

600 INCIDENTALS

ITEM 622 - CONCRETE BARRIER

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622.01 Description. This item shall consist of furnishing and placing Portland cement concrete barrier on the accepted, prepared subgrade, subbase course or existing pavement in accordance with these specifications and in reasonable close conformity with the lines, grades and dimensions shown on the plans.

This item shall include furnishing, placing, maintaining, and removal of portable concrete barrier. This item also includes all inserts, sleeves, fittings, connections, reinforcement, dowels, preformed filler, excavation, backfill and all incidentals necessary to complete the item.

622.02 Materials. Materials shall be:

Concrete (Class C).....	499
Precast concrete.....	706.13
Reinforcing steel and wire fabric	509.02
Curing materials.....	705.05, 705.06, or 705.07 Type 2, Class B
Preformed filler.....	705.03
Forms	515.09
Dowel bars	709.01 - 709.05
Steel	711.01

622.03 Placing Concrete Barrier. This item may be cast-in-place, precast or slip formed. If slip formed, the provisions of Sections 609.03(d) and 609.05 shall apply.

622.04 Portable Concrete Barrier. The individual sections shall not be less than 10 feet (3.0 m) in length. Portable concrete barrier may be slip formed in place with out joints, or grooved or sawed joints to facilitate removal, if the barrier is to be utilized at only one location on their project. Barrier sections which have been damaged during handling, or by traffic, during the life of the project, shall be repaired or replaced as directed by the Engineer. Repair or replacement of sections will not be measured for payment.

622.05 Joints. Joints for cast-in-place or slip formed barrier shall be constructed of the type, dimensions and at the locations specified.

- (a) **Contraction Joints.** Unsealed contraction joints shall be constructed by sawing, by metal inserts inside the forms, by the use of a grooving tool or by a full width 3/4 inch (19 mm) preformed joint filler. The sawed, tooled, or joints formed by inserts shall be a minimum of 1/8 inch (3.2 mm) wide and 1 1/2 inches (38 mm) deep.
- (b) **Expansion Joints.** Expansion joints shall be constructed at the centerline of and around each bridge pier column and on either side of each sign support foundation by use of 3/4 inch (19 mm) preformed joint filler.

622.06 Finish. Immediately following the removal of fixed forms or construction by the slip formed method, the surface of the barrier shall be checked with a straightedge, and any irregularities of more than 1/4 inch (6.4 mm) in 10 feet (3.0 m) shall be corrected. The barrier surface shall receive such additional finishing as necessary to present a smooth or lightly textured finish. The surface shall be free of any honeycomb, broken corner or edges, and surface voids larger than 1/4 inch (6.4 mm) in diameter. Any surface which is not satisfactory to the Engineer as to color, texture and smoothness shall be corrected in accordance with Section 511.16.

622.07 Curing. Immediately after free water has disappeared on surfaces not protected by forms and immediately after removal of forms, all exposed surfaces of the concrete shall be sealed by spraying thereon a uniform application of Section 705.07. This shall be applied in such a manner as to provide a continuous film without marring the surface of the concrete. The material shall be applied with an approved mechanical sprayer. For small areas, other acceptable methods may be used. Wind protection to the spray fog shall be provided for by an adequate shield. For rate of application and other precautions necessary in application of this compound, see Section 511.15 Method (b).

Curing of precast sections may also be preformed in accordance with the requirements of Section 515.16. Radiant heated forms may also be used for curing after approval by the Engineer.

When the foundation portion of the barrier is placed first so that the top part will be doweled to it, the foundation shall be cured in accordance with Section 511.14 Method (a) or (b). Method (a) may be used for initial cure of the short length barrier leave-outs, however, before curing is completed for leave-outs, material meeting Section 705.07 Type 2 shall be applied at the normal rate.

622.08 Method of Measurement. The quantity measured shall be the number of linear feet (meters) along the centerline of the top of the barrier, including all transitions, end terminals and bridge pier section as specified complete in place.

The quantity of portable concrete barrier measured shall be the total number of linear feet (meters) for each application of the barrier placed according to the plans. Each re-use of barrier section at a different location required by the plans shall be measured separately for payment.

622.09 Basis of Payment. Payment will be made at the contract price for:

Item	Unit	Description
622	Linear Foot (Meter)	Concrete Barrier
622	Linear Foot (Meter)	Portable Concrete Barrier, ___ in. (mm)