

January 2019

City of Peterborough

Unit Price Contract

Supplemental General Conditions and

Standard Specifications Modification Summary



City of Peterborough
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Department: **Infrastructure Planning Services**

January 2019 Edition

The following information is provided by the City of Peterborough to be considered part of Contracts where identified in the tender documents.

Unit Price Contract Supplemental Information Package

Including:

General Conditions of Contract (not attached)
Supplemental General Conditions and Standard Specifications Modification Summary

Please notify the contact listed below of any omissions or errors in these documents.

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Supplemental General Conditions

Added to: 19. Insurance

c) Contractors Pollution Liability Insurance

The Contractor shall provide and maintain during the term of the contract Environmental Liability Insurance subject to limits of not less than Five Million (\$5,000,000) inclusive per claim and with a deductible not to exceed Five Thousand (\$5,000) or as agreed to by the City and shall include coverage for but not limited to, bodily injury including death, property damage and remediation costs which are reasonable and necessary to investigate, neutralize, remove, remediate (including associated monitoring) or dispose of soil, surface water, groundwater or other contamination. **The policy shall remain in force for twelve (12) months following completion of work. The Corporation of the City of Peterborough shall be named as an additional insured. Should the Work involve asbestos abatement (provisional or non-provisional item(s), the Pollution Liability Policy evidenced must also include evidence of Asbestos Liability.**

Added to: 19. Insurance – Insurance General

9) By entering into a contract with the Corporation of Peterborough, the Contractor hereby consents to having the City provide insurance certificate(s) and any associated contact information to formal claimants.

Added to: 19. Insurance – Insurance General

12) Additional Insured

The following shall be listed as additional insured on the contractors insurance:

- a. The Corporation of the City of Peterborough
- b. Peterborough Utility Services Inc.
- c. Peterborough Utilities Commission
- d. Peterborough Distribution Inc.
- e. Bell Canada
- f. Cogeco Cable Canada LP
- g. Rogers Communications Inc.
- h. Nexicom Telecommunications Inc.
- i. Enbridge Gas Distribution Inc.

Added to & Amended: 39.

Roadway Cleanup & Haul Routes

Only arterial and collector roadways shall be used as designated haul routes, unless written request is received by the City from the Contractor, and written approval has been granted by the Contract Administrator for the use of local roadways as haul routes.

From time to time during the progress of this Contract, the Contractor may be required to clean haul routes, which may have become unacceptably covered in dirt and/or debris as a result of Contract operations. It shall be the sole responsibility of the Contractor to maintain existing streets affected by the operations, and no additional payment shall be made for such work. The cost of this work shall be included in the Unit Prices bid for the various phases of the work. Furthermore, action to clean such streets shall be taken immediately upon instruction to do so by the Contract Administrator. Otherwise, the City will arrange cleaning and the cost will be deducted on the subsequent Progress Payment Certificate.

Added: 55. Hot Mix Asphalt Price Adjustment – Based on Liquid Asphalt Price Index

The City will adjust the payment to the Contractor based on changes to the Ministry of Transportation's performance graded asphalt cement price index unless the Contractors opt out by notifying the City in writing within five business days of the award of the Contract. Once the Contractor has opted out of payment adjustments based on the index, the Contractor will not be permitted to opt back in. The price index will be published monthly in the MTO Contract Bulletin and displayed on the OHMPA (www.ohmpa.org) and MTO (www.raqs.mto.gov.on.ca) websites. The price index will be used to calculate the amount of the payment adjustment per tonne of new asphalt cement accepted into the work.

The price index will be based on the price, excluding taxes, FOB the depots in the Toronto area, of asphalt cement grade PG 64-34 or equivalent. One index will be used to establish and calculate the payment adjustment for all grades.

The price index for each month will reflect the average of that same month's prices and will be published on the last day of the month.

A payment adjustment per tonne of new asphalt cement will be established for each month in which paving occurs when the price index in effect at time of paving differs by more than \$15.00/tonne from the price index in effect when the Tender was opened. When the price index differential is less than \$15.00/tonne, there will be no payment adjustment for that month. Payment adjustments due to changes in the price index are independent of any other payment adjustments made to the hot mix tender items.

The payment adjustment per tonne will apply to the quantity of new asphalt cement in the hot mix accepted into the Work during the month for which it is established. The payment adjustment for the month will be calculated by the following means:

- a. When AC Prices are Rising by more than a \$15.00/tonne difference:

The payment adjustment to be paid to the Contractor is the result of subtracting the price index in effect when the Tender was opened from the price index in effect when paving took place, minus the \$15.00 float, multiplied by the number of tonnes of PGAC incorporated in the mix(s) as determined by the job mix formula. If the answer is negative, no adjustment is made.

- b. When AC Prices are Falling by more than \$15.00/tonne difference:

The payment adjustment made in favour of the Owner is the result of subtracting the price index in effect when paving took place, plus \$15.00, from the price index in effect when the Tender was opened multiplied by the number of tonnes of PGAC incorporated in the mix(s) as determined by the job mix formula.

The quantity of new asphalt cement includes all grades of asphalt cement supplied by the Contractor with and without polymer modifiers. For each month in which a payment adjustment has been established, the quantity will be calculated using the hot mix quantity accepted into the Work and its corresponding asphalt cement content as required by the job mix formula except for mixes which contain reclaimed asphalt pavement.

For mixes which contain reclaimed asphalt pavement, the quantity of new asphalt cement will be determined from the difference between the asphalt cement content required by the job mix formula and the asphalt cement content of the reclaimed asphalt pavement incorporated into the hot mix, as calculated by the Contract Administrator.

“Price Index in Effect” means the published price index available at the time of the event. (i.e. If tender opening is to occur in April, the March index will be the price index in effect at tender opening. If paving occurs in July, the June index will be the price index in effect at time of paving.)

Where the asphalt item is paid for on a square metre basis rather than per tonne a theoretical tonnage of new asphalt placed will be calculated for the purpose of determining the liquid AC payment adjustment. The theoretical tonnage of new asphalt placed will be calculated as follows:

Field measured asphalt area (square metres) x specified compacted asphalt depth (metres) x Bulk Relative Density (B.R.D.) from the job mix formula (tonnes/m).

Added: 56. Garbage, Green Waste & Recycling Pick-Up

The Contractor shall be responsible for coordinating with the appropriate personnel regarding garbage, green waste and recycling pick-up to ensure that these City services are not interrupted within site limits for the duration of project works. A City map for garbage/recycling collection routes and their schedule may be provided by the Contract Administrator at the preconstruction meeting. In the instance where road closures are

permitted, the Contractor must provide 5 days notice through the Contract Administrator when requesting to change the location of pick-up of the garbage/recycling.

Standard Specifications

New Specification: CP200.01	Quality Assurance
New Specification: CP200.02	Paid Duty Officer
New Specification: CP314.03	Unshrinkable Backfill
New Specification: CP510.15	Removal/Disposal of Existing Chain Link Fence
New Specification: CP511.01	Supply/Install Rip Rap with Filter Fabric (2 layers)
New Specification: CP804.02	Erosion Blanket
New Specification: CP805.03	Water Taking Reporting
New Specification: CP980.01	Supply/Install Pedestrian Barricade
New Specification: CP1541.01	Supply/Install Chain Link Fence with Top Rail

Added to: CP201.01 Clear and Grub

All trees are to be removed from the site the same day they are felled. With the Contract Administrators approval they can be left on site for two (2) working days. All trees left onsite must be fenced off with construction fence fixed to steel T-bars.

Trees identified in the contract documents for removal that are not fell and removed from site prior to May 1st and proceeding through to August 31st will require the organization of a recognized ornithologist to conduct a site review of the trees prior to their removal to ensure the natural ecology of various nesting animals is not disturbed. All costs and delays associated to this requirement shall be borne by the Contractor.

All Ash trees with a diameter of 250mm (10") or greater shall be cut to minimum lengths of 2.6m (8'6") and taken to the City of Peterborough Ash Tree Compound located at 1501 Crawford Drive. Access arrangements to the City's Tree Compound are to be made with the Contract Administrator. The Contractor shall make alternative arrangements to dispose of Ash trees that are less than 250mm diameter, stumps and brush elsewhere from the City's Tree Compound, however, brush and smaller trees shall be chipped prior to leaving the site.

Added to: CP310.01 General Asphalt Requirements

This item shall include the supply of asphalt cement content of 5.2% for HL-1 and HL-3 Hot Mix Asphalt, and 5.0% for HDBC Hot Mix Asphalt, unless otherwise specified.

The following table illustrates the acceptable tolerance for asphalt cement content provided in HL-1, HL-3 and HDBC Hot Mix Asphalt products:

Tolerances for Asphalt Cement Content (*)		
Mix	Attribute	Job-Mix Formula
HL1 & HL3	AC Content	Must be 5.2%
HDBC	AC Content	Must be 5.0%
* Based on actual field test results.		
Note: Borderline tolerances have been deleted.		

Added to: CP310.01 General Asphalt Requirements (Material Specifications)

Placement of SS1 emulsified asphalt tack coat shall be applied on all vertical faces and at longitudinal joints, prior to the asphalt placement of subsequent passes, where the unsupported asphalt edge drops below 95 Celcius. The cost of tack cost applications on vertical faces shall be included in this item.

Added to: CP310.01 General Asphalt Requirements (Material Specifications)

Requirements for Performance Graded Asphalt Cement shall be in accordance with CP1101.01. **Grade 58-34 shall be the standard asphalt cement grade unless otherwise specified in the contract documents.**

Added to: CP310.01 General Asphalt Requirements (Material Specifications)

Weigh tickets are to be provided in digital format (hand written receipts will not be accepted) and must indicate the following minimum information to be accepted for payment. Tickets not meeting these requirements will be returned to the Contractor without payment:

- Supplier name
- Material type being supplied
- Hauler name
- Truck number
- Pit location
- Truck tare weight
- Gross weight
- Net material weight
- Date and time of delivery

- Total for the day
- Running total (for entire project)
- **PGAC Grade**

Longitudinal Joint Performance (For Information Purposes Only)

Intent: The collection of compaction data will be performed at all longitudinal joints on the premise that the City will be looking to include one of or a combination of the following criteria within the 2020 specification updates for the purpose of defining acceptable/rejectable contract requirements:

- Alternate construction methods
- Equipment requirements
- Refined longitudinal joint performance

Longitudinal Joint Performance Requirements

Failure to achieve acceptable longitudinal joint performance for 2019 executed contracts will require the Contractor to schedule and attend a pre-pave meeting with the Contract Administrator prior to conducting the next paving operation. Paving will not be permitted until the pre-pave meeting has been held. The Contractor will be required to provide modifications to at least one of the following; placement operations, supply transportation, existing construction equipment, additional construction equipment, etc. The provided modification must be approved by the Contract Administrator and the Contractor will be required to conduct future operations with such modifications. If failure occurs again, pre-pave meetings will be required on a continuous basis until acceptable longitudinal joint performance has been achieved.

Longitudinal joint testing shall be performed at intervals of +/- 50 metres located on each side of the joint, in a staggered pattern and commencing at approximately 1 metre into the paving limits. Longitudinal joint performance shall apply to full width road paving only, unless otherwise noted in the contract documents.

A longitudinal joint compaction result shall under no circumstance be less than 90% for base asphalt and 91% for surface asphalt. In addition to this requirement, the average of the compaction results for a longitudinal joint shall meet OPSS.MUNI 310 – Table 10 (91% and 92% for base and surface asphalt, respectively). Longitudinal joint compaction averages shall be determined for individual joints only, when more than one is present. The above longitudinal joint performance specifications may be excluded within intersections and turning tapers when live traffic is required to be maintained.

Quality Assurance

Quality assurance testing protocols as referred to in CP200.01 shall apply.

Deleted from: CP310.01 General Asphalt Requirements

Use of Paving Equipment – Paving in Echelon (When Specified in Contract)

OPSS.MUNI 310 is amended with the addition of the following paragraph:

Paving in Echelon is mandatory for the placement of binder and surface course asphalt. The pavers shall be operated at the same time and maintain a distance of not more than 50m from each other so that a hot joint is obtained between the lanes of mixtures being placed. The Contractor shall supply sufficient personnel to adequately control both spreading operations simultaneously. Where the entire width of the proposed pavement platform cannot be paved in echelon with 2 pavers, one longitudinal construction joint is permitted. Each half of the road shall be paved in echelon resulting in only one longitudinal joint in the binder and surface courses located at the centerline of the road. The joint shall be located to ensure that it does not align with the wheel path of traffic.

Asphalt Material Transfer Vehicle (When Specified in Contract)

OPSS.MUNI 310 is amended with the addition of the following paragraph:

A Shuttle Buggy® or Asphalt Material Transfer Vehicle (AMTV) is required for all paving operations, including paving using only one paver. Compensation for the use of an AMTV will be included in the unit price for the asphalt when specified.

Re-Heating and Compaction of Longitudinal Joints (When Specified in Contract)

OPSS.MUNI 310 is amended with the addition of the following paragraph:

For base and surface courses, the Contractor shall use an approved method of re-heating, re-working and compacting all centerline longitudinal cold joints. The use of an infra-red heating system capable of maintaining a minimum temperature of 100° C to produce a welded joint, without scorching or burning the mix. The use of the heater will be included in the unit price for the asphalt when specified.

All re-heating methods shall be pre-approved by the Contract Administrator prior to the start of any asphalt placement.

The density of the mix at any longitudinal joint shall be that specified of the mainline mat density. Compaction of longitudinal joint shall be measured within 0.3 m from the joint.

Added to: CP310.02 Supply/Install Hot Mix Asphalt Heavy Duty Binder Course (Including A/C)

OPSS.MUNI 310, November 2017, shall apply except as amended and extended herein.

This item shall include the general requirements set forth in specification CP310.01. **The hot mix asphalt heavy-duty binder course depth shall be as illustrated on the contract drawings, and when the specified thickness is 100mm, it shall be understood and assumed that the asphalt installation must be performed in two separate and equal lifts.**

The asphaltic concrete for this item shall conform to OPSS.MUNI 1150, November 2018.

Added to: CP311.01 Supply/Install HL-3 Hot Mix Asphalt (Driveways and Walkways) (Including A/C)

OPSS 311.MUNI 311, November 2018, shall apply except as amended and extended herein.

The unit price bid identified in the schedule of unit prices shall be full compensation for all labor, materials and equipment necessary to supply and place HL-3 hot mix asphalt as specified on the contract drawings.

This item shall include the general requirements set forth in specification CP310.01, with the exception that PGAC grade 58-28 shall be utilized.

No asphalt testing is required by the contractor for asphalt supplied under this item. The City reserves the right to test at the City's expense if deemed necessary.

The HL-3 hot mix asphalt shall be placed at a depth of 50mm (placed in 1 – 50 mm lift) for all walkways and driveways with a width less than 3.0m. The HL-3 surface course asphalt shall meet OPSS.MUNI 1150, November 2018. Driveways and driveway aprons whose smallest dimension exceeds one (1) linear metre, shall require the use of a mechanical self-propelled paver.

Where driveways intersect with a multi-use trail 3.0m wide or larger, the multi-use trail shall be considered the controlling operation. Surface asphalt paved on driveways in advance of the multi-use trail will be rejected and require removal and replacement at the Contractor's expense. The Contractor may elect to pave the driveways in conformance with a superior PGAC grade at their discretion to prevent coordination and logistical issues. If the Contractor elects to upgrade the PGAC grade provided for driveways it shall be at no additional cost to the City.

Deleted from: CP311.01 Supply/Install HL 3 Hot Mix Asphalt (Driveways and Walkways) (Including A/C)

Where disturbed as a result of construction, commercial entrances shall be restored using a base of 150 mm of Granular 'A' and 300mm of Granular 'B'. Compensation for the Granular 'A' and 'B' material shall be made from the associated item in the Schedule of Unit Prices under CP314.02 and CP314.01 either by the tonne or square metre

Added to: CP314.01 Granular 'B' Type 1 Modified

Compaction and quality assurance testing of the Granular 'B' Type 1 Modified shall be in accordance with CP501.01 and CP200.01. The Contractor shall be responsible for establishing Quality Control Procedures and produce a Quality Control Plan as per CP501.01.

Added to: CP314.02 Granular 'A'

Compaction and quality assurance testing of the Granular 'A' shall be in accordance with CP501.01 and CP200.01. The Contractor shall be responsible for establishing Quality Control Procedures and produce a Quality Control Plan as per CP501.01.

Deleted from: CP314.02 Granular 'A'

Where disturbed as a result of construction, or where not identified on the contract drawings, commercial entrances shall be restored using a base of 300 mm of Granular 'A' and residential driveways shall be restored using a base of 150 mm of Granular 'A'.

Added/Amended To: CP351.01 General Concrete Requirements

Where deficiencies have been identified, the Contractor shall provide additional testing of the hardened concrete to verify that the concrete meets the contract requirements. **Acceptance of concrete shall be in accordance with OPSS.MUNI 1350.08 and the quality assurance testing as referred to in CP200.01 shall apply. All concrete placed that does not meet the contract requirements will require removal and replacement at the discretion of the Contract Administrator.**

Added/Amended To: CP351.01 General Concrete Requirements

Concrete samples taken shall meet or exceed a minimum specified compressive strength of 32 MPa at 28 days curing time, unless otherwise noted in the contract documents. When a 28 day failure occurs it shall be deemed rejectable until such time that the Contractor provides substantial evidence, in a form acceptable by the Contract Administrator that the average of all groups of three consecutive strength tests are equal to or greater than the specified strength (MPa) in standing with OPSS.MUNI 1350.08.02.04.01 a). Note that OPSS.MUNI 1350.08.02.04.01 b) will also continue to apply.

It is the responsibility of the Contractor and their suppliers to ensure that all concrete material supplied and installed conforms to contract requirements.

The Contractor shall be responsible to schedule and coordinate concrete works as to conform to CSA A23.1-14/A23.2-14 Table 19. In the event that scheduling cannot be accommodated for the installation of concrete with regards to Table 19, the Contractor shall be required to alter the coordination or staging of the work to accommodate such. In the event that the Contractor cannot schedule or coordinate for concrete works in conformance with Table 19, delays shall not be entertained by the City and working days shall continue.

Added to: CP802.01 Supply/Place Topsoil

The unit price bid identified in the schedule of unit prices shall be full compensation for the supply of all necessary labor and equipment necessary to supply and place topsoil as described herein. OPSS 802 is herein amended in that the unit price bid per square metre for this item shall be full compensation for supplying and placing a minimum of 150 mm of screened topsoil. **Screened topsoil shall be compensated for upon proper installation of sod as per CP803.01.**

Added to: CP803.01 Supply/Place Sod

Sod shall be properly installed within 5 working days following the placement of screened topsoil as per CP802.01.

The Contractor shall be responsible to maintain the sod, including cutting until completion of the contract. Upon completion of the contract, the Contractor shall hand deliver notices/letters to all residents within the project limits explaining proper care and maintenance procedures of the newly laid sod.

Added to: CP805.01 Environmental Considerations

Supply/Install/Remove Heavy Duty Silt Fence Flow Check Dam

The unit price bid identified in the schedule of unit prices shall be full compensation for all labour, equipment and materials required to supply, install and remove heavy duty silt fence flow check dams including regular inspection and maintenance in accordance with the following:

OPSD 219.190 Silt Fence Flow Check Dam

Supply/Install/Remove Temporary Rock Flow Check Dam

The unit price bid identified in the schedule of unit prices shall be full compensation for all labour, equipment and materials required to supply, install and remove temporary rock flow check dams including regular inspection and maintenance in accordance with the following:

OPSD 219.210 Temporary Rock Flow Check Dam V-Ditch
OPSD 219.211 Temporary Rock Flow Check Dam Flat Bottom Ditch

Supply/Install/Remove Temporary Straw Bale Check Dam

The unit price bid identified in the schedule of unit prices shall be full compensation for all labour, equipment and materials required to supply, install and remove straw bale flow check dams including regular inspection and maintenance.

All straw bale flow check dams installed shall be maintained in swales where there is a risk of erosion by excessive velocity and be constructed in accordance with OPSD 219.180.

Supply/Install/Remove Turbidity Curtain

The unit price bid identified in the schedule of unit prices shall be full compensation for all labour, equipment and materials required to supply, install, maintain and remove the turbidity curtain.

OPSD 219.260 Turbidity Curtain
OPSD 219.261 Turbidity Curtain, Seam Detail

Added/Amended to: CP1101.01 Material Specification for Performance Graded Asphalt Cement

OPSS.MUNI 1101, November 2016 shall apply.

The following herein is for the purpose of information only.

Developers shall be responsible for obtaining one (1) sample for each lift of asphalt within each stage/phase of the development and have it retained by the City material testing consultant until December 1st of each year. These samples shall be available for possible City testing at the City's expense. Cost of sampling and retention of the sample shall be the Developer's responsibility.

Requests for substituting PGAC grades will not be entertained or permitted.

Deleted from: CP1101.01 Material Specification for Performance Graded Asphalt Cement

PGAC Test Documentation

Clause 1101.04.01.01 of OPSS.MUNI 1101 is amended by the addition of the following:

- e) ii. Lime treatment shall be required for asphalt mixes that are susceptible to stripping and shall be disclosed in writing to the Contract Administrator.

For any contract with two or more borderline results for AASHTO M 320, LS-299 or LS-308 for two separate samples, the production for the entire contract shall be rejectable.

Index of Standard Drawings:

CPD M1.2 (Added)	Curb Return at Entrances Detail
CPD351.01 (Revised from 351.05)	Sidewalk Cross Section Details
CPD351.02 (Revised from 351.06)	Structural Transit Pad Detail

Index of Forms:

006 (Revised)	Traffic Control Application & Covering Letter for Engineering Projects
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