SECTION 32 01 17

CRACK SEALING IN ASPHALT CONCRETE PAVEMENTS

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

This specification covers the furnishing and installation of materials for crack sealing of asphalt concrete pavements. Products shall match existing materials and/or shall be as directed by the Contracting Officer. Installation procedures shall be in accordance with the product manufacturer's recommendations. Demolition and removal of materials shall be as required to support the work.

PART 2 PRODUCTS

2.1 LIQUID ASPHALT

Liquid Asphalt shall comply with ASTM D 2027, Grade MC-250.

2.2 EMULSIFIED ASPHALT

Emulsified Asphalt shall comply with ASTM D 977, Grade MS-2.

2.3 SEALING COMPOUND

Sealing Compound shall comply with Fed. Spec. SS-S-1401.

2.4 FINE AGGREGATE

Fine Aggregate shall be natural sand or crusher dust and have a maximum size of not more than 1/8 inch and be free of clay and organic matter.

PART 3 EXECUTION

3.1 PREPARATION:

3.1.1 All Cracks to be sealed shall be cleaned of dirt and debris.

3.1.2 Crack Cleaning Equipment shall consist of a portable air compressor with hose and nozzles for directing air directly into cracks and stiff bristle brooms.

3.1.3 Heating Equipment for Liquid Asphalt shall be mobile and shall be equipped with an agitating device for stirring material during heating, a thermometer, regulating

equipment for heat control, and a gravity type, draw off valve.

3.1.4 Heating Equipment for Sealing Compound: Unless otherwise required by the manufacturer's recommendations, the equipment shall be mobile and shall consist of double boiler, agitator type kettles with oil medium in the outer space for heat transfer. The applicator unit shall be so designed that the sealant will circulate through the delivery hose and return to the inner kettle when not sealing cracks.

3.1.5 Application Equipment shall have a spout or nozzle of such size that the sealing material will be placed in the cracks without entrapping air in cracks or spreading material on adjacent pavement surface.

3.2 INSTALLATION

3.2.1 Sealing Compound

All cracks one eighth of an inch wide and wider shall be sealed. The application temperature for sealing compound shall comply with Fed. Spec. SS-S-1401. Cracks one half of an inch wide and wider shall be filled with a slurry of fine sand and an emulsified asphalt or liquid asphalt. After the slurry has cured, cracks shall be sealed with liquid asphalt or emulsified asphalt and lightly sanded.

3.2.2 Liquid and Emulsified Asphalt Sealer

The temperature shall be varied so that it flows freely into cracks and completely fills cracks without entrapping air. Cracks shall be free of moisture before filling and shall be filled slightly above the pavement surface. When excess sealer has been removed, the sealer shall be covered with fine sand.

3.2.3 Traffic Control

Traffic will not be permitted over sealed cracks until the sealer has cooled so that vehicle tires do not pick it up. The Contractor will be responsible for all barricades and flagmen necessary to control traffic.

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