

## **53.6 ASPHALT PAVEMENT SURFACE SEALING - FOG COAT**

### **53.6.1 GENERAL**

The Work consists of supplying and applying a liquid asphalt to the surface of paved roadways to seal small cracks and surface voids and to repair oxidation, and prevent ravelling or aggregate loss. Where a surface seal covers existing pavement markings, the Work will also include the application of temporary pavement markings (spotting).

### **53.6.2 MATERIALS**

The Contractor shall supply the type and grade of liquid asphalt/emulsified asphalt material from the Alberta Transportation Recognized Products list.

Materials generally accepted for this work are SS-1 or MC-30. The use of other asphalts shall be subject to the approval of the Engineer.

Paint and glass beads shall also be supplied from the Alberta Transportation Recognized Products list.

### **53.6.3 EQUIPMENT**

The Contractor shall supply a self-powered pressure distributor capable of delivering a controlled and uniform application of liquid asphalt. The Contractor shall supply hand spraying equipment for areas inaccessible to the distributor.

### **53.6.4 PROCEDURE**

Traffic shall not be permitted to travel on the surface seal until it has cured. Where a sealing of the entire roadway surface is required, the Contractor shall apply the surface seal to only one-half of the roadway at a time. The remaining half shall not be sprayed until the first application has properly cured.

Prior to the application of the asphalt material, loose dirt or other objectionable material shall be removed from the pavement surface by brooming or by other methods acceptable to the Engineer.

No work shall be performed when the pavement surface is wet.

The surface seal shall be uniformly applied without streaking. The application rates will be as specified by the Engineer in the Work Order. Application rate ranges for the pre-approved liquid asphalts are:

SS-1	0.20 to 0.30 kg/m <sup>2</sup> (undiluted)
MC-30	0.20 to 0.30 kg/m <sup>2</sup>

Joints and seams shall not be excessively overlapped. Structures adjacent to the roadway shall not be

spattered by the asphalt material. The Contractor shall remove, at his own expense, any spattering caused by his activities.

Areas missed or inaccessible to the distributor shall be treated using hand spray equipment.

#### **53.6.4.1 Interim Traffic Markings (Spotting)**

Where a surface seal obliterates existing painted roadway lines, the Contractor shall provide interim painted traffic markings (spotting) on the sealed area. Spotting shall be applied immediately after the surface seal has cured and prior to darkness. The end points of the barrier lines shall be marked or otherwise referenced where applicable.

All spotting shall be applied using the same colour of paint as the permanent marking. Spots are to be 10 centimetres wide and 30 centimetres long, applied lengthwise to the road surface and shall delineate the travel lanes and or both edge lines as applicable. The maximum distance between spots shall be 15 metres on tangent sections and 7.5 metres on curves.

The spots and barrier line reference marks shall be completely covered with glass beads at the time of painting.

#### **53.6.5 SAMPLING AND TESTING**

The Contractor shall retain copies of his supplier's QC testing results, and undertake the quality control and quality assurance testing as required by the QC/QA Program as shown in the Special Provisions. The Contractor shall supply material samples to the Engineer for QA(Audit) testing purposes when requested.

#### **53.6.6 ACCEPTANCE CRITERIA**

Evaluation of the Work will be based upon a visual inspection by the Engineer. To be acceptable, the area designated for treatment must be 100% uniformly sealed at the specified application rate.

The Contractor shall re-treat any deficient areas at his expense.

#### **53.6.7 TIME TO COMPLETE**

The Contractor shall complete the Work within 60 calendar days of the issuance of the Work Order

#### **53.6.8 MEASUREMENT AND PAYMENT**

##### **53.6.8.1 Surface Seal Application**

Measurement will be made in square metres of the area treated with a surface seal.

Payment will be made at the unit price bid per square metre for "Asphalt Pavement Surface Seal - Liquid Asphalt". This payment will be full compensation for the supply of the asphalt material, distributor application and/or hand spraying, and all labour, equipment, tools and incidentals necessary to complete the Work.

Payment for any required cleaning of the roadway surface will be made in accordance with Specification 53.17, Roadway and Raised Median Cleaning.

#### **53.6.8.2      Paint and Glass Beads**

Supplying and applying paint and glass beads for “spotting” will not be paid for separately but shall be considered incidental to the Work.

#### **53.6.9            WARRANTY**

The warranty period for this Work shall be 30 days.