

ITEM 491

REINFORCED CONCRETE SLOPE PAVING

491.1 Description. This Item shall govern for furnishing and placing reinforced concrete slope paving to the lines, grades, and depths shown on the plans.

491.2 Materials. Concrete shall be Class D concrete, in accordance with the Item 421 "Structural Concrete". Reinforcing steel shall be in accordance with ASTM A615 or A184.

With prior approval of the engineer, fly ash may be used with the cement. Cement plus fly ash shall be composed of Portland cement, of the type specified herein and 25 percent fly ash by weight. Fly ash shall be Class C or Class F, conforming to the requirements of ASTM C618. Fly ash shall have a minimum CaO content of 20 percent.

Curing materials shall be in accordance with the Item 526 "Membrane Curing".

491.3 Construction Methods. Prior to placing material, the subgrade shall be prepared to the proper section for the width and depth of slope paving as shown on the Plans. Construction joints shall be located as shown on the plans, or as otherwise indicated.

Place as a minimum requirement: 3/4 inch expansion joint material at the location where slope paving is to be placed against walls, or around columns or piling, and at maximum intervals of 80 feet throughout the length of slope paving. Nail a 3/4 inch by 1 inch deep redwood board to the top of the joint material and after the slope paving has set and cured, remove the redwood board and fill the area with joint sealant.

Unless otherwise indicated on the plans, use a minimum No. 4 reinforcing bar conforming to ASTM A615, Grade 60, at a maximum spacing of 12 inches in each direction. The distance from the first parallel bar to the edge of the concrete shall not exceed 3 inches.

When welded wire fabric reinforcing is substituted, it shall be equivalent to the No. 4 rebar at 12 inch on centers, at a minimum. The welded wire shall conform to ASTM A1064. Only flat sheets shall be used. Use a minimum of 6 inch lap at all splices, with not less than 1 inch, nor more than 3 inches clearance from fabric to the edge of concrete, and no wires projecting to last member parallel to the edge of concrete.

The reinforcing steel shall be supported throughout the placing of the slope paving to maintain its position approximately equidistant from top and bottom surface of the concrete.

The minimum thickness of the reinforced concrete slope paving shall be 5 inches.

After the concrete has been placed, compacted and shaped to conform to the dimensions shown on the plans, and after it has cured sufficiently to avoid slumping, the concrete shall be finished with a wooden float to secure a reasonably smooth finish.

The concrete shall be cured in accordance with the Item 526 "Membrane Curing".

Weep holes shall be installed in the bottoms and walls of the low flow section and in the slope paving at the locations and spacing and in accordance with the details shown on the plans.

491.4 Measurement. Concrete slope protection shall be measured by the square yard of surface area, complete in place. All edge beams and/or toe walls, as well as weep holes, shall be incidental to the reinforced concrete slope paving.

491.5 Payment. Concrete slope protection shall be paid for at the contract unit price, measured as provided above. Price shall be full compensation for furnishing and placing all materials, including expansion joint material, joint sealant and reinforcing steel, surface finishing, and curing.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires other Standard Specifications

Item 421 "Structural Concrete"

Item 526 "Membrane Curing"

END OF ITEM 491