

**THE CORPORATION OF THE TOWN OF COBOURG**



**SPECIAL PROVISIONS – TENDER ITEMS**

**CONTRACT NO. CO-22-18 PWD**

Corporation of the Town of Cobourg

**2022 Road Resurfacing**

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### **ITEMS 1.0, 2.0, 3.0, . - MOBILIZATION/DEMobilIZATION**

Payment shall be for full compensation of all labour, equipment and material to mobilize onsite upon construction commencement and demobilize upon construction completion.

Progress payments shall be for 50% on the first Payment Certificate and 50% shall be paid on the issuance of the final Payment Certificate.

### **Items 1.1, 2.1, 3.1– Removal of Asphalt Pavement, Partial Depth**

Payment under this Item shall include for the following:

- Partial depth removal depth and width as specified in the Form of Tender and disposal off site (see below) of milled material
- Careful partial depth removal operations around/near existing maintenance hole, catch basin and water valve boxes
- Temporary ramping and subsequent removal and disposal prior to paving operations as per OPSS 510

Should additional depth partial removal be required due to site conditions and varying from the specified depth in the Form of Tender Items, the additional depth shall be pro-rated accordingly for payment on a m<sup>2</sup> basis.

All material removed from the partial removal work shall be the property of the Town of Cobourg and shall be transported and stockpiled by the Contractor to the Town of Cobourg Greenhouse located on Thompson Street.

### **Items 1.2, 2.2, 3.2– Hot Mix Asphalt,H.L.-3,**

For the unit price bid, the Contractor shall complete the following work:

The Contractor shall supply all materials required for the proper execution of the paving work in accordance with OPSS 310.

OPSS 310.09.01.03 and 310.10.02 (Hot Mix Miscellaneous) are amended in that payment shall be by the tonne placed and shall include all labour, equipment and material to supply and place Hot Mix Asphalt in entrances in accordance with OPSS 310 whether by hand or machine.

The unit prices bid shall include for the following:

- Grading, preparation and paving (H.L.-3) around existing catch basins, water boxes and maintenance holes on Westwood Dr, Harden St & Chipping Park Blvd & Sutherland Cres
- Hand placed and compacted HMA at areas of;
  - curb and gutter replacement locations
  - catch basin and maintenance hole adjustments
  - Water valve box adjustments

- Temporary reflective marking tape as deemed necessary
- Tack coat on all partial depth removal (milled) surfaces with type and application rates as per OPSS 310
- Cleaning milled surfaces with a power broom or other means capable of leaving a clean, dry surface free of dirt.
- Where padding is required, this will be supplied and paid for at the unit bid under the surface course Item.
- Item Includes asphalt padding for cross fall correction as direct by Town of Cobourg.

Depths and types of asphalt shall be as per the following:

- Westwood Dr
  - 40mm H.L.-3 Surface
- Harden St
  - 40mm H.L.-3 Surface
- Sutherland Dr & Chipping Park
  - 40mm H.L.-3 Surface

Entrances shall be restored as follows:

- Commercial paved entrances
  - 40mm H.L.-3 surface and 40mm H.L.-8 base

### **Items 1.3, 1.4, 2.4, 3.3, 3.5– Adjust Maintenance Holes and Catch basins**

For the unit price bid, the Contractor shall provide all necessary materials, labour, equipment and temporary facilities (ie. safety measures, traffic control, etc.).

The contract administrator shall identify the maintenance holes and Catch basins that require adjustments for the contractor. The contractor shall record the locations of the maintenance holes and Catch basins identified and forward the record to the contract administrator prior to performing any adjustments.

The work to adjust maintenance holes and Catch basins shall be performed in the following manner:

- The existing pavement shall be saw cut on perimeter of the area(s) that will be disturbed for the adjusting work and removal and disposal of asphalt
- Excavation to the main structure and disposal of surplus material (granular, bricks, mortar, etc).
- Supply and install concrete adjustment rings including butyl tape sealing material between each ring and the main structure up to the final ring. Existing maintenance holes and catch basins shall be corrected so that a maximum of three 50mm risers are used in each structure, larger risers used when over 150mm height is required. It is the contractor's responsibility to inspect each structure prior to acceptance of this contract to fully understand the scope of work.

- The final adjustment ring shall be a rubber type. The rubber adjustment riser ring shall be 'Infra-RISER', as manufactured by GNR Technologies. Infra-riser will be supplied by the Contractor .
- Supply and install granular 'A' backfill to the top of the granular base compacted to 100% proctor density.
- Supply and install Denso wrap.

#### **Items 1.11,2.2,3.4 – Saw cutting of Asphalt Pavement**

Payment shall be made under this Item for saw cutting of all entrance asphalt and road asphalt at limits of construction. The unit price shall be deemed to cover all costs associated with saw cutting of asphalt regardless of depth. Saw cutting to be completed in a straight, neat manner to the satisfaction of the Contract Administrator. Sawcut edges damaged by the Contractor shall be re-cut at no additional cost and as approved by the Contact Administrator.

#### **Items 1.5, 2.6,3.6 – Remove and Replacement of Curb and Gutter**

For the unit price bid, the Contractor shall include for the following:

- Removal and disposal of existing concrete curb and gutter at limits determined by the Town of Cobourg. Concrete rubble resulting from removals shall be delivered and stockpiled at Town of Cobourg Greenhouse located on Thompson Street. The unit price shall include for any necessary saw cutting at limits of removals. Damage caused to curb caused by negligent removal practises shall be repaired at the Contractor's expense. Removals are to be reviewed and approved prior to commencement by the Town of Cobourg.
- Sawcut existing asphalt and dispose of asphalt off site at a location determined by the Contractor.
- Excavation to accommodate 100mm of compacted Granular base and supply of Granular 'A' and disposal of excavated material
- Supply and installation of minimum 30 MPa (28 day) concrete to install curb and gutter as per OPSD 600.040. & 600.100.

#### **Item 1.4, 2.4, 3.5 – Dispose & Replace Existing Catch basin Frame and Grate with OPSD 401.081**

For the unit price bid, the Contractor shall remove and dispose the existing broken catch basin frames and grate and replace with OPSD 401.081, including adjustment as per OPSS 408 and details as provided in Adjust Maintenance Hole and Catch basin Item with respect to adjustment requirements. Existing frame and grate to be delivered to Town of Cobourg Greenhouse located on Thompson Street. Price will include an adjustment.

**Item 1.7, 2.9, 3.8 – Topsoil (Imported) and Sodding (Imported) –**

Screened topsoil shall be placed to a minimum depth of 100 mm in disturbed grass areas. The grading and depth of topsoil shall be approved by the Contract Administrator prior to placing sod or seed. Any sod placed prior to approval of the topsoil shall be deemed to be unacceptable.

Subsection 802.05.01 of OPSS 802, November 2010 is amended by the addition of the following:

The topsoil shall be tested to ensure there are no deficiencies with respect to fertility levels. A copy of the topsoil testing report prepared by a certified agronomist shall be provided to the Contract Administrator. The report shall document soil fertility levels and identify any deficiencies and how they are to be rectified. Payment for this testing shall be included in payment under the respective topsoil Items.

If the topsoil does not meet fertility requirements the soils shall be treated with the required amendments as recommended by the topsoil analysis report at no additional cost.

**Item 1.10, 2.8– Pavement Markings – Traffic Paint**

All pavement markings shall be applied in accordance with OPSS 710.

Traffic paint is to be organic solvent based traffic paint in Ontario White or Yellow in accordance with OPSS 1712.

The Contract Administrator shall provide direction as to the limits and extent of pavement markings prior to the commencement of any work under this Item.

**Items 1.12, 2.7, 3.11– Traffic Control**

Under this Item the Contractor shall provide Traffic Control measures as per OPSS 706, OTM Book 7 (Temporary Conditions) and Clause 21 of Special Provisions-General. It is a requirement to provide access, or alternate access for all businesses fronting site limits.

**Items 1.13,2.11,3.12– Asphalt Cement Price Adjustment**

The Owner will adjust the payment to the Contractor based on changes to the Ministry of Transportation's (MTO) performance graded asphalt cement price index unless the Contractor opts out by notifying the Town in writing within 5 business days of receiving permission to start work. 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 by the MTO. The MTO 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 58-28 or equivalent. One index will be used to establish and calculate the payment adjustment for all grades.

A payment adjustment per tonne of new asphalt cement will be established for each month in which paving occurs when the price index for the month differs by more than 5% from the price index for the month prior to tender opening. When the price index differential is less than 5%, there will be no payment adjustment established 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 from the following formulae:

Asphalt Cement Price Adjustment, PA		
IP	Paving Within Approved Contract Time	Paving Beyond Approved Contract Time
IP>1.05ITO	PA=(IP-1.05ITO) x TAC	PA=(IAT-1.05ITO) x TAC
IP<0.95ITO	PA=(0.95ITO-IP) x TAC	

Where:

- PA = payment adjustment for new asphalt cement, in dollars
- ITO = performance graded asphalt cement price index value to be used is **\$1,156.00**
- IP = performance graded asphalt cement price index for the month in which paving occurs
- IAT = performance graded asphalt cement price index for the month of expiry of approved Contract Time
- TAC = quantity of new asphalt cement in tonnes

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.

For mix containing a liquid anti-stripping additive, the quantity of anti-stripping additive will be deducted from the quantity of new asphalt cement. No other deductions will be made for any other additives.

For progress payment purposes, a final adjustment amount will be calculated once all asphalt has been placed.

**Items 1.9,2.10,3.9 Remove and Restore Asphalt Driveway/Blvd**

Payment under this Item shall include for the following:

- Full depth removal depth (average 50mm), length and width as specified by the Town of Cobourg. Includes saw cutting of asphalt full depth. All saw cutting shall be made in straight lines.
- Temporary ramping and subsequent removal and disposal prior to paving operations as per OPSS 510

All material removed from the removal work shall be the property of the Town of Cobourg and shall be transported and stockpiled by the Contractor to the Town of Cobourg Greenhouse located on Thompson Street.

The Contractor shall supply all materials required for the proper execution of the paving work in accordance with OPSS 310.

OPSS 310.09.01.03 and 310.10.02 (Hot Mix Miscellaneous) are amended in that payment shall be by the m<sup>2</sup> placed and shall include all labour, equipment and material to supply and place Hot Mix Asphalt in entrances in accordance with OPSS 310 whether by hand or machine.

- Grading, preparation and paving (H.L.-3F) around existing driveways aprons or boulevard Westwood Dr, Harden St & Chipping Park Blvd & Sutherland Cres
- Supply, fine grading and compact Granular A in areas identified by the Town of Cobourg. Correct grading/surface irregularities identified by the Town of Cobourg.
- Hand placed and compacted HMA at areas of;
  - Asphalt Driveways
  - Asphalt Aprons
  - Asphalt boulevard

Entrances shall be restored as follows:

- Commercial paved entrances
  - 40mm H.L.-3 surface and 40mm H.L.-8 base



**Items 1.8– Lift and Relay Interlocking Pavers**

Payment under this Item shall include for the following:

- Lift and stockpile existing interlocking pavers
- Supply, place and compact Granular A or 19mm Crusher Run Limestone base, match existing in material type and thickness as directed by the Town of Cobourg.
- Remove and dispose off site temporary restoration upon preparation for permanent surface restoration.
- Supply, place and compact natural coarse masonry sand.
- Re-install existing precast concrete curb. Where there is no existing precast curb, supply and place new edge restraint along all boundaries between unit paving and sodding.
- Re-install existing pavers. Remove and replace any pavers damaged by the contractor during removal, storage or re-installation.
- Supply and place polymeric jointing sand over paver surface. Tamp pavers and make level using a vibrating plate compactor or equal. Sweep polymeric sand into joint not yet filled., Make finished surface with adjacent curb.
- Correct grading/surface irregularities following initial inspection by the Town of Cobourg.
- OPSS 355

**Items 1.6, 2.5, – Remove concrete apron at existing catch basin and reinstate full depth asphalt.**

- Remove and dispose off site existing concrete apron.
- Temporary ramping and subsequent removal and disposal prior to paving operations as per OPSS 510
- Excavate and dispose of excess materials off site including any temporary ramping.
- Supply, place and compact 100mm minimum depth of Granular A base. Granular material shall be supplied, installed and compacted up to the underside of base asphalt.
- Sawcut asphalt and concrete edges surrounding the existing concrete collar. Any edges damaged by the Contractor shall be re-cut at no additional cost and as approved by the Contact Administrator. If existing asphalt/ is undermined, saw cutting shall be 150mm behind undermining. All cuts shall be straight for entire length of existing concrete apron.
- Supply and place asphalt full depth where existing concrete apron was located in roadway. As per OPSS 310

**Items 1.14, 3.10– Remove and Replace Concrete Sidewalk**

- Remove and dispose off site existing concrete sidewalk to the Thompson Yard.
- Remove existing sidewalk bays to nearest joint. Area will be identified by the Town of Cobourg
- Excavate and dispose of excess materials off site
- Supply, place and compact 100mm minimum depth of Granular A base
- Supply and place concrete sidewalk according to Town of Cobourg Standards and OPSS 351 and OPSD 310.010
- Note this item shall be used for sidewalk restoration in the area of replaced water services as well as other areas market out by the contract Administrator.
- Measurement for payment: Measurement of concrete sidewalk replacement shall be by actual area, in square meters, of sidewalk removed and replaced.
- If a tactile plate is required it shall be supplied and installed by the contractor at no extra cost.

**Items 3.7– Remove and Replace standard barrier curb**

- Remove and dispose off site existing concrete barrier curb
- Excavate and dispose of excess materials off site
- Supply, place and compact 150mm minimum depth of top soil (imported) or granular material to backfill section where barrier curb existed. Any fine grading needed to match surrounding area as directed by the contract administrator

**Items 1.15– Adjust Existing Water Valve Box**

For the unit price bid, the Contractor shall include for the following:

- Sawcut existing asphalt and dispose of asphalt off site at a location determined by the Contractor.
- Excavation to adjust valve box and supply of Granular 'A' and disposal of excavated material

**Items –2.12 Traffic Loop Detectors.(Provisional)**

- Loop detectors shall be duplex type with approved water tight splice connect where connection to be made in the respective hand hole. Saw cutting for loops to be on milled base asphalt.
- Supply and install loop detectors. Price includes all saw cutting sealing, surface preparation and sealing. Sealant shall be approved by the Town of Cobourg.