

**SECTION 25 - PORTLAND CEMENT CONCRETE PAVEMENT
TABLE OF CONTENTS**

<u>Section</u>	<u>Page</u>
25-1 GENERAL	25.1
25-2 SUBGRADE	25.1
25-3 SIDE FORMS	25.1
25-4 CONCRETE CUTTING.....	25.1
25-5 EXPANSION JOINTS IN ALLEY PAVEMENT	25.1
25-6 PLACING CONCRETE PAVEMENT	25.1
25-7 FINISHING CONCRETE PAVEMENT	25.2
25-8 CURING PORTLAND CEMENT CONCRETE PAVEMENT	25.2
25-9 PROTECTION OF PAVEMENT.....	25.2
25-10 PAVEMENT DAMAGE AND REPAIR.....	25.2
25-11 MEASUREMENT.....	25.3
25-12 PAYMENT	25.3

SECTION 25 PORTLAND CEMENT CONCRETE PAVEMENT

25-1 GENERAL

Portland cement concrete pavement must conform to the State Specifications, and these Specifications.

Portland cement concrete pavement must be constructed to the dimensions, lines and grades shown on the Plans. Unless otherwise provided in the Special Provisions, the pavement must be constructed of Class "A" or "B" concrete, at the Contractor's option, conforming to the requirements of Section 50-5, "Portland Cement Concrete", of these Specifications. Unless otherwise specified in the Special Provisions, the portland cement used in the concrete must be Type II.

25-2 SUBGRADE

Subgrade for concrete pavement must be prepared as specified in Section 18-2.05, "Subgrade Preparation", of these Specifications. Subgrade must be free of all loose or deleterious material and must be uniformly moist. Excess water on subgrade surface must be removed prior to placing concrete, as directed by the Agency.

25-3 SIDE FORMS

Side forms must be furnished and installed in accordance with Section 24, "Side Forms and Headers", of these Specifications.

25-4 CONCRETE CUTTING

Where new concrete is to join existing concrete, the existing concrete must be cut to a true line to a minimum depth of 1-1/2 inches with a power driven abrasive saw.

25-5 EXPANSION JOINTS IN ALLEY PAVEMENT

Expansion joints must be placed 10 feet from each end of the work and every 20 feet therefrom, and at other locations shown or specified in the Contract. The expansion joint material must be at least 3/8 inch in thickness and must conform to Section 50-4, "Premoulded Expansion Joint Filler", of these Specifications.

25-6 PLACING CONCRETE PAVEMENT

The Contractor must make adequate advance arrangements to prevent delay in delivery and placing of the concrete. If there is an interval of more than 45 minutes between placing of any 2 consecutive batches or loads paving operations will be stopped and the Contractor must make a contact joint in the concrete already placed at the location and of the type directed by the Agency. The contact joint is at the Contractor's expense.

Slip-form paving and finishing equipment must be properly adjusted and in satisfactory operating condition. Prior to placing concrete, the Contractor must demonstrate proper adjustment of all screeds and floats by measurements from grade stakes. Satisfactory operation and adjustment of propulsion and control equipment, including pre-erected grade and alignment lines, must be demonstrated by moving slip-form pavers and finishing machines over a 500 foot length of prepared subgrade, with all propulsion and control equipment fully operational.

Unless otherwise required by these Specifications or the Contract, concrete pavement must be constructed in 12-foot traffic lane widths separated by contact joints or monolithically in multiples of 12-foot traffic lane widths with a longitudinal weakened plane joint at each traffic lane line.

Pavement concrete must be placed while fresh. The use of water for retempering concrete is not allowed. The temperature of the concrete mix at the time of placement must not exceed 90 degrees F.

25-7 FINISHING CONCRETE PAVEMENT

The surface of concrete pavement must be finished smooth and true to grade with wooden floats. Floats must be operated from the end of the pavement and parallel with the centerline of the pavement.

High areas of concrete pavement must be cut down using the edge of a float while the concrete is workable. Material removed by the float must be worked into depressions with the float until a true surface is obtained.

Finishing and floating of the concrete pavement must continue after concrete placement has stopped, until the concrete has achieved initial set.

25-8 CURING PORTLAND CEMENT CONCRETE PAVEMENT

Portland cement concrete pavement must be cured with a pigmented curing compound as specified in Section 50-6, "Curing Compounds for Concrete", of these Specifications.

25-9 PROTECTION OF PAVEMENT

The Contractor must protect the surface of the concrete pavement from damage and markings from both pedestrians and traffic. Barriers must be placed to protect the concrete from traffic.

The concrete pavement must be maintained at a temperature of not less than 45 degrees F for 72 hours after placement. When required by the Agency, the Contractor must submit a written outline of the proposed methods for protecting the concrete pavement and maintaining the required temperature.

When required by the Special Provisions, bridges or other devices shown on the Plans or approved by the Agency must be furnished and installed by the Contractor across the pavement to provide crossings for public and private traffic. The Contractor must maintain the crossing devices throughout the period of their use at any location. When no longer required, the crossing devices must be removed and disposed of by the Contractor.

After the Agency has ordered the pavement opened to traffic the Contractor will not be held responsible for damage by public traffic. The Contractor is liable for any damage to newly laid pavement caused by the Contractor's operations.

25-10 PAVEMENT DAMAGE AND REPAIR

All damage done to concrete pavement or openings cut in concrete pavement or alley crossings during the progress of the Work must be repaired by the Contractor under the direction of the Agency. Materials for repairs must conform to these Specifications.

25-11 MEASUREMENT

Earthwork and subgrade preparation will be measured in accordance with Section 18, "Earthwork", of these Specifications.

The quantity of portland cement concrete pavement to be paid for will be measured by the cubic yard. The volume to be paid for will be calculated on the basis of the lines, grades and thicknesses shown on the Plans. If the subgrade is low or irregular and requires additional yardage above that computed from the dimensions on the Plans no allowance will be made for the additional concrete pavement, unless otherwise ordered by the Agency.

25-12 PAYMENT

Earthwork and subgrade preparation will be paid for in accordance with Section 18, "Earthwork", of these Specifications.

The price paid per cubic yard for portland cement concrete pavement includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the portland cement concrete pavement complete in place, including furnishing and placing expansion joint material, finishing concrete surface, furnishing and applying curing compound, protecting the pavement and repairing any damage, as shown or specified in the Contract, in these Specifications, and directed by the Agency.