemed unsatisfactory, or whose named Subcontractor(s) is/are deemed unsatisfactory, for the services required under this Tender. The Region also reserves the right to not award this Tender to any contractor with whom the Region has experienced consistent service-related problems within the past two years (from the date of this Tender).

6. AWARD AND EXECUTION OF CONTRACT

- .1 The award of this tender is subject to the availability of finances and the review and approval by Regional Management, Region of Durham Works and Finance Committees and Regional Council. Any of these parties may elect not to approve the award of this tender for any reason.
- .2 **All outside agency approvals have been received.**
- .3 IF THIS TENDER IS CANCELLED FOR ANY REASON, THE BIDDER AGREES TO WAIVE ANY RIGHT TO CLAIM ANY DAMAGES OR COST RECOVERIES WHATSOEVER AGAINST THE REGION OF DURHAM, ITS ELECTED OFFICIALS, EMPLOYEES AND AUTHORIZED AGENTS.
- .4 **The lowest priced compliant Bidder must complete and submit Form of Tender Appendices FOT-E and FOT-F and an electronic copy (on disk or by email) of Appendix FOT-F, prepared using Biddingo.com's Contractor Bidding System (CBS) software, within 5 business days of being requested to do so by the Region's Purchasing Section.** In the event that the sum of the Bidder's bid unit price items in their Appendix FOT-F - Schedule of Items and Unit Prices does not equal their Total Sum Tendered Price, the Total Sum Tendered Price shall take precedence and the Bidder shall adjust their Schedule of Items and Unit Prices accordingly to the satisfaction of the Region.
- .5 The successful Bidder will be notified that their tender has been accepted by issuance of a Bid Acceptance Letter. The letter will be faxed to the successful bidder on the date the letter is issued and then sent by courier. The letter will require that the successful bidder provide to the Region the following documents **within 10 Business Days** of the date of the Bid Acceptance Letter:
 - a) sign and seal four (4) sets of the Contract Documents;
 - b) 50% performance bond and 50% labour and material payment bond;
 - c) a current clearance certificate from the Workplace Safety and Insurance Board;
 - d) insurance certificate(s) and other such documents as specified and required in the Tender Document; and
 - e) Appendices FOT-C and FOT-D
- .6 If the bid price of the contract is less than \$250,000.00, H.S.T. extra, then the Region of Durham reserves the right to forgo having the successful Bidder execute a contract agreement in quadruplicate and may award the contract by issuance of a Regional purchase order pending receipt of all required documentation as required in Clause 6.5 b), c) and d).
- .7 Failure by the successful Bidder to comply with the above requirements shall make the award of the contract by the Region subject to withdrawal and entitle the Region to claim the maximum value of the Bidder's Bid Bond (or a portion thereof to fully compensate the Region for the cost difference between the successful Bidder's tender amount and the next acceptable bidder's tender amount). The Region may then award the contract to one of the other bidders or take such other action as it chooses.
- .8 Upon receipt of the documents required in Clause 6.5, the Owner will issue an Order to Commence Work. The successful Bidder shall commence work at the site within 14 calendar days of receipt of the Region's Order to Commence Work letter. No work is to be started on this project until the official Commence Work Order is issued by the Region.

7. WORKPLACE SAFETY AND INSURANCE BOARD

- .1 The Contractor shall, at the time of entering into any contract with the Region, furnish a satisfactory Certificate of Clearance from the Workplace Safety and Insurance Board stating that all assessments or compensation payable to the Workplace Safety and Insurance Board have been paid. The Contractor shall also furnish a satisfactory Certificate of Clearance from the Workplace Safety and Insurance Board, as outlined above, prior to the issuance of each monthly Progress Payment Certificate and prior to the release of any Statutory Holdback.

8. HEALTH AND SAFETY

- .1 The successful Bidder shall complete and submit the "Confirmation of Favourable Health and Safety Practice Form" within 10 Business Days of being requested to do so by the Region.

9. DISABILITY ACT INFORMATION

.1 **Durham Region Accessible Customer Service Policy**

Durham Region's Accessible Customer Service Policy is stated below:

"Durham provides goods and services to all residents, including those with disabilities. Every effort will be made to ensure the following:

- The goods and services will be provided in a timely manner that respects the dignity and independence of persons with disabilities.
- The provision of goods and services to persons with disabilities, and others, will be integrated unless an alternate measure is necessary, whether temporarily or permanently, to enable a person with a disability to obtain, use or benefit from the goods and services.
- People with disabilities may use assistive devices, guide animals and/or support persons in the access of goods and services."

.2 **Statement of Understanding**

Bidders, by submitting a Proposal, hereby acknowledge that due to their participation, volunteer and/or contract involvement with the Region of Durham, acknowledge that they have been made aware of and have read the above Accessible Customer Service Policy, and understand that;

- A person with a disability may include someone who is blind, vision challenges, deaf or hard of hearing, physical disabilities as well as learning, intellectual and/or mental health disabilities
- Many disabilities are not obvious or visible
- People with disabilities will be provided with services from the Region of Durham in an equitable manner which respects their dignity and independence
- Provision of goods and services to persons with disabilities will be integrated unless an alternate measure is required
- Service animals are permitted on regional premises
- Support persons may accompany and assist people with disabilities when accessing services
- Assistive devices are used to allow independence to persons with disabilities and will be respected accordingly within regional offices
- Accessible Feedback method is a process for both employees as well as members of the public to express any issues or comments on accessibility within regional services

10. GENERAL CONDITIONS

- .1 OPSS.MUNI 100, the OPS General Conditions of Contract, dated November 2006 shall apply to this tender, as amended by the Supplementary General Conditions. The application of these conditions shall be governed in accordance with the order of precedence stipulated in the Supplementary General Conditions.

11. TOTAL SUM TENDER

- .1 This Tender is referred to as a "Total Sum" tender which, for the purpose of bidding, shall be evaluated as a "lump sum" tender. That is, the "Total Sum Tendered Price" bid on page A-3 of the Form of Tender shall take precedence over any breakdown of this price provided in the Form of Tender Appendix FOT-F - Schedule of Items and Unit Prices. However, for the purposes of Contract Administration, the Contract shall be administered as a Unit Price contract.
- .2 The Bidder agrees that in the event of a conflict between the Total Sum Tendered Price and the Form of Tender Appendix FOT-F - Schedule of Items and Unit Prices, the "Total Sum Tendered Price" shall take precedence. Note, these terms take precedence over Appendix IFB-A -Tender Irregularities in Purchasing By-Law 68-2000 as amended, and on page B-8 of this Tender, that states: "Irregularity - Other mathematical errors which are not consistent with unit prices" and "Response - Two working days to initial corrections as made by the Region. Unit prices shall govern and the tender will be corrected accordingly. The Region reserves the right to waive initialing and accept tender as corrected."
- .3 Reference Form of Tender page A-3 for details.

APPENDIX IFB-A - TENDER IRREGULARITIES

Tender irregularities will be dealt with as specified below (APPENDIX "A" TO BY-LAW 68-2000, latest amendment)

<u>Irregularity</u>	<u>Response</u>
<ul style="list-style-type: none"> Late bids 	<ul style="list-style-type: none"> Late bids will not be accepted and will be returned unopened. Bids will be deemed to have been received when the envelope has been stamped with the time and date of receipt by the Clerk.
<ul style="list-style-type: none"> Specified tender envelope, or label, not used 	<ul style="list-style-type: none"> Automatic rejection
<ul style="list-style-type: none"> Tender envelope not sealed 	<ul style="list-style-type: none"> Unsealed bids will not be accepted for deposit in the tender box.
<ul style="list-style-type: none"> Bids not completed in ink 	<ul style="list-style-type: none"> Automatic rejection
<ul style="list-style-type: none"> Original ink signature missing from signature page 	<ul style="list-style-type: none"> Automatic rejection
<ul style="list-style-type: none"> Qualified bids (bids qualified or restricted by an attached or added statement) 	<ul style="list-style-type: none"> Automatic rejection
<ul style="list-style-type: none"> Bids received on documents other than those provided in the request 	<ul style="list-style-type: none"> Automatic rejection, unless allowed for in the request
<ul style="list-style-type: none"> Bid security <ul style="list-style-type: none"> a) Bonding company missing when bid bond requested b) not provided or not in the form or amount specified c) not sufficient 	<ul style="list-style-type: none"> Automatic rejection Automatic rejection Where security is required and amount of security is expressed as a percentage of the total tender sum, automatic rejection unless insufficiency is <u>de minimus</u> (trivial or insignificant) Where security is required and the amount of security is specified in respect, automatic rejection
<ul style="list-style-type: none"> Agreement to provide performance securities is not provided or is not in the form specified 	<ul style="list-style-type: none"> Automatic rejection
<ul style="list-style-type: none"> Part bids (all items not bid) 	<ul style="list-style-type: none"> Automatic rejection, unless allowed for in the request
<ul style="list-style-type: none"> Bids containing minor clerical errors 	<ul style="list-style-type: none"> Two working days to correct and initial errors. The Region reserves the right to waive initialing and accept tender.
<ul style="list-style-type: none"> Uninitialed changes to the bid documents which are minor (e.g. tenderer's address is amended by over-writing but not initialed) 	<ul style="list-style-type: none"> Two working days to correct. The Region reserves the right to waive initialing and accept tender.
<ul style="list-style-type: none"> Unit prices in the Schedule of Prices have been changed but not initialed 	<ul style="list-style-type: none"> Two working days to correct. The Region reserves the right to waive initialing and accept tender.
<ul style="list-style-type: none"> Other mathematical errors which are not consistent with unit prices 	<ul style="list-style-type: none"> Two working days to initial corrections as made by the Region. Unit prices shall govern and the tender will be corrected accordingly. The Region reserves the right to waive initialing and accept tender as corrected.
<ul style="list-style-type: none"> Failure to return the documents as specified 	<ul style="list-style-type: none"> Where complete documents are specified, automatic rejection

APPENDIX IFB-A - TENDER IRREGULARITIES (continued)

Tender irregularities will be dealt with as specified below (APPENDIX "A" TO BY-LAW 68-2000, latest amendment)

<u>Irregularity</u>	<u>Response</u>
<ul style="list-style-type: none"> Isolated pages are missing 	<ul style="list-style-type: none"> Two working days to supply the missing pages where in the opinion of the Region, the missing page(s) would not directly affect the bid submitted. The Region reserves the right to waive the extra pages and accept the tender, or to reject the tender outright.
<ul style="list-style-type: none"> Tender documents which suggest that the tenderer has made a major mistake in calculations or tender 	<ul style="list-style-type: none"> Decision will be on a case by case basis in consultation with the Legal Department
<ul style="list-style-type: none"> Withdrawal of bids 	<ul style="list-style-type: none"> Withdrawal of bids received after the closing time will not be allowed
<ul style="list-style-type: none"> Tie bids 	<ul style="list-style-type: none"> The "designated official" may use one of the following methods of dealing with tied bids, based upon the specific situation: <ul style="list-style-type: none"> Use a coin toss to select a recommended bid Request the tied bidders to submit new bids Negotiate with the tied bidders to break the tie
<ul style="list-style-type: none"> Substantial completion date is not as specified 	<ul style="list-style-type: none"> Two working days to clarify the completion date. The Region reserves the right to waive the clarification of the completion date and accept the tender, or to reject the tender outright.

APPENDIX IFB-B - DISK SUBMISSION LABEL

**Nathan Crawford
Senior Project Coordinator
The Regional Municipality of Durham
605 Rossland Road East
5th Floor
Whitby, Ontario
L1N 6A3**

For courier deliveries: L1N 0B7

**RE: DISK SUBMISSION
TENDER FOR CONTRACT D2017-012**

Note: This label/address is only to be used for submission of the Bidder's Schedule of Items and Unit Prices (Form of Tender Appendix FOT-F) on disk after the tender closing as required on page A-2 of the Form of Tender.

Bids must be submitted in a sealed envelope using the label provided on page B-1 or similar attached thereto and identified with the tender number and should provide the Bidder's name and address.



**THE REGIONAL
MUNICIPALITY
OF DURHAM**
FINANCE – PURCHASING SECTION

CERTIFICATE OF INSURANCE

PROOF OF LIABILITY INSURANCE WILL BE ACCEPTED ON THIS FORM ONLY.

**THIS FORM MUST BE COMPLETED AND SIGNED BY YOUR
AGENT, BROKER OR INSURER**

**ALL INSURERS SHOWN MUST BE LICENSED TO OPERATE IN
CANADA**

This is to certify that the Named Insured hereon is insured as described below

Named Insured	Address of Named Insured
Location and Operations of the Named Insured for which Certificate is issued ALL OPERATIONS PERFORMED FOR THE REGION OF DURHAM	

AUTOMOBILE LIABILITY INSURANCE

INSURING COMPANY	POLICY NUMBERS	LIMIT OF COVERAGE	EFFECTIVE DATE	EXPIRY DATE
	Automobile Liability		D/M/Y	D/M/Y
		Deductible, if any:		
	Excess Auto Liability (if applicable)		D/M/Y	D/M/Y

The above policy(ies) must cover all vehicles owned in whole or in part and licensed in the name of the insured including all vehicles leased on a long term basis for which the insured is required by contract to provide bodily injury and property damage insurance.

COMMERCIAL GENERAL LIABILITY

INSURING COMPANY	POLICY NUMBERS	LIMIT OF COVERAGE	EFFECTIVE DATE	EXPIRY DATE
	COMMERCIAL GENERAL LIABILITY	Per Claim / Annual Aggregate	D/M/Y	D/M/Y
		Deductible, if any		
	Excess Liability (if applicable)	Per Claim / Annual Aggregate	D/M/Y	D/M/Y
	Professional Liability (if applicable)	Per Claim / Annual Aggregate	D/M/Y	D/M/Y
		Deductible, if any		
Provisions of Amendments or Endorsements of Listed Policy(ies)				

COMMERCIAL GENERAL LIABILITY is issued on an 'occurrence' basis form and is extended to include Personal Injury Liability, Contractual Liability, Non-Owned Automobile Liability, Owner's and Contractor's Protective Coverage, Products/Completed Operations, Contingent Employer's Liability, Cross Liability Clause and Severability of Interest Clause.

With respect to Commercial General Liability Insurance, THE REGIONAL MUNICIPALITY OF DURHAM, THE CITY OF OSHAWA, THE TOWN OF WHITBY, THE MUNICIPALITY OF CLARINGTON, THE TOWNSHIP OF BROCK AND THE CANADIAN NATIONAL RAILWAY are added as Additional Insureds but only with respect to their liability arising out of the operations of the Named Insured.

The policy(ies) identified above shall apply as primary insurance and not excess to any other insurance available to The Regional Municipality of Durham.

If cancelled or changed so as to reduce the coverage as outlined on this certificate, during the period of coverage as stated herein, thirty (30) days, prior written notice by registered mail will be given by the Insurer(s) to:

**The Regional Municipality of Durham
605 Rossland Road East, Whitby, Ontario L1N 6A3
Attention: Irena Earhart/Marg McRae**

I certify that the insurance is in effect as stated in this certificate and that I have authorization to issue this certificate for and on behalf of the insurer(s).

Date	Name, Address, Fax and Telephone Number of Certifying Party	Signature of Authorized Representative or Official
		Print Name of above Authorized Representative or Official

Issue date: August 12, 2008

MG\INSPOOL\regional certificate of insurance

**CONTRACT D2017-012
SPECIAL PROVISIONS**

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1. SCOPE OF WORK

- .1 The work generally consists of road rehabilitation and hot mix paving at various locations throughout the Region of Durham.
- .2 These Special Provisions apply and are part of the Contract and take precedence over all Contract Drawings, Standard Specifications, General Conditions and Supplementary General Conditions pertaining to the Contract.
- .3 Provide all labour, Equipment, Material and supervision necessary to complete the work as specified and shown in the Contract Documents.
- .4 All requirements of the Contract Documents shall be performed by the Contractor unless specifically noted otherwise.
- .5 Include in Contract prices bid all costs to perform all work as required by the Contract Documents except that work explicitly noted as being performed by others.
- .6 All documents referenced in the Special Provisions or on the Contract Drawings shall be considered to be part of the Contract Documents and all information, recommendations and requirements in such referenced documents shall be considered in the Contract prices. Referenced documents are intended to supplement the Special Provisions and Contract Drawings and therefore where a conflict exists between a referenced document and either the Special Provisions or the Contract Drawings, then the Special Provisions and Contract Drawings shall take precedence in interpreting the requirements of the contract.

2. STANDARD SPECIFICATIONS AND DRAWINGS

- .1 The Regional Municipality of Durham Construction Specifications for Regional Services (RMDCS), April 2014, shall apply to this contract.
- .2 All specifications in Volume 1 - Division 1 - General Specifications of the Ontario Provincial Standard Specifications shall apply to this contract.
- .3 The municipal and provincial common specifications and drawings in OPS Volumes 1 to 4 and the municipal-oriented specifications in OPS Volumes 7 and 8 apply to this Contract. Unless specified in the Contract Documents, OPS Volumes 5 and 6 (provincial-oriented specifications) shall not apply to this contract. Applicable specified OPS Specifications and Drawings shall be the latest revisions as of the November 2016 revisions.
- .4 Where a conflict exists between the RMDCS and OPSS, the RMDCS shall take precedence.
- .5 The following Regional Municipality of Durham Standard Drawings (RMDSD) shall apply to this contract. The applicable revision of these RMDSD shall be the latest revisions as of the April 2016 revisions.

Region of Durham Standard Drawings				
Detail No.	Detail No.	Detail No.	Detail No.	Detail No.
S-200.020	S-220.010	S-301.010	S-200.020	

- .6 The following Ontario Provincial Standard Specifications (OPSS) shall apply to this contract. In addition, all OPSS referenced within the RMDCS and within the Contract Documents shall also apply to this contract.

Ontario Provincial Standard Specifications				
OPSS No.	OPSS No.	OPSS No.	OPSS No.	OPSS No.
MUNI 100	310	408	MUNI 517	MUNI 1003
102	311	MUNI 410	620	MUNI 1101
106	312	MUNI 1004	MUNI 706	1150
MUNI 120	351	MUNI 1010	710	MUNI 1350
127	MUNI 353	492	801	1714
128	MUNI 402	MUNI 501	802	1750
MUNI 180	404	MUNI 510	803	1840
MUNI 182	405	511	MUNI 804	1860
PROV 308	407			

- .7 The following Ontario Provincial Standard Drawings (OPSD) shall apply to this contract. In addition, all OPSD referenced within the RMDCS and within the Contract Documents but not listed below shall also apply to this contract.

Ontario Provincial Standard Drawings				
OPSD No.	OPSD No.	OPSD No.	OPSD No.	OPSD No.
210.070	310.050	600.020	605.030	802.010
310.010	351.010	600.030	605.040	810.010
310.020	400.020	600.040	608.010	2520.01
310.030	401.010	600.110	610.010	2520.02
310.040	600.080	601.010	704.010	2530.01

3. APPROVED PRODUCTS

- .1 Install only products listed on the Region of Durham Approved Manufacturers' Products List (MPL). The up-to-date approved products list is maintained on The Road Authority website at www.roadauthority.com.
- .2 Base tendered prices on the most current MPL at the time of tender closing. Products added to the MPL after the tender closing date may also be used. Do not use products which were removed from the MPL after the tender closing date, but substitute other approved products.

4. CONSTRUCTION SCHEDULE

Reference: RMDCS Section 01310

- .1 This project is scheduled for start of construction in May, 2017.
- .2 **Substantially perform** the Work within **ten (10) weeks** of the issuance of the Contract Administrator's order to commence the Work.
- .3 **Complete** the Work in its entirety within **twelve (12) weeks** of the issuance of the Contract Administrator's order to commence the Work
- .4 Reference Standard Specifications Section 01310 for Contractor's Responsibilities regarding contract scheduling.
- .6 Upon commencing work at any Location, the Contractor shall continue to prosecute the work to its completion, without interruption, unless explicitly permitted by the Contract Administrator.
- .7 Location-specific scheduling requirements are as follows:
 - a) Location 1 – Henry Street (Reg. Rd. 45), Whitby
Place surface asphalt south of Gilbert Street West on a Saturday.
 - b) Location 3 – Energy Drive / Courtice Road South, Clarington
Commence work at this Location first.
 - c) Location 5 – Regional Road 13, Brock
Patches must be restored the same day as milling.

5. SOILS AND EXAMINATION OF SITE

Reference: Special Provisions - Revisions to Standard Specifications, Clause 4 - Revision to OPSS.MUNI 180
Contract Documents – Supplementary General Conditions of Contract – Appendix SGC-G
RMDCS Section 01301, Clause 1.06
OPSS.MUNI 180

.1 Management of Excess Earth With Salt Impacts

Note that excess earth from infrastructure construction projects may contain elevated concentrations of chloride and sodium and may have elevated values for Electrical Conductivity and Sodium Adsorption Ratio. For the purpose of this Contract, excess earth with salt impacts is not considered to be “contaminated” within the meaning of Table 1 in OPSS.MUNI 180.

Where excess earth is managed as disposable fill, take into account the possibility of salt impacts and ensure that the material is managed responsibly and in an environmentally appropriate manner. If excess earth will be disposed of on private property, notify the Property Owner in advance that such material may be salt-impacted by using Supplementary General Conditions Appendix SGC-G in place of OPSF 180-3.

Conduct such sampling and testing as may be necessary to comply with any requirements imposed by the Property Owner as a condition of accepting the excess earth.

6. TRAFFIC CONTROL AND SAFETY

Reference: General Conditions of Contract Clause GC 7.01.11
RMDCS Section 01550

.1 Lane Restrictions

- a) Road closures are not permitted unless otherwise specified. Maintain all streets open to traffic for the duration of the Contract. Maintain at least two lanes, one in each direction, at all times except when impractical due to the nature of work being performed.
- b) For Location 2, the Contractor shall not occupy existing lanes after 12:00 p.m. (noon) on any weekday that precedes a Statutory Holiday. Where the Holiday falls on a Monday, the Contractor shall not occupy existing lanes after 12:00 p.m. (noon) on the preceding Friday.
- c) For Locations 1, 3, 4 and 5 the Contractor shall not occupy existing lanes on any Friday afternoon after 2:00 p.m.
- d) Location 1 – Henry Street (Regional Road 45), Whitby
No paving or milling operations prior to 8:30 a.m.
No occupation of Dundas Street prior to 9:00 a.m. or after 3:00 p.m.
Maintain access to Henry Street High School at all times.
- e) Location 2 – Thornton Road (Regional Road 52), Oshawa
Peak traffic periods are defined as between the hours of 6:30 a.m. and 9:00 a.m. and between 3:00 p.m. and 6:30 p.m.
Maintain two lanes southbound during the morning peak.
The Contractor can reduce Thornton Road to one lane in each direction for a maximum of four (4) days, not over any weekend, in order to replace curb and gutter and adjust structures. Base asphalt removed as part of catch basin or manhole adjustments shall be restored prior to opening up the lanes.
- f) Location 3 – Energy Drive, Clarington
The Contractor can reduce Energy Drive to one lane in each direction for a maximum of five (5) days, not over any weekend, in order to replace curb and gutter and adjust structures. Base asphalt removed as part of catch basin or manhole adjustments shall be restored prior to opening up the lanes.
- g) Location 3B – Courtice Road South, Clarington
The Region will permit two one-day road closures to facilitate road reconstruction, including base asphalt paving.
The Contractor shall provide access for emergency vehicles at all times.
The Contractor will be responsible to coordinate all road closures and re-openings with the Contract Administrator. The Region will coordinate with the local municipality and notify other interested parties of the proposed road closure.

- .2 Submit a traffic control and staging plan as required in paragraph 1.04 of RMDCS Section 01550.
- Design, installation, operation and maintenance of the Traffic Control and Staging Plan for work at all Locations to be performed by a traffic specialist/subject matter expert (SME) or employee trained by “Infrastructure Health & Safety Association” with “Traffic Control – Temporary Work Zones” or equivalent training.
- The Contractor’s Traffic Control and Staging Plan and their Traffic Protection Plan shall be subject to the review of the Contract Administrator and the local municipality.
- .3 Submit detailed Traffic Control and Staging Plan, Traffic Protection Plan and the name of the specialist(s)/subject matter expert(s) (SME) or trained employee(s) no later than **two weeks** prior to the commencement of construction activities and material deliveries.
- .4 Implement a Traffic Protection Plan for worker safety as required by Section 67 (4) of the Ontario Regulation for Construction Projects, O. Reg. 213/91. The Traffic Protection Plan may be an integral or separate part of the Traffic Control and Staging Plan. Should the traffic protection setup be altered from the Traffic Protection Plan, immediately revise the Traffic Protection Plan to suit the alteration. The revised Traffic Protection Plan shall be signed by a person of authority on behalf of the Contractor.
- .5 When an entrance to an abutting property is located within the work zone and traffic movements have been reduced to a single direction, provide separate Traffic Control Person(s) for each entrance to facilitate the safe movement of vehicular and pedestrian traffic from the property onto and along the roadway and to protect the safety of the workers on the project.
- .6 Where traffic control is required either within an intersection or adjacent to an intersection, such that traffic flow through the intersection will be impacted, provide a paid duty police officer as required by law.
- .7 The Contractor shall supply and erect reduced speed signs (TC-36) at Location 4 and 5. The Region will determine the speed to be posted on the TC-36 sign.
- .8 The Contractor shall supply and erect “SPEED FINES DOUBLED WHEN WORKERS PRESENT” signs at Location 4.
- .9 Maximum spacing for TC 54 traffic delineators shall be 4 metres in all traffic transition areas and within the first 50 metres of the construction limits.
- .10 **All costs for the requirements of Traffic Control and Safety shall be included in the applicable unit prices for the work at each location and no separate or extra payment will be made for this work.**

7. SURFACE RESTORATION

Reference: Special Provisions - Revisions to Standard Specifications, Clause 5 - Revision to OPSS 310
 Special Provisions - Revisions to Standard Specifications, Clause 12 - Revision to OPSS 802
 Special Provisions - Revisions to Standard Specifications, Clause 13 - Revision to OPSS 803
 Special Provisions - Revisions to Standard Specifications, Clause 14 - Revision to OPSS.MUNI 804
 RMDCS Section 02700, 02749 & 01450
 OPSS 310, 405, 492, 802, 803, 1150, 1840 & 1860 and OPSS.PROV 308 and
 OPSS.MUNI 804 & 1004
 RMDSD S-200.020
 OPSD 216.021 & 802.010

- .1 Include costs of restoration of all trenches up to the sub-grade or bottom of topsoil in the bid unit price for the appropriate pipe/maintenance hole item.
- .2 Restore all disturbed areas to at least a condition equivalent to that which existed prior to commencement of construction as determined by the Contract Administrator.
- .3 Complete temporary restoration according to RMDSD S-200.020 and Contract Drawings. Complete temporary restoration work as sewer and watermain installation proceeds. **In no case shall the Contractor be allowed to have more than 50 metres of the site in a disturbed condition at any one time.**
- .4 Include all costs associated with temporary restoration in the tendered items. No additional or separate payment shall be made for any temporary restoration work.
- .5 Where the Contractor is required to re-excavate in an area previously restored to correct defective work, restore all disturbed areas at the Contractor's expense.
- .6 Restore all road crossings and excavations within the travelled portion of the roadway, or along the shoulder, according to RMDSD S-200.020.
- .7 Restore roadways and driveways according to RMDCS Section 02749. All hot mix asphalt shall be produced with asphalt cement of Performance Grade PGAC 64-28.
- .8 Prepare disturbed asphalt roadways and shoulders for restoration as follows:
 - Sawcut existing asphalt full depth in neat, straight, parallel lines at **min. 450 mm from the edge of the trench** according to RMDSD S-200.020. **Sawcuts shall, without exception, encompass any asphalt overbreak, trench wall sloughing, asphalt undermining and variations in trench width such that sawcuts are straight and parallel for the full length of the trench restoration.** No extra or additional payment shall be made for multiple sawcuts. Note: Trench width shall be as required by the Occupational Health and Safety Act and Regulations and existing soils conditions.
 - Where the proposed edge of the asphalt restoration according to RMDSD S-200.020 falls within 1.0 m of the existing edge of pavement, remove all asphalt to the said edge of pavement. Similarly, if the proposed edge of the asphalt restoration falls within the travelling wheel path, remove all asphalt to the centre of the lane or to the edge of the lane marking.
 - **Remove existing asphalt full depth to 450 mm beyond the longitudinal ends of trenches.**
 - Compact granular road base materials to 100% Standard Proctor Density.
 - Sweep all sawcut asphalt edges to ensure a clean vertical face.
 - Tack coat all asphalt faces with SS-1 emulsion.
- .9 **Place all binder and surface asphalt using an asphalt paver** in lifts of specified depths

- .10 The Contract Administrator shall perform Quality Assurance inspection and testing as detailed in RMDCS Section 01450.
- .11 Restore all disturbed asphalt driveways or asphalt boulevards as per the Contract Drawings or, if not shown, with the following as a minimum:
- 150 mm Granular A compacted depth, 100% Standard Proctor Dry Density
50 mm HL 3 Hot Mix Asphalt surface course compacted depth
- .12 Restore all disturbed gravel driveways as per the Contract Drawings or, if not shown, with the following as a minimum:
- 150 mm of Granular A or 19 mm Crusher Run Limestone, 100% Standard Proctor Dry Density
- .13 Restore all disturbed concrete or asphalt sidewalks and concrete curb and gutter to the standards of the lower tier municipality and to match existing sections and joint patterns.
- .14 Restore all disturbed lawns, boulevards, ditches, easements and other maintained grassed areas with 100 mm compacted depth of screened topsoil and sod according to OPSS 802 and OPSS 803, as amended.
- All topsoil and sod placement shall be performed by an acceptable professional landscaper using experienced workers.
- .15 Restore all disturbed grassed areas not presently maintained or not scheduled for maintenance with 100 mm compacted depth of screened topsoil, seed and mulch according to OPSS 802 and OPSS.MUNI 804, as amended. Seed shall be Standard Roadside Mix. Mulch shall be hydraulic mulch.
- .16 If the onset of winter weather conditions prohibits the final surface restoration of hot-mix asphalt areas at the time of backfilling trenches, the Contractor may be ordered to restore the granular road base and temporarily surface the asphalt areas with a 50 mm depth of HL 8 Hot Mix Asphalt. Where temporary asphalt restoration is ordered, maintain the surface throughout the winter months and subsequently remove the temporary asphalt prior to completion of permanent asphalt restoration **as soon as reasonably possible** the following Spring.
- Where circumstances beyond the control of the Contractor have caused the Contract Administrator to order placement of temporary asphalt as specified above, such temporary asphalt and winter maintenance shall be at the Region's expense and paid according to the General Conditions of Contract as modified by the Supplementary General Conditions of Contract. If the Contract Administrator deems that temporary asphalt is required due to the Contractor's lack of reasonable progress, the temporary asphalt shall be supplied, placed, maintained and removed at the Contractor's expense. The Contract Administrator's decision as to the reason for the delay and the assessment of costs shall be final.
- .17 If the onset of winter weather conditions prohibits the final surface restoration of sodded areas, fine grade and place topsoil on these areas to allow for proper drainage. Undertake final surface restoration of these areas **as soon as reasonably possible** the following Spring.
- .18 If the onset of winter weather conditions prohibits the final surface restoration of seeded and mulched areas, fine grade and place topsoil on these areas to allow for proper drainage. Undertake final surface restoration of these areas **as soon as reasonably possible** the following Spring.
- .19 Replace all shrubs, trees, rockeries and guide posts damaged during construction except where marked for removal.

- .20 Replace all fences removed to permit construction.
- .21 Replace all existing culverts, headwalls and/or sewers damaged during construction with a new culvert, headwall or sewer of equal size and quality including granular bedding and cover according to OPSD 802.010. Granular embedment shall be Granular A.
- .22 **Take extreme caution not to damage any trees not marked for removal.** Trim all tree limbs and roots damaged during construction. Where the Contractor causes damage to significant tree limbs, as determined solely by the Contract Administrator, the Contractor may be ordered to provide the services of a Subcontractor specializing in tree trimming and maintenance. Such specialist Subcontractor shall have an on-staff certified arborist and the services of such Subcontractor shall be entirely at the Contractor's expense.
- .23 The Region reserves the right to withhold sufficient funds from any or all Contractor's payments to cover restoration costs for all areas not permanently restored regardless of the bid unit price for such restoration.

8. GENERAL

Include the following, where applicable, in all unit prices bid:

- .1 Environmental considerations including protection of existing trees according to OPSS 801.
- .2 Protection and temporary/permanent support of all in-ground and above ground services and utilities. Reference Special Provisions – General Requirements, Clause 11 - Work in the Vicinity of Utilities.
- .3 Removal, temporary erection and re-installation of roadside mailboxes and newspaper boxes where applicable. Notify affected residents and advise of temporary location. Contact Canada Post to confirm that the temporary mailbox locations are acceptable for delivery of mail. At the end of construction re-erect all removed mailboxes and newspaper boxes on new supports at their original location or at a location as near as possible to their original location which will meet requirements of Canada Post.
- .4 Sawcutting of existing asphalt in parallel straight lines according to Special Provisions - General Requirements, Clause 7 - Surface Restoration, and disposal off site.
- .5 Vertical trenching as required to minimize road restoration and as indicated on Contract Drawings.
- .6 Trench support systems according to OPSS 404 and as required by the Ministry of Labour for the soil conditions encountered.
Note: Prefabricated and hydraulic support systems are not permitted where Type 4 soil is encountered.
- .7 Design and implementation of an "engineered support system" where trench exceeds 6 m in depth and/or 3.6 m in width. This shall also include submission of two copies of the design drawings and specifications for such support system to the Ministry of Labour nearest to this project and two copies of same to the Contract Administrator.
- .8 Maintenance of existing ditch flows, sewage flows and residential water supply. Reference RMDCS Section 01510, Subsections 3.02 and 3.03.
- .9 Dewatering both inside and outside trenches according to RMDCS Section 02240 and OPSS.MUNI 517.
Note: Place all pipe in dry conditions. Dewater to 1.0 metre below pipe invert.
- .10 All water ordered by the Contract Administrator for dust control.

- .11 Temporary surface restoration as per RMDSD S-200.020.
- .12 All labour, equipment and materials for traffic control and signing in accordance with Special Provisions – General Requirements, Clause 6 - Traffic Control and Safety, except work for which a separate tender item is provided. Reference Special Provisions -Tender Items - General Items
- .13 All mobilization and demobilization of labour, equipment and materials.
- .14 Asphalt Removals, Cold Planing, Granular placement, Shouldering, Surface Treatments, Hot Mix Paving and other work in side roads, driveways and other abutting adjacent areas as directed by the Contract Administrator.
- .15 Removal, temporary erection and re-installation of existing road signs
- .16 Ramping of all pavement end joints that shall be left for more than (1) one day. This ramping is required to protect the edge of pavement and minimize complaints from the travelling public.

9. OCCUPATIONAL HEALTH AND SAFETY ACT AND CONSTRUCTION REGULATIONS

- .1 The following extracts of the Occupational Health and Safety Act of Ontario and Construction Regulations are included for the information of the Contractor:

.1 Duties of Constructor

- 23. (1) A constructor shall ensure, on a project undertaken by the constructor that,
 - (a) the measures and procedures prescribed by this Act and the regulations are carried out on the project;
 - (b) every employer and every worker performing work on the project complies with this Act and the regulations; and
 - (c) the health and safety of workers on the project is protected.
- 37. (1) An employer,
 - (a) shall ensure that all hazardous materials present in the workplace are identified in the prescribed manner;
 - (b) shall obtain or prepare, as may be prescribed, an unexpired material safety data sheet for all hazardous materials present in the workplace; and
 - (c) shall ensure that the identification required by clause (a) and material safety data sheets required by clause (b) are available in English and such other languages as may be prescribed.

.2 Construction Regulations

- 17. (1) A constructor shall establish for a project written procedures to be followed in the event of an emergency and shall ensure that the procedures are followed at the project.
- 26.1 (1) A worker shall be adequately protected by a guardrail system that meets the requirements of subsections 26.3 (2) to (8).
- 26.2 (1) An employer shall ensure that a worker who may use a fall protection system is adequately trained in its use and given adequate oral and written instructions by a competent person.
- 27. (1) Despite subsections 26.1 (1) and (2), if the following conditions are met, a worker shall wear a lifejacket or other personal flotation device that is

adequate:

1. The worker is exposed to a risk of drowning on a project.
 2. It is not reasonably possible to install a guardrail system as subsection 26.1 (1) requires.
 3. It is not reasonably possible to protect the worker adequately by means of a fall protection method as subsection 26.1 (2) requires.
- (2) If a worker may drown at a project,
- (a) at least two workers trained to perform rescue operations shall be available to perform rescue operations;
 - (b) rescue equipment shall be provided in a suitable location on or near the project; and
 - (c) all workers on the project shall be advised of the rescue procedures to be followed and their role, if any, in carrying out a rescue.
52. (1) Fire extinguishing equipment shall be provided at readily accessible and adequately marked locations at a project.
67. (2) If a worker at a project on a highway may be endangered by vehicular traffic unrelated to the project, the project shall make use of as many of the following measures as is necessary to adequately protect the worker:
- | | |
|--------------------------------|-----------------------------|
| 1. Barriers. | 2. Barricades. |
| 3. Delineators. | 4. Lane control devices. |
| 5. Warning signs. | 6. Flashing lights. |
| 7. Flares. | 8. Traffic control devices. |
| 9. Blocker trucks. | 10. Crash trucks. |
| 11. Sign trucks. | 12. Speed control devices. |
| 13. Longitudinal buffer areas. | |
- (3) **In addition to the measures** listed in subsection (2) but subject to section 68, a worker may be used to direct traffic.
- (4) Every employer shall develop in writing and implement a traffic protection plan for the employers' workers at a project if any of them may be exposed to a hazard from vehicular traffic.
234. (1) The walls of an excavation shall be supported by a support system that complies with sections 235, 236, 237, 238, 239 and 241.
240. If a support system is used for the walls of an excavation, a ladder for access to or egress from the excavation shall be placed within the area protected by the support system.
241. (1) A support system for the walls of an excavation shall extend at least 0.3 metres above the top of the excavation unless otherwise permitted or required by this section.

.2 Designated Substances

- .1 In accordance with the requirements of Section 30 (1) of the Occupational Health and Safety Act, the Bidder is hereby advised that the designated substances as listed hereunder are or may be present on the site and within the limits of this Contract:

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

- .2 Comply with the governing Ministry of Labour Regulations respecting protection of workers, removal, handling and disposition of any Designated Substances encountered in carrying out the Work proposed on this contract.
- .3 Comply with Region of Durham Corporate Healthy Workplace Policy. Ensure all Subcontractors and suppliers are aware of and comply with all Region of Durham Health and Safety programs. When requested, provide copies of all Subcontractors' Health and Safety Policies and Programs prior to such Subcontractors commencing work on site.
- .4 Prior to commencement of the Work, provide written notification to the Ministry of the Environment at their York-Durham District Office, 230 Westney Rd. S., 5th floor, Ajax, Ontario L1S 7J5, of the location(s) proposed for disposal of Designated Substances. Provide a copy of the notification to the Contract Administrator a minimum of two weeks in advance of work starting.
- .5 In the event that the Ministry of the Environment has concerns with any proposed disposal location, provide further notification until the Ministry of the Environment's concerns have been addressed.
- .6 Submit a Waste Quantity Report (Form OPSF 180-5) for all Solid Non-Hazardous Waste as required by OPSS.MUNI 180.
- .7 Include all costs associated with the removal and disposition of the Designated Substances herein identified in the appropriate tender items requiring such work.
- .8 Should a Designated Substance not herein identified be encountered in the work, then management of such substance shall be treated as Extra Work.

10. PRIVATE PROPERTY SITE USE AGREEMENTS AND RELEASES

Reference: OPSS.MUNI 180

- .1 Enter into a written agreement with each of the respective private property owners for the use of any private lands outside the limits of the contract for the purpose of stockpiling materials, locating field offices and trailers and disposing of excess material. Provide a copy of all such written agreements to the Contract Administrator before the use of such sites is commenced. Use OPSF Forms 180-1 and 180-2 to notify the Contract Administrator of all agreements for stockpiling material and for material managed as disposable fill.
- .2 Upon termination of the use of such sites, obtain a written release from the respective private property owners and provide two copies of each release to the Contract Administrator. Use the form provided in the Supplementary General Conditions of Contract, Appendix SGC-G for such releases.
- .3 The Contract Administrator reserves the right to withhold an appropriate amount from the Contractor's Progress Payments if the Contractor fails to provide such releases and fails to reasonably satisfy their obligations to the private property owner.

11. WORK IN THE VICINITY OF UTILITIES

- 1 Comply with "Guideline for Excavation in the Vicinity of Utility Lines" from ESA/TSSA dated December 2008, "Third Party Requirements In the Vicinity of Natural Gas Facilities" from Enbridge Gas Distribution dated 2015, and "Guidelines for Safe Excavation in the Vicinity of the Bell Network" from Bell Canada dated January 2011.
- .2 Expose all buried utilities prior to excavating or boring in the vicinity of the utility.
- .3 When required by the utility owner, the Region shall enter into an agreement with the utility owner for support of hydro poles and make payments directly to the utility owner for their services.

12. WORK WITHIN THE CANADIAN NATIONAL RAILWAY (C.N.R.) RIGHT-OF-WAY

- .1 Complete all work within the C.N.R. right-of-way in strict accordance with General Order E-10 "Pipe Crossings Under Railways" of the National Transportation Act, Railway Act.
- .2 Prior to commencement of work, contact C.N.R. to have all underground cables verified for location and depth.
- .3 Provide a minimum of seven days' prior notice to the Railway before commencing any work within the Railway right-of-way.
- .4 The Region shall arrange for flagging by C.N.R. forces during the course of work within the C.N.R. right-of-way. All workers on the site shall follow directions from the C.N.R. Flagperson without question. Workers who violate directives from the Flagperson shall be removed from the site.
- .5 Provide a copy of the Contractor's Certificate of Insurance to the Railway before construction begins. This policy shall be a minimum of \$10,000,000.00 for each occurrence and shall name the Canadian National Railway as an additional named insured against public liability and property damage.
- .6 After construction has been completed, restore the Railway right-of-way to its original condition or better, to the satisfaction of the Railway. Restore any fencing removed to facilitate construction to equivalent original condition to the satisfaction of the Railway.

13. WATERCOURSE/FISHERIES PROTECTION

Reference: RMDCS Sections 01570, 01890 & 02240

- .1 Control operations so as to prevent the entry of deleterious materials into watercourses.
- .2 Provide erosion and sedimentation controls, and protection of environmentally sensitive areas downstream, as specified in the Contract Documents.
- .3 Do not operate Equipment in watercourses or on watercourse banks unless required under the Contract.
- .4 Where the Contract requires work in watercourses or on watercourse banks:
 - i) keep the operation of Equipment within such areas to the minimum necessary to perform the specified work;
 - ii) comply with operational constraints that may be specified elsewhere in the Contract Documents; and
 - iii) otherwise proceed in a continuous fashion to minimize the duration of such work.
- .5 Store construction material, excess material, construction debris, and empty containers away from watercourses and watercourse banks.
- .6 Where an area enclosed by cofferdams is being dewatered, release any stranded fish to the watercourse without harm. Discharge dewatering effluent so as to prevent the entry of sediment to the watercourse.
- .7 If the Contract Administrator determines that controls are unacceptable, cease those operations as identified by the Contract Administrator that are causing the entry of deleterious material into watercourses. Such operations shall remain suspended until otherwise directed by the Contract Administrator in writing. Such suspension shall not require the cessation of work required for such essential operations as continuous concrete pours for structures, unless otherwise instructed by the Contract Administrator.
- .8 Provide acceptable means to allow water flow in the original watercourse to continue downstream at all times.
- .9 Do not stockpile fill materials immediately adjacent to the watercourse.
- .10 Remove all earth, stones, boulders, topsoil and organic materials in excess of Contract requirements to disposal sites outside Contract limits.

14. PROVISIONAL ITEMS

- .1 Tender items noted as being "Provisional" may or may not be required in the performance of the Work. The Contractor shall not be entitled to payment of any quantity under such "Provisional" tender items except for the actual quantity used, if any, and only where prior approval for such work and use of such tender items is explicitly given by the Contract Administrator in advance of such work.

1. RMDCS SECTION 01450 - QUALITY CONTROL**.1 CCTV Inspection by the Region**

- .1 Clause 1.07 of RMDCS Section 01450 is deleted. All CCTV inspections of new sewer pipelines shall be performed by the Region. Clean and flush pipe sewers according to RMDCS Section 02530 prior to the CCTV inspection.
- .2 Coordinate the timing of CCTV camera inspection with the Region. The initial CCTV inspection shall be performed after maintenance holes are raised to grade and prior to base asphalt being placed. Provide minimum one week notice to Contract Administrator of the expected date when maintenance holes shall be completed to allow for the Region to arrange for the CCTV camera inspection.
- .3 Allow a minimum of one week for completion of CCTV camera inspection by the Region's CCTV inspection contractor and provide adequate time and space separation from the Contractor's operations while the Region's CCTV inspection contractor is on site performing the CCTV inspection.
- .4 All costs for the further CCTV inspections due to deficiencies in the Contractor's work shall be borne by the Contractor.

2. RMDCS SECTION 01520 – CONSTRUCTION FACILITIES

- .1 Subclause 2.01.10 is amended by the addition of “including continuous supply of potable water” to the hot and cold water cooler item.

3. OPSS 102 - WEIGHING OF MATERIALS**.1 Bar Coding on Material Delivery Invoices**

OPSS 102 is amended as follows **for all hot mix asphalt and all granular materials** supplied under this contract which are measured by mass, in tonnes:

- .2 Section 102.02 of OPSS 102 is amended by the addition of the following:

American National Standard for Materials Handling - Linear Bar Code and Two-Dimensional Symbols Used in Shipping, Receiving, and Transport Applications (ANSI MH10.8.1-2005)

- .3 Subsection 102.06.02 of OPSS 102 is amended by the addition of the following:

The platform scale shall be equipped with a direct cable connection to the computer for the purpose of sending mass measurements.

A printing device connected by direct cable connection to the computer shall be capable of electronically producing, in black print only, tickets conforming to the requirements specified in the Contract Documents.

- .4 Subsection 102.07.01 of OPSS 102 is deleted and replaced by the following:

The Contractor shall provide personnel to conduct the mass measurements. The mass measurements shall be sent to the printing device using a print command on the computer. Any form of override of the printing process, except total transaction rejection, will not be allowed.

The system shall be capable of detecting vehicle overloads, and of automatically signalling overload occurrence to the system operator.

Tickets shall be supplied by the Contractor. Bar codes shall be printed directly onto the weigh ticket or onto labels. Bar coded labels shall be affixed to the Owner's copy of the ticket before it leaves the weigh scale building.

The following information shall be displayed as bar code groups printed in a column or left to right configuration:

- 1) Truck Number
- 2) Tare Weight
- 3) Net Weight
- 4) Ticket Number

The words "Truck", "Tare", "Net", and "Ticket" must appear beneath each appropriate bar code group.

Conventional alphanumerics shall be used elsewhere on the ticket to express the exact information contained in the bar codes.

Automated reading failure rates greater than one reading failure in twenty tickets scanned and attributable to the density or configuration of the bar codes are not acceptable. Where such rates of reading failure occur, the Contractor must take corrective action to enhance the bar code symbology to an acceptable level immediately following notification of the problem.

The bar code symbols shall conform to the American National Standard for Materials Handling - Linear Bar Code and Two-Dimensional Symbols Used in Shipping, Receiving, and Transport Applications (ANSI MH10.8.1-2005) for 3 of 9 bar code (Code 39).

The minimum bar code height shall be 6.4 mm or 15 percent of the bar code length, whichever is greater.

In addition to the bar code group information, each weigh ticket shall contain the following:

- a) licence plate number of unit(s)
- b) time and date of transaction
- c) truck owner
- d) contract number
- e) type of material
- f) source of material
- g) gross weight
- h) overload notation
- i) running total of each material
- j) a place for the checker to sign

For each contract, the following reports shall be produced daily:

- truck register, including allowable gross weight for all vehicles;
- truck tare report for all vehicles, including old and new tares, and time recorded;
- summaries for each type of material;
- summaries for all cancelled loads.

The above reports shall be available for the Contract Administrator to pick-up at the end of daily operations or before start-up the following day.

A sample weigh ticket from each source must be supplied to the Owner two weeks prior to delivery of the material.

4. OPSS.MUNI 180 - MANAGEMENT OF EXCESS MATERIALS

- .1 Make all arrangements for disposal of excess materials off site except as noted otherwise in the Contract Documents.
- .2 The second paragraph of Subsection 180.04.01.01 of OPSS.MUNI 180 is deleted and replaced with the following:

At the completion of such work, the Contractor shall obtain a written release from the respective private property owners and shall provide two copies of each release to the Contract Administrator. The release shall be in the form provided in the Supplementary General Conditions of Contract, Appendix SGC-G.

- .3 Form OPSF 180-3 is deleted and replaced with the form provided in Appendix SGC-G to the Supplementary General Conditions of Contract.

5. OPSS 310 - HOT MIX ASPHALT

- .1 OPSS 310 is amended by the addition of the following new Section:

310.04 DESIGN AND SUBMISSION REQUIREMENTS**310.04.01 Asphalt Pre-Placement Meeting**

An Asphalt Pre-Placement Meeting shall be conducted one week prior to placement of any hot mix asphalt to review granular material grades, mix designs, quality control and quality assurance, proposed scheduling, construction methods and any other issues either the Contractor or the Contract Administrator may wish to discuss related to supply and placement of hot mix asphalt. As a minimum, attendance at the Asphalt Pre-Placement Meeting shall include the Contract Administrator, the Contractor's Site Superintendent and a representative of the Contractor's Asphalt Subcontractor, if applicable.

- .2 Subsection 310.07.11.01 of OPSS 310 is amended by the addition of the following:

The Contractor shall use an approved method of re-heating, re-working and compacting all centreline longitudinal cold joints. Contractor shall use an infra-red heating system, capable of maintaining a minimum temperature of 93°C to produce a welded joint, without scorching or burning the mix. The density of the asphalt at any longitudinal joint measured within 0.3 m of the joint shall be within 1.5% of the mainline mat density.

- .3 Subsection 310.08.01 of OPSS 310 is amended by the addition of the following:

The Region shall conduct quality assurance testing at a frequency deemed necessary by the Region for the purpose of verification of mix compliance. Where there is variance between the QC and QA results, the Contract Administrator shall initiate referee plate sample testing for the purpose of dispute resolution. Results of the referee testing shall be used to assess the degree of remedial action required if applicable. All associated costs required to conduct the referee testing shall be the responsibility of whoever has the results that do not concur with the referee test results.

Where the hot mix asphalt supplier fails to consistently produce asphalt that meets the specifications, the Region shall have the right to refuse further material from the supplier until mix specifications are verified for compliance. Alternatively, the contractor may be required to obtain hot mix asphalt material from another supplier.

- .3 Subsection 310.08.06.03.01 of OPSS 310 is deleted and replaced with the following:

The Contractor shall conduct cores (150 mm diameter) of the pavement to verify the results of the nuclear density testing. A minimum of three cores shall be required at a specific test location. One core shall be tested by the Contractor; one by the Region and one shall be used for a potential referee testing. Cores shall be extracted, no later than 24 hours after placement of the asphalt, from a location adjacent to each area where Marshall plate samples were previously taken. All core locations must be accurately identified as to field location and corresponding Marshall plate sample. The frequency of cores shall be a minimum of one set per 500 tonnes of mix type. The Region may reduce the frequency of core extractions to a minimum of one set of three cores per 1,000 tonnes of mix type per location if results indicate compactive effort is consistently meeting specifications. Compaction testing of the cores shall be according to the most current version of the Ministry of Transportation Ontario's Laboratory Testing Manual, Test LS-287. Acceptance for percent compaction shall be determined by comparing the core Bulk Relative Density (BRD) to the core Maximum Relative Density (MRD).

6. **OPSS.MUNI 330 - IN-PLACE FULL DEPTH RECLAMATION OF BITUMINOUS PAVEMENT AND UNDERLYING GRANULAR**

- .1 OPSS.MUNI 330 is amended by the addition of the following:

330.06 EQUIPMENT

330.06.01 Pulverizing

Equipment used for this work shall be a CMI RS-500 Pulverizer or reviewed equivalent.

- .2 The third paragraph of 330.07.03 of OPSS.MUNI 330 is deleted and replaced with the following:

The operation of full depth reclamation shall ensure that 100% of the mixed material by mass passes the 26.5 mm sieve and 0 to 75% passes the 4.75 mm sieve.

Oversize pulverized material shall be removed from the road base surface and cast to the outer rounding of the shoulder by grading, raking or by hand.

The pulverized materials shall be spread across the entire roadway platform to the shoulder roundings and compacted.

- .3 Subsection 330.07.04 of OPSS.MUNI 330 is amended by the addition of the following requirement:

The Contractor shall supply all water for dust control and compaction.

7. **OPSS.MUNI 402 - EXCAVATING, BACKFILLING AND COMPACTING FOR MAINTENANCE HOLES, CATCH BASINS, DITCH INLETS, AND VALVE CHAMBERS**

- .1 Clause 402.07.08.03 of OPSS.MUNI 402 is deleted and replaced with the following:

Corrective measures ordered by the Contract Administrator to rectify deficiencies caused by over-excavation shall be performed. Soil that has become disturbed by construction methods or procedures shall be removed and replaced with granular material compacted to 100% maximum dry density where the excavated surface is below or beside the proposed structure.

- .2 Clause 402.07.09.01 of OPSS.MUNI 402 is deleted and replaced with the following:

A 150 mm layer of granular bedding material shall be placed on the bottom of the excavation and compacted to 100% of the maximum dry density prior to the placing of a structure.

- .3 The first paragraph of Clause 402.07.09.02 of OPSS.MUNI 402 is deleted and replaced with the following:

Backfill material shall be placed simultaneously on all sides of the structure in layers not exceeding 300 mm in thickness, loose measurement, and compacted to 100% of the maximum dry density prior to the placement of a subsequent layer.

8. **OPSS 407 - MAINTENANCE HOLE, CATCH BASIN, DITCH INLET, AND VALVE CHAMBER INSTALLATION**

- .1 The second paragraph of Subsection 407.10.01 of OPSS 407 is deleted and replaced with the following:

When the Owner raises or lowers the depth of a maintenance hole by up to and including 300 mm, it shall not constitute a Change in the Work and adjustment shall not be made to the payment. Where the depth of a maintenance hole is raised or lowered by more than 300 mm, then this shall constitute a Change in the Work for the full extent of the change from the original grade.

When the Owner raises or lowers a pipe invert in a maintenance hole by up to and including 300 mm, it shall not constitute a Change in the Work and no adjustment shall be made to the payment. Where a pipe invert in a maintenance hole is raised or lowered by more than 300 mm, then this shall constitute a Change in the Work for the full extent of the change from the original grade.

9. **OPSS 408 - ADJUSTING OR REBUILDING MAINTENANCE HOLES, CATCH BASINS, DITCH INLETS, AND VALVE CHAMBERS**

- .1 Subsection 408.07.01 of OPSS 408 is amended by the addition of the following:

After the addition or removal of brick or adjustment units, the existing bricks and adjustment units shall be cleaned and patched/parged to the satisfaction of the Contract Administrator.

Where existing valve chambers include slide-type valve boxes, the valve box shall be adjusted to a maximum height of 300 mm. Additional new sections or total replacement shall be paid using the appropriate Schedule of Contingency Unit Prices item.

- .2 Subsection 408.07.08 of OPSS 408 is amended by the addition of the following:

The total height of adjustment units installed shall not exceed 300 mm.

- .3 Subsection 408.09.01.01 of OPSS 408 is deleted and replaced with the following:

408.09.01.01 Adjusting Maintenance Holes, Catch Basins, Ditch Inlets, and Valve Chambers

For measurement purposes, a count shall be made of the number of structures adjusted.

- .4 Subsection 408.09.01 of OPSS 408 is amended by the addition of the following:

408.09.01.03 Rebuilding Maintenance Holes, Catch Basins, Ditch Inlets, and Valve Chambers

Measurement of rebuilt structures is in metres and shall be:

- a) for raised structures or structures with finished cover elevation unchanged:
the actual difference in elevation from the lowest elevation of the removed portion of the structure to the new finished cover elevation, or
- b) for lowered structures:
the actual difference in elevation from the existing finished cover elevation to the lowest elevation of the removed portion of the structure.

10. OPSS.MUNI 421 – PIPE CULVERT INSTALLATION IN OPEN CUT

- .1 The fifth paragraph of Subsection 421.07.12.01 of OPSS.MUNI 421 is deleted and replaced with the following:

When the Owner raises or lowers the invert of a pipe culvert by 300 mm or less, it shall not constitute a Change in the Work and no adjustment shall be made to the payment. When the invert of a pipe culvert is raised or lowered by more than 300 mm, then this shall constitute a Change in the Work for the full extent of the change from the original grade.

11. OPSS 710 - PAVEMENT MARKING

- .1 The second paragraph of Subsection 710.07.07 of OPSS 710 is amended by the deletion of "Division C of the MUTCD" and its replacement with "the latest edition of the Ontario Traffic Manual Book 11".
- .2 OPSS 710 is amended by the deletion of all other references to "M.U.T.C.D." and its replacement with "the latest edition of the Ontario Traffic Manual".
- .3 Subsection 710.09.01.01 of OPSS 710 is deleted and replaced with the following:

Measurement of pavement marking lines shall be by length in metres, excluding gaps, regardless of line width. Separate tender items are provided for each line width required.

For measurement purposes, a count shall be made of the number of symbols.

12. OPSS 802 - TOPSOIL

Reference: RMDCS Sections 02700 and 02905

- .1 Section 802.09 of OPSS 802 is deleted in its entirety.
- .2 Subsections 802.10.01, 802.10.02 and 802.10.03 of OPSS 802 are deleted and replaced with the following:

802.10.01 Topsoil from Stockpiles and Imported

Payment at the Contract price for the appropriate tender items for sod or seed and mulch shall be full compensation for all labour, Equipment, and Material to do the work.

13. OPSS 803 - SODDING

Reference: RMDCS Section 02700

- .1 Subsection 803.10.01 of OPSS 803 is amended by the addition of the following:

Progress payments for sod shall be made as follows:

- a) 50% upon successful supply and placement
- b) 50% upon meeting the Performance Measure

14. OPSS.MUNI 804 - SEED AND COVER

- .1 Subsection 804.08.03 of OPSS.MUNI 804 is deleted in its entirety. The Contract Administrator's decision as to whether or not the seeded areas meet the specified Performance Measure at the 90-Day inspection shall be final.
- .2 Subsection 804.10.01 of OPSS.MUNI 804 is amended by the addition of the following:

Progress payments for seed and mulch shall be made as follows:

- a) 50% upon successful supply and placement
- b) 25% upon meeting the 60-Day Performance Measure
- c) 25% upon meeting the 90-Day Performance Measure

15. OPSS.MUNI 1010 - AGGREGATES - BASE, SUBBASE, SELECT SUBGRADE, AND BACKFILL MATERIAL

- .1 Subsection 1010.08.01 of OPSS.MUNI 1010 is amended by addition of the following:

Stockpile samples shall be tested by the Contract Administrator or their designated agent at least seven (7) days prior to the expected delivery of such materials to the site. Where the stockpile samples fail to pass the required tests, two (2) more samples shall be taken from the same stockpile by the Contract Administrator or their designated agent. Both of these samples must pass the required tests prior to use of the stockpiled materials. Any further testing shall be at the expense of the Contractor.

The Contractor shall only supply granular materials from pre-approved sources and stockpiles. If unapproved materials are delivered to the site, the Contractor shall immediately remove such materials from the site at the Contractor's expense.

Stockpile samples passing an initial testing shall not be taken as final acceptance of materials for incorporation into the Work. Sampling and test results from these tests shall only determine acceptability of materials for delivery to the site. **Final testing of delivered materials shall be the determining factor for acceptance of materials into the Work.**

- .2 The “duplicate samples” required according to Subsection 1010.08.03 of OPSS.MUNI 1010 shall both be given to the Contract Administrator. One sample shall be used for QA testing by the Contract Administrator as specified in the Contract Documents and the second sample shall be reserved for referee testing if the Contractor chooses to invoke their right under Subsection 1010.08.06.
- .3 Table 1 of OPSS.MUNI 1010 is revised as follows:
- i) Note 3 is deleted and replaced with the following:
- Granular A, B Type I (Modified), B Type III or M shall not contain any crushed glass or ceramic material. Granular A, B Type I (Modified), B Type II, B Type III, M, O, S and SSM shall not contain any deleterious material (wood, clay brick, clay tile, gypsum, gypsum wall board and plaster).
- .4 Table 2 of OPSS.MUNI 1010 is revised as follows:
- For Granular B Type I (Modified), Type II and Type III, percent passing the 26.5 mm sieve is revised to 100.
- .5 Note 3 on Form 1010-D of OPSS.MUNI 1010 is deleted and replaced with the following:
- Granular A, B Type I (Modified), B Type III or M shall not contain any crushed glass or ceramic material. Granular A, B Type I (Modified), B Type II, B Type III, M, O, S and SSM shall not contain any deleterious material (wood, clay brick, clay tile, gypsum, gypsum wall board and plaster)

16. **OPSS.MUNI 1101 – PERFORMANCE GRADED ASPHALT CEMENT**

- .1 Subsection 1101.02 of OPSS.MUNI 1101 is amended by the addition of the following:

Ontario Ministry of Transportation Publications:

Laboratory Testing Manual:

LS-284 Recovery of Asphalt from Solution by Abson or Rotavapor

ASTM International

D7906-14 Standard Practice for Recovery of Asphalt from Solution Using Toluene and the Rotary Evaporator

- .2 In Subsection 1101.03 of OPSS.MUNI 1101, the existing definition of Low Temperature Performance Grade is deleted in its entirety and replaced with the following:

Low Temperature Performance Grade (-YY) means the low temperature performance grade specified elsewhere in the Contract Documents and also referred to as the -YY specified for the performance graded asphalt cement where the PGAC Grade specified is PG XX-YY, and equal to the minimum design pavement temperature.

- .3 In Subsection 1101.03 of OPSS.MUNI 1101, the existing definition of PGAC is deleted in its entirety and replaced with the following:

Performance Graded Asphalt Cement (PGAC) means an asphalt binder that is an asphalt-based cement produced from petroleum residue, modified using polymers, according to the latest version of AASHTO M 320 or M 332 (at the time of tendering).

- .4 Subsection 1101.03 of OPSS.MUNI 1101 is amended by the addition of the following:

Recovered Performance Graded Asphalt Cement (Recovered PGAC) means an asphalt binder that has been extracted and recovered from the hot-mix asphalt. Extraction shall use reagent grade dichloromethylene (DCM), trichloroethylene (TCE) or toluene. Fines shall be removed from the solution using a high speed centrifuge method. Recovery shall be under a nitrogen gas atmosphere according to the Abson or Rotavapor methods in LS-284 or ASTM D7906-14.

The following recovered PGAC samples are designated by the Owner for acceptance of the hot-mix asphalt (HMA): (1) PGAC extracted and recovered from loose HMA plate samples taken during construction of the pavement; or (2) PGAC extracted and recovered from samples saw cut from the finished pavement and tested within a period of 90 days following substantial performance of the contract. Recovered samples shall be used in place of rolling thin-film oven (RTFO) residues and only further aged in the pressurized aging vessel (PAV) for the purpose of AASHTO M 320, LS-299 and LS-308 grading.

- .5 Subsection 1101.04.01.01 of OPSS.MUNI 1101 is amended by the addition of the following:

- f) Test results for the product demonstrating compliance to the requirements of the Contract Documents.
- g) Grade and grade loss according to LS-308 along with a copy of all LS-308 documentation demonstrating that the product complies with the requirements of the Contract Documents.
- h) Average of the critical crack tip opening displacement (δ_t) as determined according to LS-299 along with a copy of all LS-299 documentation demonstrating that the product complies with the requirements of the Contract Documents.

- i) A two (2) litre sample of the tank asphalt cement for each grade according to Table 2 for possible Owner testing.

The Contract Administrator shall review the test results submitted. The mix shall not be placed until the Contract Administrator gives a written confirmation of conformance of the PGAC based on the submitted test results and owner testing to the requirements of the Contract Documents. Within 10 Business Days, commencing after the day of delivery of the samples and test documentation, the Contract Administrator shall provide the above confirmation or advise the Contractor of any non-conformance to the contract requirements. Confirmation of conformance to Contract requirements of the submitted PGAC properties does not constitute any guarantee that the mix can be produced or constructed or both to Contract requirements, and does not relieve the Contractor of the responsibility for ensuring the specified quality of materials and workmanship.

- .6 Subsection 1101.08.03 of OPSS.MUNI 1101 is deleted and replaced with the following:

The Contract Administrator shall determine the frequency of sampling and testing based on the HMA tender quantity for each grade of PGAC. A minimum of one sample shall be taken for each 500 tonnes of HMA placed. The QA and referee samples for possible Owner testing shall be taken at the same time.

PGAC and HMA samples shall be obtained by the Contractor when notified by the Contract Administrator. Sample containers shall be supplied by the Contractor. Sample quantities, labelling, and delivery requirements shall be as shown in Table 2. Samples shall be delivered in a condition suitable for testing.

If liquid PGAC tank samples are requested by the Owner, they shall be obtained during the production of the asphalt mix inside the asphalt mix plant from the storage tank which is directly feeding the production of the asphalt mix.

All loose HMA plate samples shall be obtained directly from the paving equipment during the construction of the pavement.

All test samples shall be obtained by the contractor in the presence of the Contract Administrator according to AASHTO T 40, ASTM D 3665, and the asphalt plant's health and safety plan. The asphalt plant's health and safety plan and procedure for sampling shall be reviewed at the pre-pave meeting.

- .7 Subsection 1101.08.04 of OPSS.MUNI 1101 is deleted in its entirety and replaced with the following:

When the Contract Administrator elects to carry out QA testing, one of the samples shall be randomly selected for testing by the QA laboratory and the remaining sealed sample shall be retained by the QA laboratory for possible referee testing. QA testing will be evaluated against the requirements as specified herein.

Test results for samples that do not comply with the performance grading requirements shall be categorized as borderline or rejectable as defined below. PGAC shall be categorized based on its test result's deviation from: (1) the individual design maximum or minimum pavement temperature and the sum of the deviations from the design maximum or minimum pavement temperatures; (2) the LS-299 CTOD design value; and (3) the LS-308 grade and grade loss designs, defined as follows and given in Table 1. The actual performance grading that is either higher than the design maximum pavement temperature or lower than the design minimum pavement temperature is not considered a deviation..:

1) AASHTO M 320

Borderline: Individual XX and YY deviations are less than or equal to 3 °C and the sum of deviations is less than or equal to 3 °C.

Rejectable: Not complying with the above.

2) LS-299

Borderline: The CTOD value is less than 10.00 mm but greater than or equal to 8.00 mm.

Rejectable: Not complying with the above.

3) LS-308 and Form B of LS-308

Borderline: The maximum grade loss is between 6.0°C and 7.0oC with reference to the 1 hour results at -YY + 10; or the maximum grade loss is between 4.0°C and 6.0°C at -YY + 20 with reference to the 1 hour results at -YY + 10; or the LS-308 grade after three days of conditioning is between -25°C and -28°C.

Rejectable: Not complying with the above.

When a sample does not comply with more than one property, attribute, and PG grading, acceptance of the HMA shall be dealt with using the property, attribute, or PG grading selected by the Owner.

The Owner may conduct elemental testing according to ASTM D7343 or other tests to determine if the asphalt cement meets the material requirements as specified in the Materials section.

If a test result for any sample indicates non-compliance to the specification, the Contract Administrator shall advise the Contractor of the test results and may arrange for additional sampling and testing. The Contract Administrator shall have 30 days from the time of sample delivery by the Contractor to complete and provide each set of test results to the Contractor.

For any single day of paving with more than two borderline results for AASHTO M320, LS-299 or LS-308, the production for the entire day shall be rejectable.

- .8 In the third paragraph of Subsection 1101.08.05 of OPSS.MUNI 1101, the second sentence is deleted and replaced by the following:

The Contract Administrator shall notify the Contractor in writing within 10 business days of receipt of the non-conforming data.

- .9 Subsection 1101.08.05 of OPSS.MUNI 1101 is amended by the addition of the following:

The Owner's review of the test results to determine disposition of the HMA produced shall include all additional testing requirements for which acceptance requirements have been specified.

.10 Table 1 of OPSS.MUNI 1101 is deleted in its entirety and replaced with the following:

Table 1
Additional Testing Requirements and Acceptance Criteria for All PGAC Grades

PGAC Grade	Property and Attributes (Unit)	Test Method	Results Reported Rounded to the Nearest	Acceptance Criteria	Borderline	Rejectable
All PGAC tank samples	Ash Content, % by mass of residue (%)	LS-227	0.1	≤ 0.6	N/A	> 0.6
All recovered PGAC samples	Non-recoverable compliance at 3.2 kPa ($J_{nr-3.2}$) (kPa^{-1})	Multiple Stress Creep and Recovery (MSCR) testing	0.01	< 4.0	N/A	≥ 4.0
	Average percent recovery at 3.2 kPa ($R_{3.2}$) (%)	according to AASHTO TP 70 testing conducted at a temperature of 58°C (Zone 3)	0.1	$> \text{the lesser of } [(29.371)(J_{nr-3.2})^{-0.2633}] \text{ or } 55$	N/A	$\leq \text{the lesser of } [(29.371)(J_{nr-3.2})^{-0.2633} - 10] \text{ or } 50$
	Average critical crack tip opening displacement (δ_t) (mm)	LS-299	0.1	> 10.0	$< 10.0 \text{ and } \geq 8.0$	< 8.0
	Maximum Grade Loss with reference to the 1-hour results at -YY + 10 (°C)	LS-308, 72-hour results at -YY + 10	0.1	≤ 6.0	$> 6.0 \text{ and } \leq 7.0$	> 7.0
		LS-308, 72-hour results at -YY + 20	0.1	≤ 4.0	$> 4.0 \text{ and } \leq 6.0$	> 6.0
	Limiting Grade (°C)	LS-308	0.1	≤ -28	$> -28 \text{ and } \leq -25$	> -25

Location 1

Henry Street (Regional Road 45)
From 60 m north of Burns Street
To the south side of Dundas Street
Town of Whitby

Length: 920 m
Width: Avg. 10.1 m
AADT: 6,400

Description of Work:

Remove and replace various sections of curb and gutter as directed by Contract Administrator.
Replace and/or adjust existing CB and MH frames, grates/covers, and WV boxes to final surface grade.
Cold plane existing surface asphalt between Colborne and Dundas Streets to allow for 45 mm depth new surface asphalt and correct cross-fall.
Temporary pavement marking of milled area.
Cold plane existing pavement partial depth at site limits to allow for placement of 40 mm depth surface asphalt.
Retain millings on site to use as shouldering material on side streets.
Tack coat base asphalt and milled areas.
Place average 40 mm depth HL 3 (PGAC 64-28) on base asphalt.
The use of a material transfer vehicle is required.
Reclaimed asphalt pavement shouldering of narrow shoulders of side streets.
Place Field Reactive Polymeric and Thermoplastic pavement markings.

Location 2

Thornton Road (Regional Road 52)
From 140 m north of King Street
To south side of Adelaide Avenue (Regional Road 58)
City of Oshawa

Length: 550 m
Width: 4 lane urban
AADT: 20,000

Description of Work:

Remove and replace various sections of curb and gutter as directed by Contract Administrator.
Replace and/or adjust existing CB and MH frames and grates/covers and WV boxes to final surface grade.
Cold plane existing pavement partial depth at site limits to allow for placement of surface asphalt.
Cold plane existing pavement adjacent to gutter to allow for placement of 40 mm of surface asphalt
Tack coat base asphalt.
Place average 40 mm depth of HL 1 (PGAC 64-28) over the base asphalt.
The use of a material transfer vehicle is required.
Place Field Reactive Polymeric and Thermoplastic pavement markings.

Location 3A**Energy Drive****From the east side of Courtice Road South****To the west side of Osborne Road****Municipality of Clarington**

Length: 770 m

Width: 12.8 m, Divided 4 lane urban

Description of Work:

Remove and replace various sections of curb and gutter as directed by Contract Administrator.

Replace and/or adjust existing CB and MH frames and grates/covers and WV boxes to final surface grade.

Cold plane existing pavement partial depth at site limits to allow for placement of surface asphalt.

Cold plane existing pavement adjacent to gutter throughout to allow for placement of 40 mm of surface asphalt.

Paver laid base repair, approximately 12 tonnes, as directed by Contract Administrator:

- Remove base asphalt full depth, approximately 60 mm.
- Replace any Granular A lost due to pavement removal operation.
- Grade and compact Granular A road base.
- Place 60 mm depth of HL 3 (PGAC 64-28)

HL 3 (PGAC 64-28) padding, up to 30 mm depth, approximately 15 tonnes, as directed by the Contract Administer, to bring asphalt grade up to 45 mm below final proposed surface grade.

Tack coat base asphalt.

Place average 50 mm depth of HL 1 (PGAC 64-28) over the base asphalt.

The use of a material transfer vehicle is required.

Place Field Reactive Polymeric and Thermoplastic pavement markings.

Location 3B**Courtice Road South****From the north face of the CNR bridge****To 50 m south of Darlington Park Drive****Municipality of Clarington**

Length: 30 m

Width: Varies, 2 lane urban/rural

Excavate existing roadway, shoulder and boulevard area to allow for 550 mm of granular road base and 90 mm of asphalt. (Equipment Rental Items)

Place, grade and compact 400 mm Granular B and 150 mm Granular A.

Place 2 X 45 mm lifts of HL 3 (PGAC 64-28).

Granular shouldering, typical 6% cross-fall.

Topsoil, seed and mulch areas of disturbed boulevard.

Place Field Reactive Polymeric and Thermoplastic pavement markings.

Location 4A**Regional Road 13**

**From 90 metres west to 540 m east of the McCully Bridge
Township of Brock**

Length: 630 m

Width: Varies, 8 m to 11.7 m

AADT: 1,940

Description of Work:

Remove and replace existing concrete curb and gutter as directed by the Contract Administrator (Provisional).
Paver laid base repair, 50 mm partial depth, approximately 15 tonnes, as directed by the Contract Administrator:
HL 3 (PGAC 64-28) padding, approximately 30 tonnes, east and west of bridge deck, where approach slabs have settled. Cold plane existing pavement to key in proposed padding.
Cold plane existing bridge deck pavement 10 mm
Cold plane existing pavement partial depth at site limits to allow for placement of surface asphalt.
Tack coat base asphalt and padding.
Place 55 mm depth HL 3 (PGAC 64-28) surface asphalt.
The use of a material transfer vehicle is required.
Granular shouldering, typical 6% cross-fall.
Place Waterborne pavement markings.

Location 4B**Regional Road 13**

**From 540 m east of the McCully Bridge
To 210 m west of MTO's Highway 12
Township of Brock**

Length: 330 m

Width: 8 m

AADT: 1,940

Grubbing.
Pulverize asphalt and granular to a depth of 300 mm and to a minimum of 1.0 m beyond existing edge of pavement.
Regrade pulverized material across entire roadway platform.
Place, grade and compact 100 mm average depth Granular A.
Cold plane pavement partial depth at east site limit to allow for placement of surface asphalt.
Place 2 X 50 mm lifts of HDBC (PGAC 64-28) over new granular grade.
Place temporary Waterborne yellow centreline. (Paid under Item 1.33.15)
Tack coat between all lifts of new and existing HMA.
Place 40 mm depth HL 3 (PGAC 64-28) over new base asphalt.
Use of material transfer vehicle is required for placement of base and surface asphalt.
Granular shouldering, typical 6% cross fall, average width 3.0 m.
Remove and replace field entrance culvert.
Majority of ditching to occur after shouldering, using material from ditching operations to topsoil side-slopes of shoulders.
Restoration of driveway and trail aprons to suit new grade.
Sodding and seeding of disturbed ditches and boulevards as directed by Contract Administrator.
Place Waterborne pavement markings.

Location 5**Regional Road 13****From 500 m east of Lake Ridge Road (Regional Road 23)****To 800 m west of Sideline 17****Township of Brock**

Approximately 15 spreader placed patches, ranging from 1.5 m to full lane width, approximately 2,000 m².
Cold plane existing asphalt, 50 mm depth as directed by the Contract Administrator (Cold Planer rentals).
Tack coat milled surface.
Place 50 mm depth HL 3 (PGAC 58-28).

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Section – Roadworks

- Reference: .1 Construct all storm sewers and appurtenances according to Regional Municipality of Durham Construction Specifications for Regional Services - Revised April 2014 and OPSS.MUNI 410.
- .2 Contract Drawings and Standard Drawings for Contract D2017-012.
- .3 Reference Special Provisions - General Requirements, Clause 8.

ITEM 1.01.01 – GRUBBING

- Reference: RMDCS Section 01890
OPSS 201 and OPSS.MUNI 510

ITEM 1.03.09 & .30 – REMOVALS

- Reference: OPSS.MUNI 510

Also include:

- .1 Dispose of all removed materials off site to a location arranged for by the Contractor. Existing frames and covers/grates removed shall become property of the Contractor and disposed of at the Contractor's expense.
- .2 Provide Contract Administrator with evidence of acceptance of surplus materials by property owner of disposal site and a signed release from the property owner upon completion of all disposal activities at the disposal site. The release form shall be according to Appendix SGC-G to the Supplementary General Conditions of Contract.
- .3 Fill all maintenance hole and catch basin excavations in the travelled roadway and which extend below the existing or proposed subgrade, as the case may be, with Granular B Type I (Modified) and compact.

Measurement for Payment:

- .1 Measurement of removal items shall be by actual measurement according to 510.09.01 of OPSS.MUNI 510 except for items where the units of measure noted in the Form of Tender include "(P)". The measurement for payment for such items shall be by Plan Quantity according to Subsection 510.09.02 of OPSS.MUNI 510.

ITEM 1.03.17 – REMOVAL OF ASPHALT PAVEMENT, PARTIAL DEPTH (UP TO 50 mm)

- Reference: OPSS 310 and OPSS.MUNI 510
RMDSD S-301.010

Also include:

- .1 Cold plane existing asphalt using a milling unit capable of milling a minimum 2.3 m width pass as well as accurately and automatically establishing profile grades and automatic control of cross-fall.
- .2 Remove asphalt millings from the site and dispose of.
- .3 Construct a straight, clean, vertical joint in the existing pavement so that the vertical depth of the joint is according to RMDSD S-301.010 on transverse and/or longitudinal joints where new pavement commences at or intersects an existing paved surface, or along existing curb and gutter.
- .4 Saw cut longitudinal and/or transverse joints where rounding has occurred prior to placement of the adjacent mat (surface lift).
- .5 Perform sweeping and cleanup of milled areas to the satisfaction of the Contract Administrator prior to placement of new paving material.
- .6 Apply tack coat to the vertical faces of joints by mechanically spraying a thin, uniform and continuous coating. The tack coat shall be applied sufficiently ahead of paving operations to allow for curing to a proper condition of tackiness.
- .7 Perform traffic control, unless paid under a separate tender item.

- .8 Supply, place and maintain bump signs at all transverse, longitudinal and full width grind location end joints, prior to the paving occurring.
- .9 Spray joints of milled surfaces open to traffic in high visibility florescent orange paint.
- .10 Adequately feather hot-mix on milled areas around all catch basins, maintenance holes, valve boxes, pedestrian crossings and end limits, including intersecting streets, prior to opening up lanes to traffic and remove immediately before paving.

Note:

- .1 Full width grinding of pavement locations should occur no more than one (1) week in advance of the paving operation.
- .2 Asphalt pavement removal shall not be permitted during inclement weather (i.e. rain).
- .3 The resulting milled surface shall have a constant and continuous cross-fall matching the proposed surface cross-fall except where approved or otherwise directed by the Contract Administrator.
- .4 The resulting milled surface will be uniform, have consistent profile and a texture free of excessive ridges and groves.
- .5 Where the finished milled surface does not conform to the above, i.e. has ridges or humps, or is gouged, the Contractor shall correct the deficient work at their expense.
- .6 Milling teeth (cutting tools) shall be uniform, not be worn in excess of manufacture's specification, or broken.

Measurement for Payment:

- .1 Measurement of partial pavement removal shall be by area in square metres.

ITEM 1.03.42 – IN-PLACE FULL DEPTH RECLAMATION OF BITUMINOUS PAVEMENT AND UNDERLYING GRANULAR

Reference: Special Provisions - Revisions to Standard Specifications, Clause 5 - Revision to OPSS 310
 Special Provisions - Revisions to Standard Specifications, Clause 6 - Revision to OPSS.MUNI 330
 OPSS 310 and OPSS.MUNI 330 & 501

For the purposes of this tender item, Clause 501.06.01.01 of OPSS.MUNI 501 is deleted and replaced with the following:

Equipment used for shaping and compaction of the pulverized, mixed material shall include:

- 1 - grader, tandem drive 125 HP minimum
- 1 - roller, self-propelled steel drum vibratory, Class S2 (reference Table 2 in OPSS 310)
- 1 - roller, self-propelled pneumatic tired, Class R2 (reference Table 3 in OPSS 310)
- 1 - water truck, for compaction purposes

Also include:

- .1 Mobilize and de-mobilize pulverizing equipment for each lane or stage of construction.

Note:

- .1 The existing pavement depths were determined by advancing boreholes at random locations throughout the length of the respective locations. Asphalt depths range from 130 mm to 150 mm, but may vary.
- .2 The existing asphalt surface and granular base shall be pulverized and blended to a depth of at least 300 mm into the existing granular base material.

Measurement for Payment:

- .1 Measurement of full depth reclamation shall be according to Clause 330.09.01.01 of OPSS.MUNI 330.

Basis of Payment:

- .1 No additional compensation will be made for asphalt encountered in excess of depths indicated.

ITEM 1.03.43 – SMALL COLD PLANER**ITEM 1.03.45 – MEDIUM COLD PLANER**

Reference: OPSS 310 and OPSS.MUNI 510
RMDSD S-310.010

Also include:

- .1 Supply and operate a small cold milling unit capable of milling asphalt to a minimum 0.45 m width.
- .2 Supply and operation of a medium cold milling unit capable of milling asphalt to a minimum 1.2 m width.
- .3 At Location 1, retain asphalt millings on site for shouldering adjacent side streets.
- .3 Ramp all end joints that will be left for more than one day. This ramping is required to protect the edge of pavement and minimize complaints from the travelling public.
- .4 Sweep and cleanup millings to the satisfaction of the Contract Administrator.
- .5 Supply and operate a Skid Steer Loader for cleanup of millings.

Note:

- .1 Small milling unit shall be used to mill lap joints according to RMDSD S-301.010.
- .2 Skid Steer Loader shall have both broom and bucket attachments available on site.

Measurement for Payment:

- .1 Measurement of cold planer shall be by actual hours of operation of the cold planer, with a minimum of 4 hours.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Materials to do the work including all other reasonable associated costs related to the work.
- .2 Travel time to and from the site and idle time shall be at the Contractor's expense.

ITEM 1.03.44 – LARGE COLD PLANER

Reference: OPSS 310 and OPSS.MUNI 510
RMDSD S-301.010

Also include:

- .1 Supply and operate a large cold milling unit capable of milling asphalt to a minimum 2.3 metre width as well as accurately and automatically establishing profile grades and automatic control of cross-fall.
- .2 Perform sweeping and cleanup to the satisfaction of the Contract Administrator.
- .3 Remove asphalt millings from the site. Provide adequate trucks on site for the removal of the millings as they are produced.
- .4 Control traffic during milling operations.
- .5 **Supply, place and maintain bump signs at all transverse, longitudinal and full width grind location end joints, prior to the paving occurring.**
- .6 Saw-cut longitudinal and/or transverse joints where rounding has occurred prior to placement of the adjacent mat (surface lift).
- .7 On transverse and/or longitudinal joints where new pavement commences at or intersects an existing paved surface, or along existing curb and gutter, construct a straight, clean, vertical joint in the existing pavement so that the vertical depth of the joint is 40 mm tapering to 0 mm at the specified width.

Note:

- .1 Milling depths range from 10 mm to 60 mm.
- .2 Full width grinding of pavement locations should **occur no more than one (1) week in advance of the paving operation.**
- .3 Work under this tender item shall not be permitted during inclement weather (i.e. rain).

Measurement for Payment:

- .1 Measurement of small cold planer shall be by actual hours of operation of the large cold planer, with a minimum of 4 hours.
- .2 Travel time to and from the site and idle time shall be at the Contractor's expense.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Materials to do the work including all other reasonable associated costs related to the work.
- .2 Travel time to and from the site and idle time shall be at the Contractor's expense.

ITEM 1.06.01 & .02 – GRANULAR MATERIALS

Reference: Special Provisions - Revisions to Standard Specifications, Clause 3 - Revision to OPSS 102
 Special Provisions - Revisions to Standard Specifications, Clause 15 - Revision to OPSS.MUNI 1010
 RMDCS Section 02749
 OPSS 102, 506 & 1001 and OPSS.MUNI 314 & 1010 (including Appendices 1010-D and 1010-E)
 OPSD 200.010

Also include:

- .1 Supply, place, grade and compact all Granular A for road base, shoulders, culvert backfill, driveways, sidewalks, multi-use/bike paths, and boulevards.
- .2 Supply, place, grade and compact all Granular B, Type I (Modified) for road base.
- .3 Supply all water for dust control and compaction according to OPSS 506.
- .4 Provide bar-coded weigh tickets according to OPSS 102 and the Standard Revision to OPSS 102.

Note:

- .1 The Contractor shall complete and submit forms 1010-D and 1010-E for all QC testing performed.
- .2 Subsection 1001.05.01 of OPSS 1001 is amended by the deletion of Quarried Limestone as acceptable Fine Aggregate material for Item 1.06.02 only.

Measurement for Payment:

- .1 Measurement of granular materials shall be according to 314.09.01.01.01 of OPSS.MUNI 314.
- .2 Weight tickets shall be received on site for all Granular A applications including Granular A base for sidewalks, multi-use/bike paths, and boulevards.

ITEM 1.08.02 – HL 3 - SURFACE (PGAC 58-28)**ITEM 1.08.09 – HL 1 - SURFACE (PGAC 64-28)****ITEM 1.08.10 – HEAVY DUTY BINDER COURSE (HDBC) (PGAC 64-28)****ITEM 1.08.52 – HL 3 - SURFACE (PGAC 64-28)**

Reference: Special Provisions - Revisions to Standard Specifications, Clause 4 - Revision to OPSS 102
 Special Provisions - Revisions to Standard Specifications, Clause 5 - Revision to OPSS 310
 Special Provisions - Revisions to Standard Specifications, Clause 16 - Revision to OPSS.MUNI 1101
 RMDCS Section 02749
 OPSS 102, 310, 311 & 1150, OPSS.MUNI 1003, OPSS.MUNI 1101
 RMDSD S-301.010

Also include:

- .1 Provide bar-coded weigh tickets according to OPSS 102 and the Standard Revision to OPSS 102.
- .2 Self-propelled Material Transfer Vehicle required for all mainline paving operations.

Restoration and Repairs to Hot Mix Asphalt

- A 100 m section means any full lane, 100 m in length, commencing at any point in the new HMA pavement.
- Where areas requiring repair or restoration are separated by less than 15 m longitudinally, or more than three areas requiring repair fall within any 100 m section, repair the entire section between the furthest limits of the areas.
- Where the sum of the lengths of repair/restoration areas in any 100 m section exceeds 50% of that section, repair the entire section.
- The previous requirement may be relaxed at the sole discretion of the Contract Administrator where only two repair areas form parts of the 100 m section and the individual length of either of the repair/restoration areas is less than 50 m.
- Where a repair/restoration area is greater than 7 m in length, the repair/restoration shall encompass the entire lane width.
- Should the edges of the repair/restoration areas be within 1 m of the edge of pavement or an existing longitudinal joint, the repair area shall extend to the edge of pavement or existing joint, as applicable. For transverse joints, the minimum separation shall be 3 m.
- Joints of repair/restoration areas shall not be located on, or be in the vicinity of, wheel paths. The Contract Administrator's decision on the joint location shall be final.
- Joints of repair/restoration areas shall not be located on, or be in the vicinity of, wheel paths. The Contract Administrator's decision on the joint location shall be final.
- Coat the entire repair/restoration area with tack coat.
- The Contract Administrator may require testing of the repair area for all criteria.
- When a lane must remain closed over night, as determined by the Contract Administrator, the Contractor shall supply and erect an illuminated arrow board.
- Crack sealing of all joints created by the asphalt repair.

Substitution of Specified Mix

The Region reserves the right to require substitution of major surface asphalt item with HL 3, HL 3F or HL 8 for the purposes of crack and base repairs, padding, driveways and other minor handwork at locations where no provision has otherwise been made for those specific items. If applicable, Item 1.08.15 - Extra-Over Hand Asphalt shall apply.

Driveways and Miscellaneous Handwork

HL 1 & HL 3 Surface – These items include paying of large entrances and driveways where HL 3F asphalt is considered inappropriate by the Contract Administrator. Driveways requiring over 5 tonnes of surface shall be asphalt spreader placed. Item 1.08.15 - Extra-Over Hand Asphalt shall apply for driveways less than 5 tonnes and any miscellaneous handwork associated with paving driveways.

Material Transfer Vehicle ("Shuttle Buggy")

Employ the use of a self-propelled Material Transfer Vehicle for binder and surface asphalt at Locations 1, 2, 3 and 4. The Material Transfer Vehicle shall not be mechanically attached to the asphalt spreader.

If any segregation is found in the final, placed HMA pavement, as determined by the Contract Administrator, cease all operations until the cause of the defective work has been remedied.

All associated costs to supply, operate and maintain the Material Transfer Vehicle shall be included in the Contract price for the appropriate hot mix asphalt tender items.

Mainline Paving

Mainline paving shall be conducted in consecutive adjacent passes in the same direction unless otherwise permitted by the Contract Administrator.

Paving in Echelon

Where paving in echelon, as defined in OPSS 310, is specified, or where the Contractor elects to pave in echelon, the Contractor shall employ two asphalt pavers each with a minimum standard paving width of 3.05 m, and each equipped with a mass flow paver hopper insert ("buggy bin"). All associated costs to supply, operate and maintain this unit shall be included in the Contract price for the appropriate hot mix asphalt items.

Paver Screed Auger Extensions

Where the standard paving width exceeds 4.0 m, the use of paver screed auger extensions is required. The auger ends must be no greater than 0.3 m from the edges of the paving width.

Site Clean up

Complete general site clean up within one (1) week of completion of paving to the satisfaction of the Contract Administrator.

Measurement for Payment:

- .1 Measurement of hot mix asphalt shall be according to Clause 310.09.01.01.01 of OPSS 310.

Basis of Payment:

Subsection 310.10.01.01 is amended by the addition of the following:

The Contract price for hot mix asphalt shall include the supply and placement of temporary line markings, unless an item has otherwise been provided. Temporary line markings are required when more than one lift of asphalt is to be placed and the successive lift is not placed prior to the upcoming weekend. Temporary line markings are also required on milled surfaces that are not paved over prior to the upcoming weekend. These temporary (interim) line markings are required on curves and long sections of pavement where spot marking would be necessary for safety purposes.

ITEM 1.08.15 – EXTRA OVER HOT MIX ASPHALT - HAND ASPHALT

Reference: OPSS 310

Also Include:

- .1 This item is an "extra over" item for hand-placement of **permanent** hot mix asphalt on crack repair, swales, shoulders, gutters, etc., and shall reflect the additional labour cost only, as the Contractor will also be paid for the hot mix asphalt under the appropriate items.

ITEM 1.08.73 – TACK COAT

Reference: OPSS 310, 1103 and OPSS.PROV 308

Subsection 310.07.03 of OPSS 310 is amended by the addition of the following:

Tack coat shall be applied using self-propelled or tow-along pressure distributors capable of applying the product at the specified rate and in a continuous and uniform manner both longitudinally and transversely for the full lane width. The distributors shall be equipped with a volume-determining device of sufficient sensitivity to measure the quantity of tack coat dispensed, measurable to the nearest five litres.

Also include:

- .1 Apply tack coat to milled pavement and previously paved surfaces prior to new paving.
- .2 Apply tack coat according to OPSS 310 and Subsection 308.07.01 of OPSS.PROV 308.

Note:

- .1 The use of a hand held pressure wand is acceptable only for tack coating small irregularly shaped areas such as tapers.
- .2 The Contractor shall consider the use of alternative products for night time operations and cold temperatures. The use of any alternative product requires the approval of the Contract Administrator.
- .3 Contract Administrator may require, at any time, testing of the diluted emulsion.

Measurement for Payment

- .1 Measurement of tack coat shall be according to Clause 310.09.01.02 of OPSS 310.

ITEM 1.12.04 – CULVERT PIPE

Reference: Special Provisions - General Requirements, Clause 8
 Special Provisions - Revisions to Standard Specifications, Clause 10 - Revision to OPSS.MUNI 421
 OPSS 1801 and OPSS.MUNI 421
 OPSD 802.010

Also include:

- .1 Excavate to grade and dispose of surplus materials.
- .2 Remove and dispose of existing pipe where the proposed culvert is to be installed in the same trench and a removal item is not provided.
- .3 Pipe bedding and cover shall be according to OPSD 802.010.
Note: Granular embedment material shall be Granular A. Embedment material shall be placed and compacted in maximum 300 mm lifts up to the bottom of the roadway/driveway granular base.
- .4 Pipe couplers, where required, shall be watertight.
- .5 Backfill with select native materials and compaction.

Note:

- .1 Acceptable pipe materials for this Item are:
 - a) Corrugated Steel Pipe, Aluminized Type 2 to CSA G401.
 - b) Reviewed equivalent
- .2 Contractor shall be responsible to confirm culvert lengths, sizes and types prior to ordering materials.
- .3 The Contract price for pipe shall also include any adjustment in length within plus or minus 0.3 m. No increase shall be given or deduction taken for adjustment within the 0.3 m of horizontal tolerance.
- .4 Road base granular and permanent asphalt restoration, to match existing granular and asphalt depths, will be paid under the appropriate granular and asphalt items.
- .5 Entrance culverts shall be installed prior to road base construction and be concurrent with regrading of adjacent ditch sections so that culvert elevations suit new ditch grades.

ITEM 1.13.01 – ADJUST WATERMAIN VALVE BOX

Reference: RMDSD S-220.010

Also include:

- .1 Excavate to grade and dispose of surplus material.
- .2 Adjust sliding-type valve box to finished grade.
- .3 Remove an area of asphalt around the valve box sufficient to achieve specified compaction.
- .4 Backfill and compact excavated area.
- .5 Restore and compact granular road base material.
- .6 Supply and place hot mix asphalt, in kind.

Measurement for Payment:

- .1 For measurement purposes, a count shall be made of the number of valves adjusted.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Materials to do the work.

ITEM 1.13.20 – REPLACE TOP SECTION OF WATERMAIN VALVE BOX

Reference: RMDSD S-220.010

Also include:

- .1 Excavate to grade and dispose of surplus material.
- .2 Remove existing valve box top section and dispose off site.
- .3 Supply and install new sliding-type valve box top section and adjust to finished grade.
- .4 Backfill and compact excavated area.
- .5 Restore and compact granular road base material.
- .6 Supply and place hot mix asphalt, in kind.

Measurement for Payment:

- .1 For measurement purposes, a count shall be made of the number of valve box top sections replaced.

Basis of Payment:

- .1 Payment at the Contract price for this tender item shall be full compensation for all labour, Equipment and Material to do the work.

ITEM 1.14.24 – ADJUSTING MAINTENANCE HOLES, CATCH BASINS AND WATERMAIN VALVE CHAMBERS (MAXIMUM 300 mm)

Reference: Special Provisions - Revisions to Standard Specifications, Clause 9 - Revision to OPSS 408
RMDCS Section 02631
OPSS 408
OPSD 704.010

Also include:

- .1 Raise maintenance holes no earlier than 72 hours prior to placing surface asphalt.
- .2 Repair, or remove and replace existing brickwork complete as required to a maximum of 300 mm.
- .3 Clean and patch/parge existing bricks and adjustment units to the satisfaction of the Contract Administrator.
- .4 Remove, salvage and reinstall existing frame and cover/grate. Clean exterior of existing frame to the satisfaction of the Contract Administrator. Remove dirt and foreign material not bonded to the casting.
- .5 Adjustment to final grade.
- .6 Supply, place and compact Granular A backfill up to bottom of frame.
- .7 Tack coat or apply bituminous paint to the exterior sides of the frame.
- .8 Supply and place hot mix asphalt, in kind. Place asphalt to base of frame, regardless of adjacent asphalt depths.

- .9 Saw cut new curb in line with edges of catch basin frames.

Measurement for Payment:

- .1 For measurement purposes, a count shall be made of the number of frames and covers/grates adjusted.

Basis of Payment:

- .1 Payment at the Contract price for this tender item shall be full compensation for all labour, Equipment and Material to do the work.

ITEM 1.14.26 – REPLACE MAINTENANCE HOLE FRAME AND COVER OR CATCH BASIN FRAME AND GRATE

Reference: Special Provisions - Revisions to Standard Specifications, Clause 9 - Revision to OPSS 408
OPSS 408 and OPSS.MUNI 510
OPSD 400.020 & 401.010

Also include:

- .1 Remove and salvage existing frame and cover/grate and transport to Region's Oshawa/Whitby Depot.
- .2 Repair, or remove and replace existing brickwork with acceptable alternative, according to the Approved Manufacturers' Products List. The maximum total height of existing and new bricks, adjustment units or grade rings shall be 300 mm.
- .3 Supply and install new maintenance hole frame and cover according to OPSD 401.010 complete in a new bed of mortar. Use Type B frame and cover in the roadway and Type A frame and cover for all other locations.
- .4 Supply and install new catch basin frame and grate according to OPSD 400.020 complete in a new bed of mortar.
- .5 Supply and place Granular A backfill compacted around brickwork and frame.
- .6 Supply and place hot mix asphalt, in kind, except where asphalt placement is covered under another tender item.

Measurement for Payment

- .1 For measurement purposes, a count shall be made of the number of frames and covers/grates replaced.

Basis of Payment

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Materials to do the work.

ITEM 1.17.10 – CONCRETE CURB AND GUTTER - ALL TYPES (HAND PLACED)

Reference: RMDCS Section 02700
OPSS 353 and OPSS.MUNI 1350
OPSD 600.010, 600.020, 600.030, 600.040, 600.080, 600.110, 605.030, 608.010, 610.010,
310.030 & 351.010

Also include:

- .1 Construct curb terminations according to OPSD 608.010.
- .2 Provide sidewalk key where sidewalk is constructed adjacent to the proposed curb and gutter.
- .3 Form new curb to match and tie into all existing curb and gutter shapes unless otherwise directed by the Contract Administrator.
- .4 Restore adjacent areas disturbed by curb construction (i.e. sod, asphalt, concrete etc.)
- .5 Hand form concrete around catch basins or any other appurtenances

Note:

- .1 **Curb shall be dropped flush to the gutter at all sidewalk ramps** as per the "super elevated" section shown on OPSD 600.010 and as shown on OPSD 310.030. Do not use 30 mm lip shown on "tangent" section for sidewalk ramps. This lip shall be used at entrances only.

ITEM 1.17.16 – RMDSD S-101.020 CATCH BASIN SETBACK

Reference: RMDCS Section 02700
 OPSS 353 and OPSS.MUNI 1350
 RMDSD S-101.020

Note:

- .1 This item is "extra over" the straight line curb paid under Item 1.17.10.
- .2 No deduction shall be made for the length of the catch basin setback in computing the measurement for any concrete curb and gutter item.

Measurement for Payment:

- .1 For measurement purposes, a count shall be made of the number of setbacks constructed.

Basis of Payment:

- .1 Payment at the Contract price for this tender item shall be full compensation for all labour, Equipment and Materials to do the work.

ITEM 1.19.03 – SEED AND MULCH

Special Provisions - Revisions to Standard Specifications, Clause 13 - Revision to OPSS 803
 Special Provisions - Revisions to Standard Specifications, Clause 14 - Revision to OPSS.MUNI 804
 RMDCS Section 02700 & 02905
 OPSS 803 and OPSS.MUNI 501 & 804

Note:

- .1 All work under these items shall be performed by an acceptable specialist Subcontractor using workers experienced in sodding and seeding.
- .2 Sseed shall be Standard Roadside Mix.

ITEMS 1.20.01, .04, .05, .10 & .11 – EQUIPMENT RENTAL - COMMON

Reference: OPSS 127

Measurement for Payment:

- .1 Measurement of rental equipment shall be by time in hours for effective operated time performing work designated by the Contract Administrator to be carried out on an equipment rental basis.

Basis of Payment:

- .1 Payment at the Contract price for these tender items shall be full compensation for total cost of owning and operating the Equipment including all direct and indirect costs such as, but not limited to: fuel, oil and other consumables and supplies; transportation of the equipment to and from the site; regular maintenance and field repairs; overhaul; depreciation and financing; storage; insurance; and overhead and profit.
- .2 The Contract price shall also include the cost of labour and a foreman for grade control and all requirements for traffic control.
- .3 No payment will be made for stand-by time or minimum call-out time except as specified.

ITEM 1.20.01 – GRADALL

Reference: Clause 127.02.07.05 of OPSS 127

Also include:

- .1 Furnish and operate a carrier-mounted, telescopic boom excavator with a minimum operating weight of

20,000 kg.

Note:

- .1 Acceptable models are:
 - a) Gradall XL4100
 - b) Reviewed equivalent

ITEM 1.20.04 – MECHANICAL SWEEPER, SELF PROPELLED WITH WATER ATTACHMENT

Reference: Clause 127.02.12.02 of OPSS 127

Also include:

- .1 Furnish and operate a self-propelled mechanical sweeper with a vacuum system capable of removing fine (dust) material from the road surface.

Note:

- .1 Acceptable models are:
 - a) Johnston VT605
 - b) Elgin Geovac or Whirlwind
 - c) Reviewed equivalent

ITEM 1.20.05 – LOADER/BACKHOE

Reference: Clause 127.02.07.08 of OPSS 127

Also include:

- .1 Furnish and operate a loader/backhoe complete with an Extend-a-Hoe attachment, with a minimum net flywheel power of 65 kW.

Note:

- .1 Acceptable models are:
 - a) Case 580SL
 - b) Reviewed equivalent

ITEM 1.20.10 – TRIAXLE DUMP TRUCK

Reference: Clauses 127.02.08.08 and 127.02.08.07 of OPSS 127

Also include:

- .1 Furnish and operate a gasoline or diesel powered, tandem rear axle with 3rd lift axle and a minimum GVWR of 32,000 kg.

Note:

- .1 Tandem dump trucks may be used as a substitute on locations approved by the Contract Administrator. Where used, tandem dump trucks shall be paid at 85% of the Contract price for a Triaxle Dump Truck.

ITEM 1.20.11 – WATER TRUCK - PRESSURE SPRAY BAR AND NOZZLES

Reference: Clause 127.02.08.13 of OPSS 127

Also include:

- .1 Furnish and operate a tandem rear axle water truck, gasoline or diesel powered, with a pressure water spray bar.

ITEM 1.21.01 – FOREMAN AND TRUCK

Include:

- .1 All labour costs, payroll burden, overhead and profit.
- .2 Travel time.
- .3 Supply of one vehicle for transporting crew members and hand tools.

Note:

- .1 The Contract price for this item shall also apply when a Foreman and Truck is required for extra work as ordered by the Contract Administrator.

Measurement for Payment:

- .1 Measurement for payment shall be based on the actual time, in hours, that a foreman is required to perform work as directed by the Contract Administrator.

ITEM 1.21.02 – SPECIALIZED LABOURER FOR ASSISTANCE TO HOMEOWNERS

Reference: OPSS 127

Also include:

- .1 Provide at all times a worker to provide assistance to local residents and business owners in carrying parcels to and from their homes or businesses where construction makes access to residences or businesses difficult.
- .2 Provide a pickup truck or panel truck or other vehicle as necessary to assist with deliveries to local businesses where access by truck will be difficult.

Note:

- .1 This item will only be used upon the direction or consent of the Contract Administrator.

Measurement for Payment

- .1 Measurement of labourer shall be by actual time, in hours, that the labourer is in service to local residents and businesses.

Basis of Payment

- .1 Payment at the Contract price for the above tender item shall be full compensation for labour costs, including payroll burden, overhead and profit, and Equipment costs to provide one worker, as directed by the Contract Administrator.
- .2 Picking up and moving garbage and recycling containers placed at the curb by local residents within the limits of closed road areas will be at the Contractor's expense and shall not be paid under this item.

ITEM 1.33 – PAVEMENT MARKING - WATERBORNE TRAFFIC PAINT**ITEM 1.33.01 – BROKEN WHITE (10 cm, ALL PATTERNS)****ITEM 1.33.03 – BROKEN YELLOW (10 cm, ALL PATTERNS)****ITEM 1.33.10 – SOLID WHITE (10 cm)****ITEM 1.33.12 – SOLID WHITE (45 cm) FOR STOP BARS****ITEM 1.33.15 – SOLID YELLOW (10 cm)****ITEM 1.33.20 – SYMBOLS - ARROW**

Reference: Special Provisions - Revisions to Standard Specifications, Clause 11 - Revision to OPSS 710
OPSS 710 & 1716

Also include:

- .1 Perform all pre-marking.
- .2 Apply all temporary stop bars and transverse lines upon completion of milling operation.

Note:

- .1 Paint materials shall be according to OPSS 1716. Acceptable products are those waterborne products listed on MTO's DSM List #5.85.40.
- .2 The work shall be performed according to the manufacturer's recommendations, which shall include the use of a qualified firm, trained and licensed by the material manufacturer.
- .3 Pre-marking shall be inspected by the Contract Administrator prior to application of permanent pavement markings.
- .4 Contract quantities provide for two applications of line markings, the first immediately after paving and the second the following Spring. A second application will be required as final surface course asphalt will not be placed (by others) until the end of the Warranty Period for this contract.

ITEM 1.34 – PAVEMENT MARKING, DURABLE - FIELD-REACTION POLYMERIC

ITEM 1.34.12 – SOLID WHITE (45 cm) FOR STOP BARS

ITEM 1.34.14 – SOLID WHITE (10 cm) TRANSVERSE FOR CROSSWALK

ITEM 1.34.20 – SYMBOLS – ARROW

Reference: Special Provisions - Revisions to Standard Specifications, Clause 11 - Revision to OPSS 710
OPSS 710, 1714 & 1750

Also Include:

- .1 Perform all pre-marking.
- .2 Supply and apply field-reacted, two component polymeric pavement marking material by the extrusion (screed) method according to the manufacturer's specifications, at locations as directed by the Contract Administrator.

Note:

- .1 Polymeric materials shall meet the requirements of OPSS 1714. Acceptable products are Lafrentz System 400, or those products on MTO's DSM List #5.85.45 which are specified for the extrusion (screed) method. Spray method and products are not acceptable.
- .2 Glass beads shall meet the requirements of OPSS 1750. Acceptable manufacturers are those listed on MTO's DSM List #5.85.38. The Contractor shall note Subsection 1714.05.04 of OPSS 1714, which requires both premixed and surface applied glass beads for the screed application method.
- .3 The work shall be performed according to the manufacturer's recommendations, which shall include the use of a qualified firm, trained and licensed by the material manufacturer.
- .4 Pre-marking shall be inspected by the Contract Administrator prior to application of permanent pavement markings.
- .5 Stop bars shall not be installed until after intersection stop controls (traffic signals or stop signs) have been installed.
- .6 Any applications which fail to meet the service requirements specified in OPSS 1714 at any time during the Warranty Period shall be completely removed and replaced by the Contractor at the Contractor's expense.

ITEM 1.35 – PAVEMENT MARKING, DURABLE - FIELD-REACTION POLYMERIC OR THERMOPLASTIC

ITEM 1.35.01 – BROKEN WHITE (10 cm, ALL PATTERNS)

ITEM 1.35.10 – SOLID WHITE (10 cm)

ITEM 1.35.15 – SOLID YELLOW (10 cm)

Reference: Special Provisions - Revisions to Standard Specifications, Clause 11 - Revision to OPSS 710
OPSS 710, 1713, 1714 & 1750

Subsection OPSS 710.08.02 is amended by the addition of the following:

Reflectivity shall be measured by random testing according to ASTM D7585-10. Should a random test area fail to meet the requirements of the applicable OPSS, the area for testing will be expanded to determine the overall length of marking that will have to be re-applied.

Should a section of the marking appear questionable in terms of its retroreflectivity, measurements shall be

undertaken in accordance to ASTM D7585-10.

The zone of measurement will begin with the first stretch of suspect marking and extend to the last section.

Any applications which fail to meet the requirements specified in OPSS 1713 or 1714, as applicable, at any time during the Warranty Period shall be completely removed and replaced by the Contractor at the Contractor's expense.

Deficient pavement markings shall be removed at Contractor's expense. The removal method shall be non-destructive to the new HMA mat (i.e. water/soda blasting). Grinding of deficient pavement markings shall not be permitted.

Note:

- .1 Work under this tender item shall include the supply and application of longitudinal pavement marking materials.
- .2 Materials shall meet the requirements of OPSS 1713 or 1714 and be listed on MTO's DSM List #5.85.43. Spray method and products are not acceptable.
- .3 Glass beads shall meet the requirements of OPSS 1750. Acceptable manufacturers are those listed on MTO's DSM List #5.85.38. The application requires the operation of applying an overlay of glass beads during the application.
- .4 Pavement marking materials may be applied by means of extruded or ribbon applicator methods.
- .5 All work shall be performed according to the manufacturer's recommendations.

ITEM 1.38.01 & .02 – SUPPLY AND INSTALL POSTS FOR NEW TRAFFIC SIGNS

Reference: OPSS 703
RMDSD S-300.080
OPSD 985.110, 985.210, 985.220 & 990.110
Ontario Traffic Manual Book 1B - July 2001, Section 12 - Sign Position

Subsection 703.05.02.02 of OPSS 703 is amended by the addition of the following:

Preservative shall be selected from the following:

- a) Chromated Copper Arsenate (CCA) shall be according to AWPA P5, Type A, B or C.
- b) Ammoniacal Copper Arsenate (ACA) shall be according to AWPA P5.

Only waterborne preservatives CCA or ACA shall be permitted for use on wood that is to be painted.

Sections 703.09 and 703.10 of OPSS 703 are deleted in their entirety. Measurement for payment and basis of payment shall be as specified in this tender item.

Also include:

- .1 Supply and install mounting posts for new traffic signs at locations as specified.

Note:

- .1 This tender item shall be used only for new traffic. Replacement of posts for existing traffic signs shall be deemed to be paid under the "Traffic Control and Signing" tender item.
- .2 Steel U-Flange posts shall be according to OPSS 703 and OPSD 990.110.
- .3 Wooden posts shall be according to OPSS 703 as amended under this tender item.
- .4 Telespar sign support system hardware shall be according to RMDSD S-300.080 including signpost, two-piece breakaway anchor and hardware as supplied by UCC Industries International Inc. (see www.roadauthority.com for contact details).
- .5 The Ontario Traffic Manual (OTM) can be accessed free of charge at www.mto.gov.on.ca/english/transrd/. Click on Library Catalogue, and search for the title "Ontario Traffic Manual".

Measurement for Payment:

- .1 For measurement purposes, a count shall be made of the number of posts/post sets of each mounting type.

Basis of Payment:

- .1 Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment and Materials to do the work.

ITEM 1.38.20 – PICK UP TRAFFIC SIGNS AND MOUNT ON POSTS (SINGLE AND DOUBLE)

Reference: OPSS 703

Ontario Traffic Manual Book 1B - July 2001 (Section 12 - Sign Position) and Book 6 - July 2001

Sections 703.09 and 703.10 of OPSS 703 are deleted in their entirety. Measurement for payment and basis of payment shall be as specified in this tender item.

Also include:

- .1 Pick-up traffic signs at the Owner's Traffic Engineering and Operations Centre at 101 Consumers Dr., Whitby and deliver to site.
- .2 Secure storage of signs on site prior to installation.
- .3 Mount Owner-supplied signs on posts using Contractor-supplied hardware acceptable to the Contract Administrator.

Note:

- .1 Fasteners and hardware shall be either stainless steel or protected after manufacture by hot dip galvanizing according to ASTM A123M-15.
- .2 Sign mounting heights shall be as specified and in the Ontario Traffic Manual (OTM). The OTM can be accessed free of charge at www.mto.gov.on.ca/english/transrd/. Click on Library Catalogue, and search for the title "Ontario Traffic Manual".
- .3 New signs mounted on traffic signal or street lighting poles must be installed by an electrician under Item 4.10.04.

Measurement for Payment:

- .1 For measurement purposes, a count shall be made of the number of signs installed.

Basis of Payment:

- .1 Payment at the Contract price for these tender items shall be full compensation for all labour, Equipment and Materials to do the work.

Section - Traffic Signals and Roadway Illumination

- Reference: .1 Construct all traffic signal and roadway illumination items and appurtenances according to OPSS 106 and the Ontario Electrical Safety Code.
- .2 Contract Drawings and Details for Contract D2017-012.
- .3 Reference Special Provisions - General Requirements, Clause 8.

The Contractor shall provide one copy of the ESA final certificate of inspection to the Contract Administrator.

Qualifications of Electrical Subcontractor

The Contractor shall use an Electrical Subcontractor who has established a successful track record of being able to complete the proposed electrical work using experienced, fully trained and qualified staff. Personnel directly involved in the performance of electrical work shall have a minimum of five year's related experience in providing these or similar services. **All electrical work shall be performed by or under the direct supervision of a licensed electrician. Further, traffic signal and traffic signal control equipment installation, inspection, and testing shall be performed by or under the direct supervision of a licensed electrician who has successfully completed Levels 1 and 2 of the IMSA Traffic Signal Technician Certification Program. The Contractor shall provide proof of these qualifications at the Pre-Installation Meeting noted below.**

Traffic Signal Works Pre-Installation Meeting

A Traffic Signal Works Pre-Installation Meeting will be conducted one week prior to construction of any Traffic Signal works to review standards and material installation, quality control and quality assurance, proposed scheduling, construction methods and any other issues either the Contractor or the Contract Administrator may wish to discuss related to supply and installation of Traffic Signal works.

As a minimum, attendance at the Traffic Signal Works Pre-Installation Meeting will include the Contract Administrator, a representative from the Region of Durham's Traffic Division, the Contractors' Site Superintendent and a representative of the Contractor's Traffic Signal Subcontractor, if applicable.

Materials Supplied or Salvaged by Owner

Materials to be supplied by the Owner shall be picked up at the Region of Durham's Traffic Operations Centre, 101 Consumers Drive, Whitby.

The Contractor shall make specific arrangements with the Region's Stock Keeper 48 hours prior to the materials being ready for pick up. Contact the Stock Keeper at (905) 666-8116.

Hours available for material pick up or salvaged material drop off will be between the hours of 8:30 a.m. and 2:30 p.m., Monday through Friday. Access to and from the Traffic Operations Centre yard will not be granted outside of these hours.

The Owner guarantees to the Contractor that all materials packaged and ready for pick up are free of defects. The Contractor is responsible for inspecting all materials ready for pick up for defects prior to loading such materials for transportation.

The Contractor shall provide the appropriate labour and equipment required to pick up and transport the materials. The Contractor shall ensure that all materials are safely secured, connected or packaged prior to transporting such materials.

The Contractor is solely responsible for materials supplied by the Owner during pick up, transportation, storage and installation. Materials damaged or missing in any way shall be repaired or replaced to the satisfaction of the Contract Administrator by the Contractor at his expense.

ITEM 4.12.01 – DETECTOR LOOP

Reference: OPSS 620
OPSD 2520.01, 2520.02 & 2530.01

Also include:

- .1 Apply treatment for crossing major pavement cracks, butt or expansion joints, pavement irregularities or transition areas according to OPSD 2520.01 and OPSD 2520.02. Alternatively, detector loop shall be re-marked into separate loops at the discretion of the Contract Administrator.
- .2 Saw cut detector loop according to OPSD 2520.01 and OPSD 2520.02.
- .3 Install detector loop with the size, winding direction, configuration, number of turns, and inductance value as specified.
- .4 Provide identification numbers for each loop cable and extra low voltage cable clearly indicated on vinyl sleeve wire markers in the splice point and in the controller cabinet.

Note:

- .1 **Location 1, Henry Street, Detector Loops are 1.8 m X 1.8 m and include 3 turns of wire.**
- .2 Schedule work such that detector loops are installed in the binder course asphalt.
- .3 Detector loop layout shall be verified by the Contract Administrator prior to saw cutting.
- .4 Detector loop cable shall be according to IMSA Cable Specification 51-5 or #14 AWG type RWU90 (-40 C) stranded copper wire.
- .5 Sealing compound shall be Pro Seal 6006, or reviewed equivalent cold pumped type or hot poured type.
- .6 Insulated resin splice closures shall be Klik-it II, Raychem or reviewed equivalent.

Measurement for Payment:

- .1 For measurement purposes, a count shall be made of the number of detector loops installed regardless of the size or type of loop.

Basis of Payment:

- .1 Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment and Material to do the work.

Section - Environmental Measures**ITEM 7.02.03 – SILT FENCE BARRIER (LIGHT DUTY)**

Reference: OPSS 805
OPSD 219.110

Also include:

- .1 Remove sediment from silt fence and dispose as required.
- .2 Restore disturbed areas as per Special Provisions - General Requirements, Clause 8.

Note:

- .1 Silt fence shall be installed prior to any construction commencement and at locations directed by the Contract Administrator.
- .2 The silt fence shall not be removed until the restored grassed areas have successfully taken root as determined by the Contract Administrator

Progress payments shall be made according to Subsection 805.10.01 of OPSS 805.

Section – General Items**ITEM 8.02 – CONTRACT DOCUMENTATION**

The sum of prices bid for Items 8.02.01, 8.02.02 and 8.02.03 shall not exceed 2% of the Total Sum Tendered Price.

ITEM 8.02.01.A & 8.02.01.B – BONDS

Reference: Supplementary General Conditions of Contract
General Conditions of Contract

Include:

- .1 Provide 50% Performance Bond
- .2 Provide 50% Labour and Material Payment Bond.

Note:

- .1 Payment of this item shall be made on the first Progress Payment Certificate.

ITEM 8.02.02 – INSURANCE

Reference: Supplementary General Conditions of Contract
General Conditions of Contract

Include:

- .1 Provide Liability Insurance as per Special Provisions, Information for Bidders, Supplementary General Conditions and General Conditions. Note that for General Liability Insurance, the Regional Municipality of Durham, the Town of Whitby, the City of Oshawa, the Municipality of Clarington, the Township of Brock and the Canadian National Railway shall be added as additional insureds under this policy.

Note:

- .1 Payment of this item shall be made on the first Progress Payment Certificate.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Material to do the work.

ITEM 8.02.03 – WARRANTY SECURITY HOLDBACK FINANCING

Reference: Supplementary General Conditions of Contract, Item 32 - GC 8.02.03.14

Include:

- .1 Cost of financing for Warranty Security Holdback. Maximum amount of Warranty Security Holdback shall be \$32,000.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Material to do the work.
- .2 Progress payments shall be made as follows:
 - 25% on the first Progress Payment Certificate
 - 25% on the Substantial Performance Payment Certificate
 - 50% on the Final Acceptance Payment Certificate, together with the release of the Warranty Security Holdback at the end of the Warranty Period, as may be extended according to the Contract Documents.

ITEM 8.02.04 – EXTENSION OF WARRANTY PERIOD TO 24 MONTHS

Reference: Supplementary General Conditions of Contract, Clauses 1 and 23

Include:

- .1 All costs to extend the Warranty Period from 12 months to 24 months according to the Supplementary General Conditions of Contract.

Note:

- .1 This is **not** a provisional item.
- .2 Payment of this item shall be made on the Substantial Performance Payment Certificate.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Material to do the work.

ITEM 8.03.05 – PAID DUTY POLICE OFFICER FOR INTERSECTIONS

Include:

- .1 Supply paid duty Police Officer(s) and police cruiser at the following intersections:
 - Loc. 1 – Henry Street and Dundas Street
 - Loc. 2 – Thornton Road and King Street
 - Loc. 2 – Thornton Road and Adelaide Avenue

Measurement for Payment:

- .1 Measurement of paid duty police officers shall be by actual on-site working time in hours, per officer.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Material to do the work.

ITEM 8.03.06 – PORTABLE VARIABLE MESSAGE SIGN

Reference: OPSS 706

OPSS 706 is amended as follows:

706.01 SCOPE

Section 706.01 of OPSS 706 is amended by the addition of the following:

This specification also covers the requirements for the use of Portable Variable Message Signs (PVMS).

706.05.02 Signs

Subsection 706.05.02 of OPSS 706 is amended by the addition of the following:

All PVMS shall be from approved manufacturers and shall have operating characteristics according to the Contract Documents.

706.07 CONSTRUCTION

Section 706.07 of OPSS 706 is amended by the addition of the following Subsection:

706.07.04 Portable Variable Message Signs

Provide PVMS as directed by the Contract Administrator. Install, operate, relocate and remove all PVMS as directed by the Contract Administrator.

Set up and place signs properly so that the messages are unobstructed and legible to approaching motorists for at least 300 m. Ensure that signs do not obstruct any existing signs. Install and level signs such that the bottom of the sign display is at least 1.5 m above the adjacent edge of pavement elevation. Maintain and set signs at proper angle to traffic so that they can be viewed at the highest possible luminance value. Adjust message brightness to ambient light conditions as determined by the Contract Administrator. Keep sign blank and turn away from traffic while not in use for more than 24 hours.

The Contractor is not required to create messages. The Contract Administrator shall provide the Contractor with customized messages as required. The use of any messages other than those provided is prohibited.

If a PVMS/Communications failure occurs, the Contractor shall notify the Contract Administrator and take immediate action to correct the problem.

OPSS 706 is amended by the addition of the following Section:

706.09 MEASUREMENT FOR PAYMENT**706.09.01 Portable Variable Message Sign**

Measurement shall be made of the number of months (and part months at a pro-rated amount) for each PVMS supplied.

Section 706.10 of OPSS 706 is amended by the addition of the following:

706.10.02 Portable Variable Message Sign – Item

Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Material to do the work including supply, installation, operation, maintenance, and removal of the PVMS.

Approved Manufacturers and Products

The approved manufacturers listed below have demonstrated in the past their ability to produce PVMS in accordance with the specifications. However, the Owner does not warrant that these sources will produce acceptable or sufficient signs for any contract. The Contractor shall make such independent investigation and examination as he/she deems necessary, to be satisfied as to the quality and quantity of the signs available from these sources, and to ensure that all signs supplied by them satisfy the requirements of the specification.

Approved Manufacturer:	Approved Model:
ADDCO 240 Arlington Avenue East St. Paul, Minnesota 55117 USA Ph. # 651-488-8600 Fax # 651-558-3600 www.addco.com	DH1000-ALS

Solar Technology Inc. 7620 Cetronia Road Allentown, Pennsylvania 18106 USA Ph. # 610-391-8600 Fax # 610-391-8601 www.solartechnology.com	Silent Messenger
Ver-Mac Inc. 1781 Rue Bresse Québec, QC G2G 2V2 Ph. # 888-488-7446 Fax # 418-654-0517 www.ver-mac.com	PCMS-1210, PCMS-1500LP; and PCMS-1500C
Wanco Inc. 5870 Tennyson Street Arvada, Colorado 80003 USA Ph. # 800-972-0755 Fax # 303-427-5725 www.wanco.com	WTLMB

Operating Characteristics

The Portable Variable Message Signs shall exhibit the following operating characteristics while in use:

- light emitting diode (LED) technology or hybrid LED/Flip Disk Technology
- antiglare polycarbonate sheeting
- solar powered
- capable of operating for seven consecutive days on battery power supply with solar panels disconnected
- shall include all hardware and software necessary to facilitate reliable local and remote sign control
- programmable (25 message sequence for one week duration)
- shall have the complete instruction manual kept with the console
- equipped with full keyboard or touch-screen console
- capable of displaying a multiphase message with variable dwell times for each phase
- capable of displaying message text in narrow or bold font
- text of message shall not scroll or travel horizontally or vertically across the face of the sign
- capable of displaying 3 lines of 8 characters, each character being approximately 457 mm high
- each character matrix comprised of 35 pixels, 5 wide by 7 high
- message visible from 500 m away in all ambient light conditions
- message legible from 50 m to 300 m away in all ambient light conditions
- ability to raise the bottom of the display board a minimum of 1.5 m above ground level
- flat black background on the display area when the pixels are in the off position
- trailer painted orange or yellow
- capability to accurately level the sign and aim it towards oncoming traffic
- photosensor array to enable the luminance of the sign to be controlled both automatically and manually in relation to ambient light levels
- locking device to prevent rotation of the sign in winds up to 100 km/h, while the sign is in display mode

Trailer Mounting

The maximum dimensions of the Portable Variable Message Sign and trailer assembly while in display mode shall be as follows:

Maximum overall height = 4.5 m

Maximum overall width = 3.75 m

Maximum overall length = 5.5 m

Maximum gross unit weight = 2,500 kg

Conspicuity Markings

PVMS trailer assemblies shall have high reflectivity micro-prismatic florescent sheeting tape (or equivalent) (e.g. diamond grade or Type VII) meeting ATSM standard E991 and ASTM E1247 for florescent materials. The reflectorized tape shall be of alternating, uniform white and orange or white and yellow sections. Sections of reflectorized tape shall be placed around the trailer frame, tongue or other outermost dimension, at uniform height and width such to reflect the light from the headlights of a vehicle approaching from any direction.

PVMS sign assemblies shall have high reflectivity micro-prismatic florescent sheeting tape (or equivalent) (e.g. diamond grade or Type VII) meeting ATSM standard E991 and ASTM E1247 for florescent materials. The reflectorized tape shall be construction orange in colour, and 13 mm in width. The tape shall surround the outside of the sign assembly on all sides and be a uniform distance from the outmost pixels.

For continuing approval, the manufacturer shall not change material or product type or source, production methods, or design of unit without the prior written authorization of the Owner.

ITEM 8.03.07 – RELOCATE PORTABLE VARIABLE MESSAGE SIGN

Include:

- .1 Relocate a Portable Variable Message Sign to the next Location or area in which it is required, within the monthly rental periods, as directed by the Contract Administrator.

Measurement for Payment:

- .1 Payment shall be made for each time that a PVMS is relocated to the next Location or area as directed by the Contract Administrator.

Basis of Payment:

- .1 Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment and Material to do the work.



THE REGIONAL
MUNICIPALITY
OF DURHAM

WORKS DEPARTMENT

CONSTRUCTION SPECIFICATIONS FOR REGIONAL SERVICES

Note: Regional Municipality of Durham Construction Specifications for Regional Services, April 2014, shall apply to this tender. For those Tenderers who require a copy of these specifications, a copy will be provided upon request.

APRIL 2014



THE REGIONAL MUNICIPALITY OF DURHAM WORKS DEPARTMENT

SUPPLEMENTARY GENERAL CONDITIONS OF CONTRACT

**SUPPLEMENT TO
OPSS.MUNI 100 (NOVEMBER 2006)
OPS GENERAL CONDITIONS OF CONTRACT**

SUPPLEMENTARY GENERAL CONDITIONS OF CONTRACT

The following revisions to OPSS.MUNI 100, the OPS General Conditions of Contract, dated November 2006, shall apply to this contract:

1. **GC 1.04 Definitions**

The definition for "Change Directive" is amended by the addition of the words "and acknowledged by the Contractor's signature" before the word "directing".

The definition for "Warranty Period" is amended by deleting the words "12 months" and replacing them with "24 months". The definition is further amended by the addition of the following:

The Warranty Period will be extended if known deficiencies are incomplete upon expiration of the specified Warranty Period.

Add the following definition:

RMDCS means the Regional Municipality of Durham Construction Specifications for Regional Services, latest edition at the time of tender closing.

2. **GC 1.05 Substantial Performance**

Paragraph .01 a) is amended in that in order for the Work to be deemed as substantially performed the Work must have satisfactorily passed all required inspections and testing and is ready for use or is being used for the purpose intended.

3. **GC 1.06 Completion**

Paragraph .01 is amended in that in order for the Work to be deemed as completed the Work must have satisfactorily passed all required inspections and testing.

4. **GC 2.02 Order of Precedence**

Paragraph .01 is deleted and replaced with the following:

In the event of any inconsistency or conflict in the contents of the following documents, such documents shall take precedence and govern in the following descending order:

- (a) Agreement/Purchase Order
- (b) Addenda
- (c) Special Provisions
- (d) Contract Drawings
- (e) Information for Bidders
- (f) Standard Specifications
- (g) Standard Drawings
- (h) Form of Tender
- (i) Supplementary General Conditions
- (j) General Conditions
- (k) Working Drawings

Later dates shall govern within each of the above categories of documents.

In the event of any inconsistency or conflict in the contents of referenced standards and standard specifications, the more stringent requirement shall apply.

Subsection 2.02 is amended by the addition of the following new paragraph:

- .05 Neither party to the Contract shall take advantage of any apparent error or omission in the drawings or specifications. The Contract Administrator shall be permitted to make such corrections and interpretations as may be necessary for fulfilment of the intent of the drawings and specifications. The Contract Administrator shall not unfairly refuse compensation for such corrections and interpretations; however, the Contract Administrator shall be the sole judge of the value of such compensation, if any.

5. **GC 3.03 Right of the Contract Administrator to Modify Methods and Equipment**

Subsection GC 3.03 is amended by the addition of the following new paragraphs:

- .04 Whenever the progress of the Work is not keeping pace with the approved schedule the Contract Administrator may order the work to proceed on a two or three eight-hour-shift basis if he deems this necessary to speed up the work, or he may order any work to be carried out in whole or in part at night, and the Contractor shall have no claim for extra compensation in respect thereof. No work, however, shall be undertaken at night without the consent in writing of the Owner.
- .05 Whenever, in the judgement of the Contract Administrator, it may be necessary or expedient, in order to preserve and maintain traffic over or on any street or road, or to maintain essential services to customers to do work at night or after or before the regular time of ending or beginning labour, such night, overtime or weekend work shall be performed by the Contractor.

6. **GC 3.06 Extension of Contract Time**

Subsection GC 3.06 is deleted in its entirety and replaced with the following:

GC 3.06 Progress of Work and Extension of Contract Time

GC 3.06.01 Time

- .01 Time shall be of the essence of this agreement.

GC 3.06.02 Time for Completion

- .01 If the Contract Time 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 ensure that the work will be performed 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.

GC 3.06.03 Extension of Contract Time

- .01 An application for an extension of Contract Time shall be made in writing by the Contractor to the Contract Administrator as soon as the need for such extension becomes evident and at least 15 Days prior to the expiration of the Contract Time. The application for an extension of Contract Time shall enumerate the reasons and state the length of extension required.

- .02 Circumstances suitable for consideration of an extension of Contract Time include the following:
 - a) Delays; See subsection GC 3.07.
 - b) Changes in the Work; See clause GC 3.10.01.
 - c) Extra Work; See clause GC 3.10.02.
 - d) Additional Work; See clause GC 3.10.03.
- .03 The Contract Administrator, in considering an application for an extension to the Contract Time, shall take into account whether the delays, Changes in the Work, Extra Work or Additional Work involve a Controlling Operation.
- .04 The Contract Time shall be extended for such additional time as may be recommended by the Contract Administrator and deemed fair and reasonable by the Owner.
- .05 The terms and conditions of the Contract shall continue for such extension of Contract Time.
- .06 In the event of the Owner granting an extension of time, time shall continue to be deemed of the essence of this Contract.

7. **GC 3.07 Delays**

- .1 For the purpose of subparagraph .01 e), the term "abnormal inclement weather" shall apply only where one of the following conditions has been demonstrated to the satisfaction of the Contract Administrator:
 - .1 Rainfall exceeds 25 mm in 24 hours
 - .2 Snowfall exceeds 25 cm in 24 hours
 - .3 Ambient outside air temperature exceeds 35 °C for more than two hours
 - .4 Ambient outside air temperature is below -25 °C for more than two hours

In the case of .1 and .2, the majority of the rainfall or snowfall either must have occurred during normal working hours as specified in the Contract Documents or must have commenced within three hours of the start of normal working hours.
- .2 Where the Contractor claims that a delay has occurred due to abnormal inclement weather, the Contractor shall, on the date such delay has occurred, inform the Contract Administrator of their intent to claim for such delay and indicate which work activities have been delayed. The Contractor shall submit to the Contract Administrator their final claim for such delay within five Working Days of the occurrence, complete with full supporting documentation from Environment Canada indicating what weather event caused the delay and the hours during which the event occurred.
- .3 An extension to the Contract Time due to abnormal inclement weather will only be granted if the work activity that has been delayed is part of the Work's critical path according to the latest accepted schedule revision at the time of such weather event. The extension to the Contract Time shall be limited to the duration of the weather event and documented in a Change Order by the Contract Administrator.
- .4 The Contractor shall monitor local weather forecasts and take reasonable measures to mitigate delays in the Work and damage to the Work due to weather conditions. The Contractor's claim for delay may be denied or reduced if, in the opinion of the Contract Administrator, the Contractor had failed to take reasonable measures to mitigate such delays.

- .5 The Contractor shall not be reimbursed for any costs associated with delays due to abnormal inclement weather. Such delays, if allowed by the Contract Administrator in accordance with this clause, shall only be eligible for an extension of the Contract Time.

8. **GC 3.10.01 Changes in the Work**

The last sentence of paragraph .01 of Clause GC 3.10.01 is deleted and replaced with the following:

Upon the receipt of such Change Order or Change Directive the Contractor shall sign the Change Order or Change Directive acknowledging receipt and proceed with the Change in the Work.

Clause GC 3.10.01 is amended by the addition of the following new paragraph:

- .03 The Owner reserves the right to delete any portion of the work from the Contract should it be deemed in the interest of the Owner to do so.

Renumber the remaining paragraph as .04.

9. **GC 3.10.02 Extra Work**

The last sentence of paragraph .01 of Clause GC 3.10.02 is deleted and replaced with the following:

Upon the receipt of such Change Directive the Contractor shall sign the Change Directive acknowledging receipt and proceed with the Extra Work.

10. **GC 3.14.01 Conditions for Arbitration**

Paragraphs .01 and .02 are deleted and replaced with the following:

- .01 If a claim is not resolved satisfactorily through the negotiation stage noted in clause GC 3.13.04, Negotiations, or the mediation stage noted in clause GC 3.13.05, Mediation, the parties may, upon mutual agreement, utilize the provisions of subsection GC 3.14, Arbitration.
- .02 Agreement of the parties to utilize Arbitration must be in writing and made within a period of 60 Days following the opinion given in paragraph GC 3.13.03.05, or, where the use of a third party mediator was implemented, within 120 Days of the opinion given in paragraph GC 3.13.03.05.

11. **GC 4.02 Approvals And Permits**

Subsection 4.02 is amended by the addition of the following new paragraphs:

- .03 The construction of the works and all operations connected therewith are subject to the approval, inspection, by-laws and regulations of all municipal, provincial and federal and other authorities having jurisdiction in respect to any matter embraced in this Contract.
- .04 Prior to any works being undertaken within the limits of the Contract, the Contractor shall obtain road occupancy permits from the applicable road authorities as required.
- .05 All fees payable in respect of these permits and approvals shall be at the Contractor's expense with the exception of the fees for the Ministry of Labour approval and Building Permits, should these be required.

12. GC 5.04 Substitutions

Subsection GC 5.04 is amended as specified in Section 01201 of the Region of Durham's Standard "Construction Specifications for Regional Services".

13. GC 6.02 Indemnification

Section GC 6.02 is amended by the addition of the following new paragraph:

- .06 Claims that are directed to the Contractor by a third party will be expected to be handled in a timely and professional manner. Final written adjudication of the claim shall be reported to the Region's Supervisor of Risk Management at the following address:

Region of Durham Finance Department
Risk Management Supervisor
605 Rossland Road East
4th Floor
P.O. Box 623
Whitby, Ontario L1N 6A3
Attention: Ms. Sonia Coward

14. GC 6.03.02 General Liability Insurance

Paragraph .01 is deleted and replaced with the following:

General liability insurance shall be in the name of the Contractor, with the Owner, The City of Oshawa, the Town of Whitby, the Municipality of Clarington, the Township of Brock and the Canadian National Railway named as additional insureds, with limits of not less than five million dollars inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof, with a property damage deductible of not more than \$5,000. The form of this insurance shall be the Regional Municipality of Durham Certificate of Insurance Form. The Contractor shall forward with the executed contract documents a certified copy of the completed Certificate of Insurance Form.

Paragraph .02 is deleted.

Paragraph .03 is deleted and replaced with the following:

The General Liability policy shall be maintained continuously from commencement of the Work to the date of Completion Acceptance as indicated by the Certificate of Completion. With respect to completed operations, coverage shall be maintained until the end of the Warranty Period.

Paragraph .05 is amended by deleting the words "IBC Form 2100" and replacing them with "the Region of Durham Certificate of Insurance Form".

15. GC 6.03.04 Aircraft and Watercraft Liability Insurance

GC 6.03.04 is deleted in its entirety.

16. GC 6.03.05 Property and Boiler Insurance

GC 6.03.05 is deleted in its entirety.

17. GC 6.03.06 Contractor's Equipment Insurance

GC 6.03.06 is deleted in its entirety.

18. GC 6.04 Bonding

Subsection GC 6.04 is deleted in its entirety and replaced with the following:

- .01 A bond, in an amount equal to fifty per cent (50%) of the Total Sum Tendered Price, will be required for the faithful performance of the Contract, including rectification of deficiencies during the Warranty Period. The Region of Durham's standard Performance Bond form shall be used.
- .02 A bond, in an amount equal to fifty per cent (50%) of the Total Sum Tendered Price, will be required for the faithful payment of labour and materials related to the Contract. The Region of Durham's standard Labour & Material Payment Bond form shall be used.
- .03 The surety firm used to provide the specified bonds must be acceptable to the Region of Durham and shall be licensed and authorized by the Financial Services Commission of Ontario (FSCO) to issue bonds in Ontario in accordance with the Insurance Act, R.S.O. 1990, Chapter I.8.
- .04 Copies of the Region of Durham's standard Performance Bond and standard Labour and Material Payment Bond forms are provided as Appendices SGC-A and SGC-B respectively.
- .05 Payment for Bonds shall be made on the first Progress Payment Certificate under the appropriate tender items.
- .06 Bonds shall not be extended to cover any amounts in excess of the Total Sum Tendered Price unless explicitly requested by the Owner. No claims for such additional bonding will be considered unless such additional bonding is requested by the Owner.

19. GC 7.01 General

Paragraph .03 is amended by the addition of the following:

The Contract Administrator or Owner shall have the right to order a change in the Contractor's operations, including increased length of Work Day and/or increased number of work crews and/or equipment, in order to ensure that the Contract Time is not surpassed due to the Contractor's construction means, methods, techniques, sequences and/or procedures.

Paragraph .10 is amended by the addition of the following:

The Contractor's representative on the site shall be able to read, write and speak fluent English.

Subsection GC 7.01 is amended by the addition of the following new paragraphs:

- .17 If the Contractor is non-resident in Ontario, he shall, immediately after being notified by the Owner that his tender has been accepted, obtain from the Retail Sales Tax Branch a certificate showing that the Contractor has registered with the Retail Sales Tax Branch and shall submit such certificate to the Owner at the time that he furnishes the Performance Bond and the Labour and Materials Payment Bond. In addition, wherever the Contract Documents require a Certificate of Clearance from the Workplace Safety and Insurance Board, the non-resident Contractor shall provide an equivalent document from his home province or state.
- .18 The Contractor is encouraged to hire local labour wherever possible.

20. **GC 7.02 Layout**

Paragraphs .04, .05 and .06 are amended in that, except as otherwise noted, layout shall be done by Region of Durham forces and all responsibility for the layout and elevations supplied by the Owner shall be borne by the Owner.

21. **GC 7.03 Working Area**

Subsection 7.03 is amended by the addition of the following:

- .04 The Contractor shall install, and remove upon completion of the Work, a temporary metal fence to delineate and secure a "compound" for equipment and material storage. All materials and equipment shall be stored in this fenced compound unless such material and equipment is actively in use in the performance of the Work. Any removed materials shall be disposed of immediately or shall be temporarily stored in the fenced compound until its proper disposal.
- .05 The Owner has arranged for permanent and construction easements, and easements for access roads as shown on the Contract Drawings and under the conditions stated elsewhere. Any further working areas or access routes will be the responsibility of the Contractor. The Contractor shall provide the Contract Administrator with a copy of any arrangements, including conditions, for occupation of lands other than those acquired by the Owner. In no case shall the Contractor occupy private property without the approval of the Contract Administrator and the property owner.
- .06 Upon completion of the Contract, the Contractor shall provide the Contract Administrator with two copies of a Form of Property Owner's Release, using the format as provided in Appendix SGC-G, signed by each property owner upon whose land he has entered for any purpose in conjunction with the Contract.

22. **GC 7.14 Limitations of Operations**

Paragraph .01 is deleted and replaced with the following new paragraphs:

- .01 Except for such work as may be required by the Contract Administrator to maintain the Work in a safe and satisfactory condition, the Contractor shall normally carry on operations under the Contract during the daylight hours of any week day, or Saturday, providing that he so conducts his operations as not to create a nuisance or disturb the peace unnecessarily and providing such hours meet with the approval of the Owner and the lower tier municipality. No work shall be permitted on Sundays, except in the case of emergency, and then only with the written permission of the Contract Administrator and to such extent as he may judge to be necessary. Whenever the Contractor desires to depart

from his normal working hours as established by his past performance, he shall obtain written approval from the Owner at least 48 hours prior to the contemplated change in operations.

- .02 The Contractor shall, as far as possible, refrain from work on statutory holidays or other holidays recognized by the Owner. In case he desires to work on any such holiday, he shall notify the Contract Administrator in writing at least four Business Days in advance of such holiday that he desires to work, stating those places where said work will be conducted. Failure to give such notice in advance shall be considered as an indication that no work requiring the presence of the Contract Administrator is to be done by the Contractor on such Statutory Holiday.

The remaining paragraph is renumbered as .03.

23. **GC 7.16 Warranty**

Paragraph .02 is amended by deleting the words "12 months" and replacing them with "24 months" throughout the paragraph.

The last sentence of Paragraph .02 is amended by the addition of the following:

The decision of the Owner as to the nature, extent and cause of such imperfections and the necessity for remedying the same shall be final.

Subsection 7.16 is amended by the addition of the following new paragraph:

- .04 Should the Contractor fail to comply with the directions of the Contract Administrator, the Owner may, after giving the Contractor five Business Days written notice, perform the necessary work, provided that in the event of an emergency, the Owner may forthwith without notice perform the necessary work and the cost of such work in either event may be deducted or collected by the Owner.

24. **GC 7.17 Contractor's Workers**

Paragraph .01 is deleted and replaced with the following:

- .01 The Contractor shall be responsible for the conduct of any person or persons in his employ or in the employ of his Subcontractors and suppliers. The Contractor shall only employ orderly, competent, and skilful workers to do the Work. For the purposes of this Contract, "workers" shall also include all persons under the employ of the Contractor's Subcontractors and suppliers.
- .02 Where any worker(s) are, in the opinion of the Contract Administrator, found to be: intemperate; disorderly; wilfully negligent; dishonest; repeatedly in contravention of the Contract Documents; in any way repugnant to a member of the public, the Owner or the Contract Administrator; or incompetent in the performance of their duties under the Contract, such worker(s) shall be removed from the work. Such worker(s) shall not be employed on the work or involved in the Contract again without the written consent of the Contract Administrator.
- .03 Where any worker has been removed from the work under this provision from a previous contract, the Owner reserves the right to refuse such worker from any involvement in the Contract.

25. Insert the following new Subsection GC 7.19:

GC 7.19 Health and Safety

- .01 The Contractor shall comply with the Region's Health and Safety policies, programs, rules and requests. Copies of the Region of Durham's Corporate Health and Safety Policy and Programs are available through the Region's Works Department Safety Office.
- .02 The Contractor shall ensure all Subcontractors and suppliers are aware of and comply with all Region of Durham Health and Safety policies, programs, rules and requests.
- .03 The Contractor shall provide a copy of Contractor's current Health and Safety Policies and Program prior to the commencement of construction.
- .04 The Contractor shall obtain copies of all Subcontractors' Health and Safety policies and programs.
- .05 The Contractor shall comply with all Federal and Provincial Health and Safety Acts and Regulations, Lower Tier Municipality Health and Safety By-Laws and with all applicable industry safety standards.
- .06 The Contractor shall comply with current Ontario Regulations for Construction Projects made under the Occupational Health and Safety Act (OHSA). Copies of the Regulations may be obtained from Service Ontario Publications, email webpubont@ontario.ca (Tel. 416-326-5300 or 1-800-668-9938).
- .07 The Contractor shall provide any and all personal protective equipment for its own workers where prescribed. If any worker fails to comply with any program, policy, rule or request regarding health and safety, the Region reserves the right to order the removal of that person from the Work.
- .08 The Contractor shall maintain on site, at a location accessible to the Consultant and the Owner, current Materials Safety Data Sheets (MSDS).
- .09 The Contractor shall provide the Owner with a list of Designated Substances that will be brought to the site prior to commencing work.
- .10 In accordance with the Region of Durham Corporate Health and Safety Policy and Program, if any designated hazardous substances have been identified within the Working Area, a list of those substances found to be present will be provided in the Special Provisions or the Geotechnical Report contained in the Contract Documents.
- .11 The Contract Administrator shall have the right to document all health and safety concerns regarding the Contractor's operations and to issue warnings and/or to stop work for any Contractor violations of the OHSA, Ontario Construction Regulations, or any health and safety requirements of the contract, including Regional health and safety policies, programs, rules, and/or if the Contractor creates a health or safety hazard.
- .12 Written warnings and/or stop work orders shall be given to the Contractor using the Region's Contractor Health and Safety Warning / Stop Work Order Form.
- .13 The Owner reserves the right to have a hazard corrected at the Contractor's expense.
- .14 The Contractor shall notify all regulatory bodies required for construction activities, (i.e., Notice of Project, employer notification, etc.). Notifications shall include, but not be limited to, the notification requirements laid out in OHSA Sec 51-53 and the requirements of Ont. Reg. 213/91 for Construction Projects, Sections 5, 6 and 7. For the purpose of this contract the Contractor shall be the "Constructor".

26. GC 8.02.03.01 Progress Payment Certificate

Paragraphs .03 and .04 are deleted and replaced with the following:

- .04 Prior to the release of each progress Payment Certificate, the Contract Administrator shall send a copy of his proposed Payment Certificate, by facsimile machine, to the Contractor. Upon receipt of said fax, the Contractor shall forward a signed Payment Acknowledgement Letter, on the Contractor's letterhead, using the format as provided in Appendix SGC-C, indicating his acknowledgement of the payment amount due. Except where a release letter is provided, as required under GC 8.02.03.05, as amended, or GC 8.02.03.07, as amended, or GC 8.02.03.13, no payment will be released to the Contractor without receipt of a faxed copy of the corresponding Payment Acknowledgement Letter.
- .05 The aforesaid acknowledgement shall not be deemed to be a finalization of work performed up to the end of the respective payment period. The Contractor shall retain all rights to claim for any work, or extra work, performed during the course of the contract and the Contract Administrator shall retain all rights to make adjustments to any previous Certificate.
- .06 On all Payment Certificates prepared after the Substantial Performance Payment Certificate and up to, but not including, the Completion Payment Certificate, the Contract Administrator shall retain a ten percent (10%) Finishing Holdback on all work completed after the date of Substantial Performance.
- .07 On all Payment Certificates prepared after the Substantial Performance Payment Certificate, the Contract Administrator may retain two per cent (2%) of the estimated value of Work performed to the Cut-Off Date for finalization of quantities and Change Orders. The Contract Administrator shall endeavour to complete his finalization of quantities and Change Orders in a timely manner, however, the Contract Administrator reserves the right to retain such 2% Finalization Holdback for a period not to exceed 120 days from the date of Completion.
- .08 Payment will be made within 30 Days of the Cut-Off Date.

27. GC 8.02.03.05 Substantial Performance Payment and Substantial Performance Statutory Holdback Release Payment Certificates

Paragraph .04 a) is deleted and replaced with the following:

- a) a Substantial Performance Release Letter, using the format as provided in Appendix SGC-D, releasing the Owner from all further claims relating to the Contract for all work up to and including the date of Substantial Performance, qualified by stated exceptions such as outstanding work or matters arising out of subsection GC 3.13, Claims, Negotiations, Mediation;

Paragraph .04 b) is deleted and replaced with the following:

- b) a statutory declaration in a form satisfactory to the Contract Administrator that all liabilities incurred by the Contractor and the Contractor's Subcontractors in carrying out the Contract have been discharged except for statutory holdbacks properly retained and that all liens in respect of the Contract and Subcontracts thereunder have expired or have been satisfied, discharged or provided for by payment into Court;

28. **GC 8.02.03.07 Completion Payment and Completion Statutory Holdback Release Payment Certificates**

The title of this Clause is revised to “**Completion Payment and Finishing Holdback Release Payment Certificates.**”

Paragraph .01 is deleted and replaced with the following:

- .01 When the Contract Administrator issues the Completion Certificate, the Contract Administrator will also issue the Completion Payment Certificate and the Finalization Holdback Release Payment Certificate or where appropriate, a combined payment certificate.

Paragraph .03 is deleted and replaced with the following:

- .03 The Finishing Holdback Release Payment Certificate will be a payment certificate releasing to the Contractor the 10% Finishing Holdback. Payment of such Finishing Holdback shall be due 46 Days after the date of Completion of the Work as established by the Completion Certificate but subject to the provisions of the *Construction Lien Act* and the submission by the Contractor of the following documents:

- a) a Completion Release Letter, using the format as provided in Appendix SGC-E, releasing the Owner from all further claims relating to the Contract, qualified by stated exceptions where appropriate;
- b) a statutory declaration in a form satisfactory to the Contract Administrator that all liabilities incurred by the Contractor and the Contractor's Subcontractors in carrying out the Contract have been discharged, qualified by stated exceptions where appropriate; and
- c) a satisfactory Certificate of Clearance from the Workplace Safety and Insurance Board.

29. **GC 8.02.03.09 Interest for Late Payment**

Sub-paragraph .01 g) is deleted and replaced with the following:

- g) Finishing Holdback Release Payment Certificate: 76 Days after the date certified as the date that the Work was completed.

30. **GC 8.02.03.11 Owner's Set-Off**

Paragraph .01 is deleted and replaced with the following:

- .01 Pursuant to Section 12 of the *Construction Lien Act*, the Owner may retain from monies owing to the Contractor under this or any other contract an amount sufficient to cover any outstanding or disputed liabilities including the cost to remedy deficiencies, the reduction in value of substandard portions of the Work, claims for damages by third parties which have not been satisfactorily determined in writing by the Contractor's insurer, undetermined claims by the Owner under paragraph GC 8.01.02.01 a), any assessment due the Workplace Safety and Insurance Board and any monies to be paid to the workers in accordance with clause GC 8.02.06, Payment of Workers, all as determined in the sole and absolute discretion of the Owner.

31. Clause GC 8.02.03 is amended by the addition of the following new Sub-clause GC 8.02.03.13:

GC 8.02.03.13 Final Payment Certificate

- .01 Upon the issuance of the Final Acceptance Certificate in accordance with clause GC 8.02.05 and when the Contractor and the Contract Administrator have finalized all quantities, Change Orders, claims and credit issues, the Contract Administrator shall prepare a Final Payment Certificate releasing any monies due the Contractor. The receipt of a Final Release of Claims Letter from the Contractor using the format provided in Appendix SGC-F, releasing the Owner from all further claims relating to the Contract shall be a condition precedent to the preparation of a Final Payment Certificate. No alterations, qualifications or limitations upon the Final Release of Claims Letter will be accepted.

32. Insert the following new clause GC 8.02.03.14:

GC 8.02.03.14 Warranty Security Holdback

- .01 The Warranty Security Holdback will be retained progressively, commencing on the first Payment Certificate, from monies that would otherwise be payable to the Contractor. **The maximum value of the Warranty Security Holdback will be as specified in the Special Provisions.**
- .02 The maximum Warranty Security Holdback will be held commencing on the Substantial Performance Payment Certificate. The amount withheld on Payment Certificates prior to the Substantial Performance Payment Certificate will be based on the percentage of work completed.
- .03 Where Extra Work or Additional Work is added to the Contract after the closing of tenders the Owner reserves the right to request additional Warranty Security to cover such additional work, if such additional security is deemed in the Owner's interest. **Payment for any additional security shall be included in the respective Change Orders.**
- .04 The retained amount is strictly to be used as a Warranty Security and is in addition to the Statutory Holdback, Finishing Holdback, the warranty provided by the Contractor's Performance Bond and any monies withheld due to known incomplete and/or deficient work or for finalization of the contract value.
- .05 Except as otherwise provided hereunder, the Warranty Security Holdback, less any deductions made therefrom as provided for in the Contract, shall be released to the Contractor on the Final Payment Certificate. No interest will be payable on the Warranty Security Holdback where credit issues and/or claims remain outstanding at the end of the Warranty Period.
- .06 **No substitute forms of security will be accepted.**

33. **GC 8.02.04 Payment on a Time and Material Basis**

Subsection GC8.02.04 is amended by the addition of the following:

The Owner shall not be responsible to pay any H.S.T. amounts on invoiced work or materials. As such, the Owner shall deduct H.S.T. amounts from all equipment, Material and Subcontractor invoices prior to applying allowable mark-up on such costs.

34. **GC 8.02.04.02 Daily Work Records**

Paragraph .01 of Subsection GC8.02.04.02 is deleted and replaced with the following:

- .01 Daily Work Records, prepared by either the Contractor's representative or the Contract Administrator, as the case may be, reporting the labour and Equipment employed and the Material used on each Time and Material project, shall be reconciled and signed by both the Contractor's representative and the Contract Administrator within 24 hours.

35. **GC 8.02.04.04 Payment for Labour**

Paragraph .01 is deleted and replaced with the following:

The Owner shall pay the Contractor for labour employed on each Time and Material project at the unit prices stated in the Schedule of Contingency Unit Prices shown in the Form of Tender. Reference Section 01210 of RMDCS for details.

36. **GC 8.02.04.09 Submission of Invoices**

Paragraph .02 is amended by the deletion of 'the standard form "Summary for Payment of Accounts on a Time and Material Basis"' and its replacement with 'the "Region of Durham T&M Cost Breakdown" form'.

Paragraph .04 is amended by the deletion of "Summary for Payment of Accounts on a Time and Material Basis" and replacing with "Region of Durham T&M Cost Breakdown".

37. **GC 8.02.05 Final Acceptance Certificate**

Paragraph .01 is deleted and replaced with the following:

The Contract Administrator shall issue the Final Acceptance Certificate after the Warranty Period has expired. The Final Acceptance Certificate shall not be issued until all known deficiencies have been adjusted or corrected, as the case may be, and the Contractor has discharged all obligations under the Contract.

38. **GC 8.02.08 Taxes**

The last sentence of Paragraph .03 is deleted and replaced with the following:

This statement shall be submitted not later than 30 Days after issuance of the Completion Certificate in accordance with clause GC 8.02.03.06, Certification of Completion.

Clause GC 8.02.08 is amended by the addition of the following new paragraphs:

- .05 The Contract Administrator reserves the right to make deductions from the regular progress payments to compensate for the estimated benefit from decreased tax costs. Such deductions will be set-off from contract payments pending receipt of the statement itemizing the benefits which have resulted from the decrease in tax costs at which time the final payment adjustment will be determined.
- .06 All bid prices set out in the Form of Tender shall be submitted exclusive of taxes (H.S.T.)

39. **GC 8.02.09 Liquidated Damages**

Paragraph .01 is deleted and replaced with the following:

- .01 It is agreed by the Parties to the Contract that in case the work is not Substantially Performed within the Contract Time, damage will be sustained by the Owner and the parties hereto agree that the Contractor will pay to the Owner the sum of **one thousand five hundred dollars (\$1,500.00)** for each and every calendar day beyond the Contract Time that the work remains not Substantially Performed. It is agreed that this amount is an estimate of the actual damage to the Owner which will accrue during the period in excess of the specified Contract Time including but not limited to, costs for site inspection, survey crew, staffing, administration and consulting services.
- .02 The Owner may deduct any amount due under this paragraph from any monies that may be due or payable to the Contractor on this or any other contract with the Owner. 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 Owner.
- .03 The Contractor shall not be assessed with Liquidated Damages for any delay caused by Acts of God or of the Public Enemy, Acts of the Province or of a Foreign State, Fire, Flood, Earthquake, Epidemic, Quarantine Restriction, Embargo or delays of Subcontractors due to such causes.

40. Insert the following new subsection GC 8.02.10:

GC 8.02.10 Construction Lien Act

- .01 The Contractor shall give the Contract Administrator notice in writing, immediately, of all lien claims or potential lien claims coming to the knowledge of the Contractor or his agents.
- .02 When a claim for lien is filed by a Subcontractor, labour or material supplier or equipment renter, the Contractor shall forthwith pay to the Owner, its reasonable legal fees incurred in connection therewith, on a solicitor and his own client basis, together with all interest, costs and expenses incurred by the Owner and such remedy shall be in addition to any other remedy available to the Owner under the terms of the Contract.
- .03 Where any lien claimant asks from the Owner the production for inspection of the Contract Documents or the state of the accounts between the Owner and the Contractor, the Contractor shall be liable for an administration fee of up to Two Hundred Dollars (\$200.00) for each request made as compensation for the preparation of such accounting or for the preparation of the Contract Documents, or both, as the case may be.
- .04 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 Owner from reasonable legal fees, on a solicitor and his own client basis, incurred in appearing on such an application and in addition agrees to pay to the Owner 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.
- .05 The Contractor acknowledges and agrees that any and all fees, costs, or expenses of any nature whatsoever which are the responsibility of the Contractor under this Clause shall be deductible from monies otherwise payable to the Contractor.

APPENDICES

- SGC-A Region of Durham Standard Performance Bond Form
- SGC-B Region of Durham Standard Labour and Material Payment Bond Form
- SGC-C Payment Acknowledgement Letter
- SGC-D Substantial Performance Release of Claims Letter
- SGC-E Completion Release of Claims Letter
- SGC-F Final Release of Claims Letter
- SGC-G Region of Durham Standard Form for Property Owner's Release

APPENDIX SGC-A - REGION OF DURHAM STANDARD PERFORMANCE BOND FORM

Bond No. _____

Contract D2017-012

Amount \$

KNOW ALL MEN BY THESE PRESENT, that we

hereinafter called
"the Principal",

and

hereinafter called
"the Surety",

are jointly and severally held and firmly bound unto the Regional Municipality of Durham hereinafter called **"the Oblige"**, its successors and assigns the sum of

DOLLARS (\$))

of lawful money of Canada, to be paid unto the Oblige, for which payment well and truly to be made we the Principal and the Surety jointly and severally bind ourselves, our and each of our respective heirs, executors, administrators, successors and assigns by these presents.

WHEREAS by an agreement in writing dated the _____ day of _____, 20____, the Principal has entered into a Contract with the Oblige, hereinafter called **"the Contract"**, for the

as in the Contract provided, which Contract is by reference herein made a part hereof as fully to all intents and purposes as though recited in full herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal shall at all times duly perform and observe the Contract or as the same be changed, altered or varied as hereinafter provided, to the satisfaction of the Oblige and shall at all times fully indemnify and keep indemnified the Oblige from and against all and any manner of loss, damage, expense, suits, actions, claims, liens, proceedings, demands, awards, payments and liabilities arising out of or in any manner based upon or attributable to the Contract and shall fully reimburse and repay the Oblige for all outlay, expense, liabilities, or payments incurred or undertaken to be made by the Oblige pursuant to the Contract, then this obligation shall be void, but otherwise it shall be and remain in full force and effect.

PROVIDED ALWAYS and it is hereby agreed and declared that the Oblige and the Principal have the right to change, alter and vary the terms of the Contract and that the Oblige may in its discretion at any time or times take and receive from the Principal any security whatsoever and grant any extension of time thereon or on any liability of the Principal to the Oblige.

PROVIDED FURTHER and it is hereby agreed and declared that the Principal and the Surety shall not be discharged or released from liability hereunder and that such liability shall not be in any way affected by any such changes, alterations, or variations, taking or receiving of security, or extension of time, as aforesaid, or by the exercise by the Obligee of any of the rights or powers reserved to it under the Contract or by its forbearance to exercise any such rights or powers, including (but without restricting the generality of the foregoing) any changes in the extent or nature of the works to be constructed, altered, repaired, maintained or warranted under the Contract, or by any dealing, transaction, forbearance or forgiveness which may take place between the Principal and the Obligee.

AND it is hereby declared and agreed that the Surety shall be liable as Principal, and that nothing of any kind of matter whatsoever that will not discharge the said Principal shall operate as a discharge or release of liability of the said Surety.

PROVIDED FURTHER and it is hereby agreed and declared that the Surety shall not be liable for a greater sum than that specified in this Bond.

SIGNED, SEALED AND DELIVERED
in the presence of

Address

Contact Nos.:

SGC-17

APPENDIX SGC-B - REGION OF DURHAM STANDARD LABOUR AND MATERIAL PAYMENT BOND FORM

Bond No. _____

Contract D2017-012

Amount \$

KNOW ALL MEN BY THESE PRESENT, that wehereinafter called
"the Principal",

and

hereinafter called
"the Surety",

are jointly and severally held and firmly bound unto the Regional Municipality of Durham hereinafter called **"the Obligee"** for the use and benefit of the Claimants, their and each of their heirs, executors, administrators, successors and assigns in the amount of

DOLLARS (\$))

of lawful money of Canada, for the payment of which sum well and truly to be made we the Principal and the Surety jointly and severally bind ourselves, our and each of our respective heirs, executors, administrators, successors and assigns by these presents.

WHEREAS by an agreement in writing dated the _____ day of _____, 20____, the Principal has entered into a Contract with the Obligee, hereinafter called **"the Contract"**, for the

which Contract is by reference herein made a part hereof as fully to all intents and purposes as though recited in full herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal shall make payment to all Claimants for all labour and material used or reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A Claimant for the purpose of this bond is defined as one having a direct Contract with the Principal for labour, material, or both, used or reasonably required for use in the performance of the Contract, labour and material being constructed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment, directly applicable to the Contract provided that a person, firm, or corporation who rents equipment to the Principal to be used in the performance of the Contract under a contract which provides that all or any part of the rent is to be applied towards the purchase price thereof shall only be a Claimant to the extent of the prevailing industrial rental value of such equipment for the period during which the equipment was used in the performance of the Contract, labour and material.

APPENDIX SGC-B - REGION OF DURHAM STANDARD LABOUR AND MATERIAL PAYMENT BOND FORM (continued)

2. The Principal and the Surety hereby jointly and severally agree with the Oblige, as Trustee, that every Claimant who has not been paid as provided for under the terms of their Contract with the Principal, before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's work or labour was done or performed or materials were furnished by such Claimant, may as a beneficiary of the trust herein provided for, sue on this Bond, prosecute the suit to final judgement for such sum or sums as may be justly due to such Claimant under the terms of their Contract with the Principal and have execution thereon. Provided that the Oblige is not obliged to do or take any act, action or proceeding against the Surety on behalf of the Claimants, or any of them, to enforce the provisions of this Bond. If any act, action or proceeding is taken either in the name of the Oblige or by joining the Oblige as a party to such proceeding, then such act, action or proceeding, shall be taken on the understanding and basis that the Claimants, or any of them, who take such act, action or proceeding, shall indemnify and save harmless the Oblige against all costs, charges and expenses or liabilities incurred against all costs, charges and expenses or liabilities incurred thereon and any loss or damage resulting to the Oblige by reason thereof. Provided still further that, subject to the foregoing terms and conditions, the Claimants or any of them may use the name of the Oblige to sue on and enforce the provisions of this Bond.
3. No suit or action shall be commenced hereunder by any Claimant:
- a) unless such Claimant shall have given written notice within the time limits hereinafter set forth to each of the Principal, the Surety and the Oblige, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail, or served in any manner in which legal process may be served in the Province of Ontario, to the Principal and Surety at any place where an office is regularly maintained for the transaction of business by such persons, and to the Oblige addressed to the attention of The Director, Legislative Services - Regional Clerk or designate, The Regional Municipality of Durham, 605 Rossland Road East, Whitby, Ontario.
- Such notice shall be given:
- (1) in respect of any claim for the amount of any portion thereof required to be held back from the Claimant by the Principal under either the terms of the Claimant's contract with the Principal or under the Construction Lien Act, 1983, and amendments thereto applicable to the Claimant's contract with the Principal, whichever is the greater within one hundred and twenty (120) days after such Claimant should have been paid in full under the Claimant's contract with the Principal.
- (2) in respect of any claim other than for the holdback, or portion thereof, referred to above, within one hundred and twenty (120) days after the date upon which such Claimant did, or performed the last of the work or labour or furnished the last of the materials for which such claim is made, under the Claimant's contract with the Principal.
- b) After the expiration of one (1) year following the date on which the Principal ceased work on the Contract, including work performed under the guarantees provided in the Contract.
- c) Other than in a Court of competent jurisdiction in the Province of Ontario, and the parties hereto agree to submit to the jurisdiction of such Court.
4. The amount of this Bond shall be reduced by, and to the extent of any payment or payments made in good faith, and in accordance with the provisions hereof, inclusive of the payment by the Surety of claims under the Construction Lien Act, 1983, as amended, whether or not such claims be presented under and against this Bond.

APPENDIX SGC-B - REGION OF DURHAM STANDARD LABOUR AND MATERIAL PAYMENT BOND FORM (continued)

PROVIDED ALWAYS and it is hereby agreed and declared that the Obligee and the Principal have the right to change, alter and vary the terms of the contract, and that the Obligee may in its discretion at any time or times take and receive from the Principal any security whatsoever and grant any extension of time thereon or on any liability of the Principal to the Obligee.

PROVIDED FURTHER and it is hereby agreed and declared that the Principal and the Surety shall not be discharged or released from liability hereunder and that such liability shall not be in any way affected by any such changes, alterations, or variations, taking or receiving of security, or extension of time, as aforesaid, or by the exercise by the Obligee of any of the rights or powers reserved to it under the contract or by its forbearance to exercise any such rights or powers, including (but without restricting the generality of the foregoing) any changes in the extent or nature of the works to be constructed, altered, repaired or maintained under the Contract, or by any dealing, transaction, forbearance or forgiveness which may take place between the Principal and the Obligee.

PROVIDED FURTHER and it is hereby agreed and declared that the Surety shall not be liable for a greater sum than that specified in this Bond.

IN WITNESS WHEREOF the Principal and the Surety have executed these presents this _____ day of _____, 20____.

SIGNED, SEALED AND DELIVERED
in the presence of

Witness

Occupation

Address

Principal Signature

Surety Signature

Address:

Contact Nos.:

APPENDIX SGC-C - PAYMENT ACKNOWLEDGEMENT LETTER

Before the release of any Payment Certificate, the Contractor **must** provide a Payment Acknowledgement Letter to the Contract Administrator using the following wording and format:

(CONTRACTOR'S LETTERHEAD)

The Regional Municipality of Durham
Works Department
5th Floor
605 Rossland Road East
P.O. Box 623
Whitby, Ontario
L1N 6A3

Attention: Contract Administrator

Dear Sir:

**RE: REGION OF DURHAM CONTRACT D2017-012
ROAD REHABILITATION AND HOT MIX PAVING AT VARIOUS LOCATIONS THROUGHOUT
THE REGION OF DURHAM**

I/We acknowledge Payment Certificate No. _____ as prepared by the Region of Durham in the amount due of \$_____.

Signature

Name

Position

APPENDIX SGC-D - SUBSTANTIAL PERFORMANCE RELEASE OF CLAIMS LETTER

Before the release of any portion of the 10 % Statutory Holdback, the Contractor **must** provide a Substantial Performance Release Letter to the Contract Administrator using the following wording and format:

(CONTRACTOR'S LETTERHEAD)

The Regional Municipality of Durham
Works Department
5th Floor
605 Rossland Road East
P.O. Box 623
Whitby, Ontario
L1N 6A3

Attention: Contract Administrator

Dear Sir:

**RE: REGION OF DURHAM CONTRACT D2017-012
ROAD REHABILITATION AND HOT MIX PAVING AT VARIOUS LOCATIONS THROUGHOUT
THE REGION OF DURHAM
*** SUBSTANTIAL PERFORMANCE RELEASE *****

In the matter of Contract D2017-012, being a contract between (company name) and the Regional Municipality of Durham, I, _____, being the (position) of the above named company, hereby certify that (company name) agrees that the amount of \$ _____ represents the total value of the work completed under this contract up to cut-off of next payment (_____ being the date of Substantial Performance).

I further certify that (company name) has no further claims related to work performed on this contract on or before the date of Substantial Performance except as noted below.

I further certify that (company name) will expeditiously complete any and all outstanding work and to discharge all unfulfilled obligations under the Contract.

Outstanding issues previously submitted in accordance with GC 3.13.03:

1. (Description and value of claim)
2. (Description and value of claim)
3. (Description and value of claim)

Signature

Name

Position

Note: Issues not previously submitted in accordance with GC 3.13.03 shall not be listed here or in any future correspondence related to this contract.

APPENDIX SGC-E - COMPLETION RELEASE OF CLAIMS LETTER

Before release of the Completion Payment Certificate or Invoice, the Contractor **must** provide a Completion Release Letter to the Contract Administrator using the following wording and format:

(CONTRACTOR'S LETTERHEAD)

The Regional Municipality of Durham
Works Department
5th Floor
605 Rossland Road East
P.O. Box 623
Whitby, Ontario
L1N 6A3

Attention: Contract Administrator

Dear Sir:

**RE: REGION OF DURHAM CONTRACT D2017-012
ROAD REHABILITATION AND HOT MIX PAVING AT VARIOUS LOCATIONS THROUGHOUT
THE REGION OF DURHAM
*** COMPLETION RELEASE OF CLAIMS *****

In the matter of Contract D2017-012, being a contract between (company name) and the Regional Municipality of Durham, I, , being the (position) of the above named company, hereby certify that (company name) agrees that the amount of \$, as shown on your proposed Completion Payment Certificate No. , represents the total final value of work completed under this contract, subject to the resolution of the following outstanding claims:

Outstanding issues previously submitted in accordance with GC 3.13.03:

1. (Description and value of claim)
2. (Description and value of claim)
3. (Description and value of claim)

Signature

Name
Position

Note: Issues not previously submitted in accordance with GC 3.13.03 shall not be listed here or in any future correspondence related to this contract.

Before release of the Final Payment Certificate or Invoice, the Contractor **must** provide a Final Release Letter to the Contract Administrator using the following wording and format with no alterations, qualifications or limitations:

The Regional Municipality of Durham
Works Department
5th Floor
605 Rossland Road East
P.O. Box 623
Whitby, Ontario
L1N 6A3

Dear Sir:

In the matter of Contract D2017-012, being a contract between (company name) and the Regional Municipality of Durham, I, _____, being the (position) of the above named company, hereby certify that (company name) agrees that the amount of \$_____ represents the total final value of the work completed under this contract and that (company name) has no further claims related to this contract.

Signature _____
Name _____
Position _____

APPENDIX SGC-G - REGION OF DURHAM STANDARD FORM FOR PROPERTY OWNER'S RELEASE OF LAND USED BY THE CONTRACTOR

Upon completion of the Contract, the Contractor shall provide to the Contract Administrator two (2) copies of a form of release signed by each property owner upon whose land the Contractor has entered for any purpose in conjunction with the Contract as follows:

Date:

To: *Contract Administrator*
The Regional Municipality of Durham
Works Department
5th Floor
605 Rossland Road East
P.O. Box 623
Whitby, Ontario
L1N 6A3

RE: CONTRACT D2017-012

Dear Sir:

I hereby certify that **_____ have fulfilled the terms of our agreement and have left my property in a satisfactory condition.

I release **_____ and the Regional Municipality of Durham from further obligations.

Yours very truly,

Signature

Property Owner's Name _____
Lot _____, Concession _____, Municipality of _____

(Please complete above, printing with ink or by typewriter)

Final payment will not be paid to the Contractor until all the applicable forms of release have been signed by property owners, received by the Owner and checked.

** NOTE: Insert name of Contracting Firm.

ONTARIO PROVINCIAL STANDARDS FOR ROADS AND PUBLIC WORKS



GENERAL CONDITIONS OF CONTRACT

**OPSS.MUNI 100
NOVEMBER 2006**

NOTE: OPSS.MUNI 100 - OPS General Conditions of Contract, Revised November 2006, shall apply to this contract.

For those Bidders who require a copy of these General Conditions for tender purposes, a copy is available at <https://www.raqsa.mto.gov.on.ca/techpubs/ops.nsf/OPSHomepage>.

The successful Bidder will be provided complete Contract Documents with the OPS General Conditions.