January 2025

City of Peterborough

Unit Price Contract Supplemental General Conditions and Standard Specifications Modification Summary

City of Peterborough
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Department**: Infrastructure, Planning and Growth Management**

January 2025 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 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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Section B - Supplemental General Conditions

Added to: 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 on the Ontario Asphalt Pavement Council website **https://www.onasphalt.org/about/ac-index.** 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 **on the day of** Tender **closing.** 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 **on the day of** Tender **closing** 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 **on the day of** Tender **closing** 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 **closing** is to occur in April, the March index will be the price index in effect at Tender **closing**. 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).

Section C - Standard Specifications

Added to CP200.00 Traffic Control

4) **Any work within 15.24m of the nearest Canadian Pacific (CP) Railway rail will require CP flagging which will be the Contractor's responsibility to obtain, pay and coordinate to obtain all approvals prior to the commencement of any work that is located within the distance specified herein. The Contractor shall be responsible for all timelines, coordination, filling out the application (including but not limited to; CP Utility Corridor Access Application and CP Flagging Application Form), paying the application fees while providing the Contract Administrator with a copy of the final approved CP flagging permit for project records. All associated cost for flagging operations will be recoverable by the Contractor from the City, unless the Contractor has incurred unnecessary charges by not providing cancellation notices to CP when operational scheduling requires such. Recoverable flagging cost will be issued through a change order once the City has received paid invoice statements, and the Contractor will not be permitted to charge/recover overhead or additional administration cost of any kind above and beyond the paid invoice value(s) for flagging. Application and permitting costs will not be recoverable.**

Added to CP310.01 General Asphalt Requirements

Mix	Attribute	Job-Mix Formula	OPSS 310 Acceptable	OPSS 310 Borderline	OPSS 310 Rejectable
HL1 & HL3	AC Content	5.2% Min.	< 0.30	**0.30** to 0.50	> 0.50
HDBC	AC Content	5.0% Min.	< 0.30	0.30 to 0.50	> 0.50
HL-2	AC Content	6.2% Min.	< 0.30	0.30 to 0.50	> 0.50

Sampling & Testing

As per OPSS.MUNI 310, the 'Average Plant Produced HMA Maximum Relative Density (MRD)' shall be determined by averaging all of the respective HMA mix design specific MRDs with respect to the HMA placed for an individual Contract only. (i.e.: HMA placement of the same mix design on alternate projects shall not be considered when calculating the 'Average Plant Produced HMA Maximum Relative Density (MRD)').

Where compaction requirements are not achieved to meet contractual requirements and where negotiations are proven unsuccessful, the Contractor shall elect to undertake coring as per OPSS.MUNI 310 for the purpose of referee testing. The City shall provide the Contractor and referee testing laboratory with the 'average plant produced MRD for the project' (i.e.: average plant produced MRD for HL-1 PGAC 64-34 Mix Design Number XXXXX is [(2.616 + 2.601) / 2] = 2.609 as per the attached QA mix results. To ensure representative referee compaction confirmation of the HMA at the time of placement, core samples shall be taken from outside of wheel paths (i.e.; Center of lanes) as determined and chosen by the Contract Administrator. The Contractor shall provide a proposal for the City's review and approval of how the core locations will be repaired immediately after cores are removed. The results of the core compaction verification shall be binding. The Contractor shall be responsible for traffic control and associated costs regardless of the results. Referee lab for the BRD values on the extracted cores shall be as mutually agreed upon and as per the RAQs system. Failed cores shall have the representative lane of asphalt removed and replaced from E/P to centerline as per OPSS.MUNI 310.08.06.01 without exception.

Where referee testing indicated rejectable asphalt, the Contractor shall remove and replace the asphalt at the Contractor's sole expense.

Example:

For locations where nuclear gauge readings failed to meet contract compaction requirements, six (6) cores shall be obtained in total (three (3) from each lane) at approximately even distances apart.

Each core location will be representative of a third of the asphalt that was placed within each lane. For the west and east end core locations, these cores will represent the asphalt from the paving limit to the midway point towards the middle of where the center core location is located. The middle core location will be representative of the asphalt placed from the midway point from each of the end cores.

Note - The number of cores may change at the discretion of the Contract Administrator. However, the above intent shall apply.

Material Specifications

Requirements for **Recovered** Performance Graded Asphalt Cement (PGAC) shall be in accordance with CP1101.01 **whereas requirements for Asphalt Cement Tank Sampling shall be as per OPSS.MUNI 1101**. **All PGAC tank samples 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.**

Operational Constraints

Prior to paving base asphalt, all catchbasin structures, manhole structures, valves, etc. shall be covered by plating the opening and placing granular road base on top of the structures**. All lifts of base asphalt shall be paved over top of the granular road base, followed by temporary and/or final adjustments, as required. Base asphalt, CCTV and leakage testing must be approved by the Contract Administrator prior to paving surface asphalt.**

Water shall not be permitted to be placed on HMA for the purpose of accelerating cooling.

Added to CP310.05 Supply/Install HL 1 Hot Mix Asphalt (Including A/C)

Payment of this item will be as follows:

a) 90% upon installation of acceptable asphalt as per all applicable specifications.

b) **5% upon successful completion of all pavement marking applications.**

c) **5% upon successful completion of all pavement marking applications along the entire site in standing with timelines as per CP 710.01 and CP 710.02. The intent of this 5% holdback in payment when not complying with pavement marking application timelines, is to ensure site safety for the Contractor and all general public users.**

Added to CP310.06 Supply/Install HL-3 Hot Mix Asphalt (Including A/C)

Payment of this item will be as follows:

a) 90% upon installation of acceptable asphalt as per all applicable specifications.

b) **5% upon successful completion of all pavement marking applications.**

c) **5% upon successful completion of all pavement marking applications along the entire site in standing with timelines as per CP 710.01 and CP 710.02. The intent of this 5% holdback in payment when not complying with pavement marking application timelines, is to ensure site safety for the Contractor and all general public users.**

Added to CP310.08 Supply/Install HL-2 Hot Mix Asphalt (Including A/C)

Payment of this item will be as follows:

a) 90% upon installation of acceptable asphalt as per all applicable specifications.

b) **5% upon successful completion of all pavement marking applications.**

c) **5% upon successful completion of all pavement marking applications along the entire site in standing with timelines as per CP 710.01 and CP 710.02. The intent of this 5% holdback in payment when not complying with**

pavement marking application timelines, is to ensure site safety for the Contractor and all general public users.

Amended to CP314.03 Unshrinkable Backfill

OPSS.MUNI 401, November 2024, shall apply except as amended and extended herein.

Added to CP351.01 General Concrete Requirements

OPSS.MUNI 351.05 is amended by the addition of the following:

The materials for the production of concrete sidewalks, medians, bus pads, curb, curb and gutter, **and concrete collars** shall meet the requirements of OPSS.MUNI 1350 and the following:

1) Cement type: Normal Portland GU

2) Minimum 28-day compressive strength: 32 MPa

3) Class of exposure: C-2

Added to CP407.03 Supply/Install Concrete Storm Structure

The unit price bid identified in the schedule of unit prices shall include full compensation for all labor, equipment, and materials to do all earth excavation, to remove asphalt pavement, except where this is a separate item, for providing openings and breaking into the storm sewers, to carry out all pipe installations, connections, benching and grouting, to place and compact all **embedment**, bypass pumping to keep system operational at all times, backfill and cover materials, to dispose surplus excavated materials to carry out all sheathing, shoring and dewatering as per OPSS.MUNI 517 and 518 as may be required and for all other items incidental to this operation.

Added to CP407.04 Supply/Install Concrete Sanitary Structure

The unit price bid identified in the schedule of unit prices shall include full compensation for all labor, equipment, and materials to do all earth excavation, to remove asphalt pavement, except where this is a separate item, for providing openings and breaking into the storm sewers, to carry out all pipe installations, connections, benching and grouting, to place and compact all **embedment**, bypass pumping to keep system operational at all times, backfill and cover materials, to dispose surplus excavated materials to carry out all sheathing, shoring and dewatering as per OPSS.MUNI 517 and 518 as may be required and for all other items incidental to this operation.

New Specification CP408.06 Reset/Adjust Existing or New Bell Chamber and Maintenance Hole Frame and Cover

CP 408.01 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 labour, equipment and materials required for setting of new or existing (i.e.: used) Bell chamber and maintenance hole frame and cover to the proper finished grade within the limits of construction in accordance with CPD 408.04. The installation shall follow CPD 408.04, whereas it must be a poured in place collar. Please note that Bell will furnish new frame and covers, when needed as determined by a Bell representative, at no cost to the Contractor.

The Contractor shall hire a 'Bell Approved Contractor' (i.e.: currently Telecon, Ledcor, Aecon, etc., however, this is subject to change without notice as determined by the City and/or Bell) to perform Bell chamber and maintenance hole adjustments on-site.

The Contractor may be required to obtain the frame and cover from Bell's Peterborough yard at no extra cost to the City. Obtaining these materials may require machinery such as but not limited to a backhoe due to frame and cover's weight which cannot be lifted manually by workers.

The City shall not be held responsible for, including but not limited to; additional costs, timelines, delays, claims, coordination, where coordination of 'Bell's approved Contractor' fails to meet construction operations and/or scheduling timelines even where it leads to unsuccessfully meeting the contractual requirements. If the issue with coordinating 'Bell's approved Contractor' persists, the Contractor may request alternate options to conduct the work. These alternative options will require review and formal written approval from the Contract Administrator and are not guaranteed to be approved by the City and/or Bell.

New Specification CP408.07 Supply/Set Watertight Maintenance Hole

CP 408.01 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 labour, equipment and materials required for setting new frames, covers and grates to proper finished grade within the limits of construction in accordance with standard drawings OPSD 401.030.

Added to CP410.01 Supply/Install DR 35 PVC Storm Sewer

The unit price bid identified in the schedule of unit prices (including both cross drains and mains) to supply and install DR 35 PVC storm sewer in accordance with the size indicated on the contract drawings shall include but not necessarily be limited to the following:

a) Excavation and disposal of all surplus or unsuitable material as per CP 206.01.

b) All sheathing, shoring, bracing, and dewatering as per OPSS.MUNI 517 and 518 that may be required.

c) Supply, place and install the size and class of pipe indicated on the contract drawings.

d) Supply, place and compact (Granular A) **embedment** in accordance with OPSD 802.010 and CP501.01.

e) Temporary support of surrounding utilities located within the excavation, if required.

f) Supply, place in 300 mm lifts, and compact to CP501.01, suitable native backfill to the subgrade elevation below the proposed road as dictated by the road cross sections for the given street.

g) All transitions and adaptors necessary to connect newly installed pipes to existing pipes. Blind tee connections must be constructed with factory made tees, Inserta Tees (or approved equivalent by the Contract Administrator), or by coring into the existing pipe. If coring is not feasible as approved in writing by the Contract Administrator, alternative methods may be used at no additional cost to the City, and approved by the Contract Administrator.

h) Connections to existing and new structures in accordance with CPD 708.020, including tapping of pipes into existing structures with the use of rubberized connectors (boots) and altering benching, if required.

i) Cleaning, flushing and CCTV camera inspection of the completed sewer in accordance with CP409.01.

j) All pumping, by passing, temporary pipes and sand bagging etc. to keep the system operational at all times and not adversely affect the installation of pipe **embedment** downstream.

k) Leakage testing of new sewers in accordance with OPSS.MUNI 410. Contractor is required to submit in document form a table stating the pipe run id, length of run, diameter of pipe in mm and the calculated allowable leakage per run to the Contract Administrator two (2) working days prior to testing, all actual leakage shall be recorded by the contractor and submitted once testing is complete. Contractor is to use City of Peterborough Form 001 or Form 002 for report.

Deflection testing as per OPSS.MUNI 410 and OPSS.MUNI 438 when requested based on CCTV inspection review. Digital image in MPEG format**.** Cross drain sizes shall be as follows:

- 250 mm from all 600x600 catch basins
- 300 mm from all 600x1450 catch basins

Should it be determined that the native soil is suitable for **embedment** then the contractor will be required to give the City a credit for **embedment** equivalent to the cost per tonne or cubic metre for Granular 'A' delivered to the job site times the theoretical **embedment** quantity per lineal metre of pipe as determined by OPSD 802.010.

Added to CP410.02Supply/Install Concrete Storm Sewer

The unit price bid identified in the schedule of unit prices to supply and install concrete storm sewer in accordance with the size and pipe grade indicated on the contract drawings shall include but not necessarily be limited to the following:

a) Excavation and disposal of all surplus or unsuitable material as per CP 206.01.

b) All sheathing, shoring, bracing, and dewatering as per OPSS.MUNI 517 and 518 that may be required.

c) Temporary support of surrounding utilities located within the excavation, if required. The temporary removal and relaying of existing storm cross drains.

d) Supply, place and install the size and class of pipe indicated in this item's description.

e) Supply, place, and compact **embedment** (Granular A) in accordance with OPSD 802.030 (Class B **Embedment**), 802.031 (Class B **Embedment**) or 802.032 (Class B **Embedment**) in conformance with CP501.01.

f) Supply, place in 300mm lifts, and compact to CP501.01, suitable native backfill to the subgrade elevation below the proposed road as dictated by the road cross sections for the given street.

g) All transitions and adaptors necessary to connect newly installed pipes to existing pipes. Blind tee connections must be constructed with factory made tees, Inserta Tees (or approved equivalent by the Contract Administrator), or by coring into the existing pipe. If coring is not feasible as approved in writing by the Contract Administrator, alternative methods may be used at no additional cost to the City, and approved by the Contract Administrator.

h) Connections to existing and new structures in accordance with CPD 708.020, including tapping of pipes into existing structures with the use of rubberized connectors (boots) and altering benching, if required.

i) Cleaning, flushing and CCTV camera inspection of the completed sewer in accordance with CP409.01.

j) All pumping, by passing, temporary pipes and sand bagging etc. to keep the system operational at all times and not adversely affect the installation of pipe **embedment** downstream.

k) Leakage testing of new sewers in accordance with OPSS.MUNI 410. Contractor is required to submit in document form a table stating the pipe run id, length of run, diameter of pipe in mm and the calculated allowable leakage per run to the Contract Administrator two (2) working days prior to testing, all actual leakage shall be recorded by the contractor and submitted once testing is complete. Contractor is to use City of Peterborough Form 001 or Form 002 for report..

Should it be determined that the native soil is suitable for **embedment**, the contractor will be required to give the City a credit for **embedment** equivalent to the cost per tonne or cubic metre for Granular 'A' delivered to the job site times the theoretical **embedment** quantity per linear metre of pipe as determined by the OPSD per item e).

Added to CP410.03 Supply/Install DR 28 PVC Sanitary Service

The unit price bid identified in the schedule of unit prices shall be full compensation for all labor, equipment and materials required for the supply and installation of sanitary service connections including all fittings, adaptors, etc., except where these fittings and adaptors are paid for under other items, necessary to connect to either existing sewers or replacement sewers in accordance with standard drawing OPSD 1006.010 as necessary and indicated on the contract drawings shall include but not necessarily be limited to the following:

a) Excavation and disposal of all surplus or unsuitable material as per CP 206.01.

b) All sheathing, shoring, bracing, and dewatering as per OPSS.MUNI 517 and 518 that may be required.

c) Supply, place and install the size and class of pipe indicated on the contract drawings.

d) Supply, place, and compact **embedment** (Granular A) in accordance with OPSD 802.010 and CP501.01.

e) Temporary support of surrounding utilities located within the excavation, if required.

f) Supply, place in 300 mm lifts, and compact to CP501.01, suitable native backfill to the subgrade elevation below the proposed road as dictated by the road cross sections for the given street.

g) All transitions and adaptors necessary to connect newly installed pipes to existing pipes. Blind tee connections must be constructed with factory made tees, Inserta Tees (or approved equivalent by the Contract Administrator), or by coring

into the existing pipe. If coring is not feasible as approved in writing by the Contract Administrator, alternative methods may be used at no additional cost to the City, and approved by the Contract Administrator.

h) Connections to existing and new structures in accordance with CPD 708.020, including tapping of pipes into existing structures with the use of rubberized connectors (boots) and altering benching, if required.

i) Cleaning, flushing and CCTV camera inspection of the completed sewer in accordance with CP409.01.

j) All pumping, by passing, temporary pipes and sand bagging etc. to keep the system operational at all times and not adversely affect the installation of pipe **embedment** downstream.

k) Leakage testing of new sewers in accordance with OPSS.MUNI 410. Contractor is required to submit in document form a table stating the pipe run id, length of run, diameter of pipe in mm and the calculated allowable leakage per run to the Contract Administrator two (2) working days prior to testing, all actual leakage shall be recorded by the contractor and submitted once testing is complete. Contractor is to use City of Peterborough Form 001 or Form 002 for report.

Deflection testing as per OPSS.MUNI 410 and OPSS.MUNI 438 when requested based on CCTV inspection review. Digital image in MPEG format. Where services are placed to the property lines, leakage testing of services is required in accordance with OPSS.MUNI 410. The proposed services will extend from the proposed main to the property line, unless replacing an existing service.

The unit price shall also include excavation and removal/disposal of existing service, all **embedment** materials required for the new connection and management of the existing flow. Flows are to be maintained at all times.

Added to CP410.04 Supply/Install DR 35 PVC Sanitary Sewer

The unit price bid identified in the schedule of unit prices to supply and install DR 35 PVC sanitary sewer in accordance with the size indicated on the contract drawings shall include but not necessarily be limited to the following:

a) Excavation and disposal of all surplus or unsuitable material as per CP 206.01.

b) All sheathing, shoring, bracing, and dewatering as per OPSS.MUNI 517 and 518 that may be required.

c) Temporary support of surrounding utilities located within the excavation, if required. The temporary removal and relaying of existing storm cross drains.

d) Supply, place and install the size and class of pipe indicated on the contract drawings.

e) Supply, place and compact (Granular A) **embedment** in accordance with OPSD 802.010. All granular **embedment** is to be compacted according to CP501.01.

f) Supply, place in 300 mm lifts, and compact to CP501.01, suitable native backfill to the subgrade elevation below the proposed road as dictated by the road cross sections for the given street.

g) All transitions and adaptors necessary to connect newly installed pipes to existing pipes. Blind tee connections must be constructed with factory made tees, Inserta Tees (or approved equivalent by the Contract Administrator), or by coring into the existing pipe. If coring is not feasible as approved in writing by the Contract Administrator, alternative methods may be used at no additional cost to the City, and approved by the Contract Administrator.

h) Connections to existing and new structures in accordance with CPD 708.020, including tapping of pipes into existing structures with the use of rubberized connectors (boots) and altering benching, if required.

i) Cleaning, flushing and CCTV camera inspection of the completed sewer in accordance with CP409.01.

j) All pumping, by passing, temporary pipes and sand bagging etc. to keep the system operational at all times and not adversely affect the installation of pipe **embedment** downstream.

k) Leakage testing of new mains in accordance with OPSS.MUNI 410. Contractor is required to submit in document form a table stating the pipe run id, length of run, diameter of pipe in mm and the calculated allowable leakage per run to the Contract Administrator two (2) working days prior to testing, all actual leakage shall be recorded by the contractor and submitted once testing is complete. Contractor is to use City of Peterborough Form 001 or Form 002 for report.

Deflection testing as per OPSS.MUNI 410 and OPSS.MUNI 438 when requested based on CCTV inspection review. Digital image in MPEG format. Should it be determined that the native soil is suitable for **embedment** then the contractor will be required to give the City a credit for **embedment** equivalent to the cost per tonne or cubic metre for Granular ‘A‘ delivered to the job site times the theoretical **embedment** quantity per linear metre of pipe as determined by OPSD 802.010.

Added to CP410.05 Supply/Install Concrete Sanitary Sewer

The unit price bid identified in the schedule of unit prices to supply and install concrete sanitary sewer in accordance with the size and pipe grade indicated on the contract drawings shall include but not necessarily be limited to the following:

a) Excavation and disposal of all surplus or unsuitable material as per CP 206.01.

b) All sheathing, shoring, bracing, and dewatering as per OPSS.MUNI 517 and 518 that may be required.

c) Temporary support of surrounding utilities located within the excavation, if required. The temporary removal and relaying of existing storm cross drains.

d) Supply, place and install the size and class of pipe indicated in this item's description.

e) Supply, place, and compact **embedment** in accordance with OPSD 802.030 (Class B **Embedment**), 802.031 (Class B **Embedment**) or 802.032 (Class B **Embedment**) and in accordance with CP501.01.

f) Supply, place in 300 mm lifts, and compact to CP501.01, suitable backfill to the subgrade elevation below the proposed road as dictated by the road cross sections for the given street.

g) All transitions and adaptors necessary to connect newly installed pipes to existing pipes. Blind tee connections must be constructed with factory made tees, Inserta Tees (or approved equivalent by the Contract Administrator), or by coring into the existing pipe. If coring is not feasible as approved in writing by the Contract Administrator, alternative methods may be used at no additional cost to the City, and approved by the Contract Administrator.

h) Connections to existing and new structures in accordance with CPD 708.020, including tapping of pipes into existing structures with the use of rubberized connectors (boots) and altering benching, if required.

i) Cleaning, flushing and CCTV camera inspection of the completed sewer in accordance with CP409.01.

j) All pumping, by passing, temporary pipes and sand bagging etc. to keep the system operational at all times and not adversely affect the installation of pipe **embedment** downstream.

Leakage testing of new mains in accordance with OPSS.MUNI 410. Contractor is required to submit in document form a table stating the pipe run id, length of run, diameter of pipe in mm and the calculated allowable leakage per run to the Contract Administrator two (2) working days prior to testing, all actual leakage shall be recorded by the contractor and submitted once testing is complete. Contractor is to use City of Peterborough Form 001 or Form 002 for report.Should it be determined that the native soil is suitable for **embedment** then the contractor will be required to give the City a credit for **embedment** equivalent to the cost per tonne or cubic metre for Granular 'A' delivered to the job site times the theoretical **embedment** quantity per linear metre of pipe as determined by the OPSD per item e).

Added to CP410.08 Supply/Install DR 28 PVC Storm Service

The unit price bid identified in the schedule of unit prices shall be full compensation for all labor, equipment and materials required for the supply and installation of storm service connections including all fittings, adaptors, etc., except where these fittings and adaptors are paid for under other items, necessary to connect to either existing sewers

or replacement sewers in accordance with standard drawing OPSD 1006.010 as necessary as Indicated on the contract drawings shall include but not necessarily be limited to the following:

a) Excavation and disposal of all surplus or unsuitable material as per CP 206.01.

b) All sheathing, shoring, bracing, and dewatering as per OPSS.MUNI 517 and 518 that may be required.

c) Supply, place and install the size and class of pipe indicated on the contract drawings.

d) Supply, place, and compact **embedment** (Granular A) in accordance with OPSD 802.010. All granular **embedment** is to be compacted in conformance with CP501.01.

e) Temporary support of surrounding utilities located within the excavation, if required.

f) Supply, place in 300 mm lifts, and compact to CP501.01, suitable native backfill to the subgrade elevation below the proposed road as dictated by the road cross sections for the given street.

g) All transitions and adaptors necessary to connect newly installed pipes to existing pipes. Blind tee connections must be constructed with factory made tees, Inserta Tees (or approved equivalent by the Contract Administrator), or by coring into the existing pipe. If coring is not feasible as approved in writing by the Contract Administrator, alternative methods may be used at no additional cost to the City, as approved by the Contract Administrator.

h) Connections to existing and new structures shall be in accordance with CPD 708.020 including tapping of pipes into existing structures with the use of manufactured rubberized connectors and altering benching, if required.

i) Cleaning, flushing and CCTV camera inspection of the completed sewer in accordance with CP409.01.

j) All pumping, by passing, temporary pipes and sand bagging etc. to keep the system operational at all times and not adversely affect the installation of pipe **embedment** downstream.

k) Leakage testing of new sewers in accordance with OPSS.MUNI 410. Contractor is required to submit in document form a table stating the pipe run id, length of run, diameter of pipe in mm and the calculated allowable leakage per run to the Contract Administrator two (2) working days prior to testing, all actual leakage shall be recorded by the contractor and submitted once testing is complete. Contractor is to use City of Peterborough Form 001 or Form 002 for report.

Deflection testing as per OPSS.MUNI 410 and OPSS.MUNI 438 when requested based on CCTV inspection review. Digital image in MPEG format.Size shall be 150mm unless otherwise specified on contract drawings and/or documents.

Where services are placed to the property lines, leakage testing of services is required in accordance with OPSS.MUNI 410. The proposed services will extend from the proposed main to the property line, unless replacing an existing service.

Added to CP510.03 Removal/Disposal of Asphalt Partial Depth

Operational Constraints

During resurfacing (i.e.: pavement preservation and/or road surface repair) contracts where milling and surface asphalt placement is required, structure adjustments and curb and gutter replacements shall be performed prior to milling operations. The Contractor Administrator shall have full authority to request specific locations throughout the contract that require milling in advance of adjusting structures at no extra cost to the City.

The Contractor shall mobilize to perform padding and/or asphalt base repair(s) within two business days of written notification from the Contract Administrator without exception. Failure to mobilize within two business days notification will result in any additional road base failures and/or extension of existing failures to become the Contractor's responsibility, liability and associated cost to repair. Payment items for base repair(s) and padding will be paid under the respective Contract items.

Added to CP510.12 Abandonment of Existing Sewer

OPSS.MUNI 510, November 2018, shall apply except as amended and extended herein.

The unit price bid shall be full compensation for the supply of all labour, equipment, and materials necessary for abandoning storm and sanitary sewers and/or structures by way of pressure grouting (mechanical method).

Added to CP510.16 Abandoning of Sewers/Structures by Pressure Grout (Mechanical Method)

Not applicable.

Standard Drawings

Amended Drawings:

- **CPD M1.4 REV2 – see revised drawing.**

Standard Forms

Amended Forms:

- **Form 002 (Leakage Testing) – See revised form.**