

CW 3330 – INSTALLATION OF INTERLOCKING PAVING STONES**TABLE OF CONTENTS**

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CW 3330 – INSTALLATION OF INTERLOCKING PAVING STONES**1. GENERAL CONDITIONS**

The General Conditions and Standard Provisions attached hereto shall apply to and be a part of this Specification.

3. DESCRIPTION

This Specification shall cover the preparation of sub-grade and the supply and installation of interlocking paving stones, sand and crushed limestone on medians and residential approaches.

The work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all work as hereinafter specified.

5. MATERIALS**5.1 General**

The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this Specification. All materials supplied under this Specification shall be subject to inspection and testing by the Contract Administrator. There shall be no charge to the City for any materials taken by the Contract Administrator for inspection purposes.

5.2 Materials**5.2.1 Interlocking Paving Stones**

Paving stones shall be of a standard type, colour and pattern as indicated on the Drawings. Paving stones shall conform to the requirements of CAN3-A231.2, Precast Concrete Pavers.

Further to CAN3-A231.2.6.1.1, where concrete pavers are shipped for installation before the pavers are 28 days old, the average compressive strength of these pavers at the time of delivery to the work site shall be not less than 40 MPa.

5.2.2 Crushed Limestone

The crushed limestone shall conform to the requirements of Section 5 of Specification CW3110 for crushed limestone base course material.

5.2.3 Bedding Sand

Bedding sand shall be fine aggregate as specified in Section 5.3.1 of Specification CW 3310, with the exception that the sand shall conform to the following grading requirements:

TABLE 1
CW 3330-R3.1

CANADIAN METRIC SIEVE SIZE	PERCENT OF TOTAL DRY WEIGHT PASSING EACH SIEVE
10 000	100%
5 000	95% – 100%
2 500	80% – 100%
1 250	50% – 85%
630	25% – 60%
315	10% – 35%
160	5% – 15%
80	0% – 10%

5.2.4 Filler Sand

Filler sand shall have a maximum aggregate size of 2.5 mm.

5.2.5 Plastic Edge Support

Plastic edge support shall be made of High Density Polyethylene (HDPE) material.

An acceptable plastic edge support is “Snap Edge” as manufactured by Snapedge Canada Ltd. or Snap Edge Corporation.

9. CONSTRUCTION METHODS**9.1 Excavation**

Excavation shall comply with Specification CW 3110.

The excavation shall not extend beyond the specified limits of excavation. The limits of excavation shall be taken as a vertical plane 150 mm beyond the limits of the proposed paving stone installation, unless otherwise specified on the Drawings or in the Specifications for the Work.

For paving stone installations, the sub-grade shall be excavated to the minimum depths shown on Standard Detail SD-240, unless otherwise directed by the Contract Administrator.

9.2 Preparation of Sub-grade, Sub-base and Sand-base

The construction of sub-grade and crushed limestone sub-base shall be completed in accordance with Specification CW 3110 and the Drawings.

A layer of compacted crushed limestone shall be placed as shown in the appropriate detail on the compacted sub-grade. On top of this a 30 mm layer of bedding sand shall be placed.

The bedding sand layer shall be spread and levelled so that the paving stones when installed are 10 mm higher than the finished grade. No more sand shall be spread than can be covered in one day by paving stones. The bedding sand layer shall not be compacted prior to laying the paving stones.

Supply and placing of bedding sand shall be incidental to the installation of the paving stones.

9.3 Installation of Paving Stones

Where edge support is required, precast concrete curbs shall be installed at locations determined by the Contract Administrator. Supply and installation of precast concrete curbs shall be incidental to the installation of the paving stones.

Plastic edge support may be installed as a paving stone edging for residential approaches. All installation shall be in accordance with the manufacturer's instructions. Supply and installation of plastic edge support shall be incidental to the installation of the paving stones.

The paving stones shall be installed such that spaces between joints do not exceed 5 mm, unless otherwise approved by the Contract Administrator. Spaces between paving stones shall be uniform and consistent while maintaining straight and true patterns.

Work shall commence with edge stones along the longest straight section of curb or property line and work towards the opposite edge. Edge stones shall be used around any structure within the sidewalk limits and along the limits of the sidewalk.

If cutting of paving stones is required, the sawn or sheared edges shall be true, even and undamaged. Coloured mortar shall be used to fill small voids between blocks and curbs or other structures.

Paving stones shall be compacted into the sand layer using approved vibratory compactors until they are at the proper grade, uniformly level and free of any movement. Filler sand shall be swept into the joints until full.

Supply and placing of filler sand shall be incidental to installation of the paving stones.

9.4 Regrading Existing Interlocking Paving Stone Installations

As directed by the Contract Administrator, the Contractor shall regrade existing interlocking paving stone installations.

The Contractor shall carefully remove and clean existing paving stones from areas determined by the Contract Administrator. The crushed limestone sub-base and bedding sand layer shall be prepared in accordance with Clause 9.2 of this Specification.

The Contractor shall re-install existing paving stones to elevations determined by the Contract Administrator or in accordance with Clause 9.3 of this Specification. Supply and replacement of damaged paving stones shall be incidental to the cost of regrading the existing paving stones. Replacement paving stones shall be of similar colour and dimensions as the existing paving stones, and shall tie into adjoining interlocking paving stones without cutting of replaced interlocking paving stones.

10. QUALITY CONTROL

10.1 Inspection

All workmanship and all materials furnished and supplied under this Specification are subject to close and systematic inspection and testing by the Contract Administrator including all operations from the selection and production of materials through to final acceptance of the specified work. The Contractor shall be wholly responsible for the control of all operations incidental thereto notwithstanding any inspection or approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or works that are not in accordance with the requirements of this Specification.

10.2 Corrective Action

The Contractor shall, at his own expense, correct such work or replace such materials found to be defective under this Specification in an approved manner to the satisfaction of the Contract Administrator.

12. METHOD OF MEASUREMENT**12.1 Supply and Installation of Interlocking Paving Stones**

Interlocking paving stone will be measured on a surface area basis. The surface area to be paid for shall be the number of square metres constructed in accordance with this Specification and accepted by the Contract Administrator, as computed by measurements made by the Contract Administrator.

12.2 Crushed Limestone Sub-base

Crushed Limestone Sub-base will be measured on a weight basis. The weight to be paid for shall be the number of tonnes in place in accordance with this Specification acceptable to the Contract Administrator, as measured on a certified weigh scale. No payment will be made for material placed outside of the limits of excavation.

12.3 Regrading Existing Interlocking Paving Stone Installations

Regrading existing interlocking paving stone installations will be measured on a surface area basis. The surface area to be paid for shall be the number of square metres regraded in accordance with this Specification and accepted by the Contract Administrator, as computed from measurements made by the Contract Administrator.

13. BASIS OF PAYMENT**13.1 Supply and Installation of Interlocking Paving Stones**

The supply and installation of interlocking paving stones will be paid for at the Contract Unit Price per square metre for "Interlocking Paving Stones", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the work included in this Specification.

13.2 Crushed Limestone Sub-base

The supplying, placing and compaction of crushed limestone sub-base material will be paid for at the Contract Unit Price per tonne for "Supplying and Placing Limestone Sub-base", measured as specified herein, which price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the work included in this Specification.

13.3 Regrading Existing Interlocking Paving Stone Installations

Regrading existing interlocking paving stone installations will be paid for at the Contract Unit Price per square metre for "Regrading Existing Interlocking Paving Stones", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other times incidental to the work included in this Specification.