SECTION 8.11 CONCRETE CURBING

- **8.11.01--Description:** This item shall consist of concrete curbing constructed on the prepared subbase in accordance with the dimensions and details shown on the plans or as ordered and in conformity with these specifications.
- **8.11.02--Materials:** The concrete for cast-in-place or slip formed curbing shall be Class "C" concrete conforming to the requirements of Article M.03.01. Joint filler shall conform to the requirements of Article M.03.01. The concrete for precast concrete curbing shall have a minimum 28 day compressive strength of 28 MPa and shall contain 5 to 7% entrained air unless otherwise approved by the Engineer. The material for the precast concrete shall conform to Article M.03.01, except the coarse aggregate gradation may be varied with the approval of the Engineer.
- **8.11.03--Construction Methods:** Construction methods for concrete curbing shall conform to the requirements of Article 6.01.03 for concrete for structures, as supplemented by the following requirements:
- **1--Excavation:** Excavation shall be made to the required depth, and the base upon which the curbing is to be set shall be compacted to a firm, even surface.
- **2--Placing of Concrete:** The concrete shall contain not less than 5 nor more than 7 percent entrained air at the time the concrete is deposited within the forms. Concrete shall be placed only on a moist base. Concrete shall not be placed on a soft, muddy or frozen base.

Slip form equipment may be used if the resulting product conforms with the plans. Precast concrete curbing may be used if the resulting product conforms with the plans except for the length of each curb unit. Precast concrete curbing units may be constructed in 2 m or longer lengths for straight sections.

Where slip form equipment or precast concrete curbing is not used, the concrete shall be placed in forms, struck off with a template, compacted by approved means, and finished to a smooth, even surface. Vibration will not be required.

The concrete curbing shall be constructed in sections having a uniform length of approximately 3 m, unless otherwise directed, so arranged that a joint in the curbing shall come opposite a joint in the adjoining concrete pavement slab and be similar to it. The length of these sections may be varied slightly where necessary for closures, but no section less than 2 m in length will be permitted. These sections shall be separated by an approved method at the time of placing of the concrete.

- **3--Forms:** Where forms are used, they shall be so constructed that the form for exposed faces may be removed before the concrete has taken final set in order to permit correction of surface irregularities.
- **4--Curing and Protection:** Concrete curbing, except precast curbing, shall be cured and protected in conformity with the requirements of Article 4.01.03 for concrete pavement. Precast curbing shall not be shipped to the project until the 28 day compressive strength is acquired. Precast curbing that has been damaged shall be removed from the project at the Contractor's expense.
- **5--Backfilling:** After the concrete has set sufficiently, the grading shall be completed to the lines shown on the plans, or as ordered, by refilling to the required elevation with approved material which shall be placed in layers of not over 150 mm in depth and compacted until firm and solid.
- **8.11.04--Method of Measurement:** This work will be measured for payment along the top of the curb and will be the actual number of meters of concrete curbing completed and accepted.
- **8.11.05--Basis of Payment:** Payment for this work will be made at the contract unit price per meter for "Concrete Curbing" of the type specified, complete in place, which price shall include all materials, equipment,

tools and labor incidental thereto; also all excavation, backfilling, disposal of surplus material and drainage openings.

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Pay Item Concrete Curbing (Type) Pay Unit