1.0 GENERAL

1.1 Scope

1.1.1 The items or work covered by the section are those required for the supply and application of asphaltic material as a primer for compacted granular base course and tack coat between layers of asphalt.

1.2 Related Sections

1.2.1 Section 2230 – Granular Base Course

1.2.2 Section 2350 – Placement of Asphalitic Pavement

2.0 PRODUCTS

2.1 Bituminous Material

2.1.1 The bituminous material shall be MC70 to MC250, RC70 to RC250 or SS-1. Where SS-1 is used, the dilution with water shall be 1:1.

3.0 EXECUTION

3.1 Preparation

3.1.1 Asphalt Primer

3.1.1.1 Immediately prior to applying the asphalt primer, the surface of the base course shall be brought to uniform cross-section by patching all depressions and defective areas using an approved patching material and by removing all bumps and irregularities.

3.1.2 Tack Coat

3.1.2.1 The pavement shall be clean and dust free. All loose and foreign material shall be removed by light sweeping. When thoroughly set, the tack coat shall be covered immediately or protected from traffic until covered.

3.2 Application

3.2.1 Upon the prepared surface, the asphalt shall be applied uniformly, at a rate of 1.5 litres per square metre for asphalt primer, at a rate of 0.5 litres per square metre for tack coat, and a rate of 1.0 litres per square metre for cure coat as directed by the Engineer. The asphalt primer shall be applied only when the surface is dry or slightly damp unless otherwise allowed by the Engineer in writing, and only when the air temperature in the shade is above +2 °C. The application temperature of the asphalt primer shall be specified by the Manufacturer.

3.2.2 To ensure uniformity of application, a drip pan shall be inserted under the
nozzles when the application is stopped, and building paper shall be spread over the treated surface to allow sufficient distance on restarting so that the nozzles are operating at full force when the untreated surface is reached. The building paper shall then be removed or destroyed. A narrow spout pouring pot or hand spray shall be used to apply primer material necessary to touch up any spots unavoidably missed by the distributor.

3.2.3 Concrete work adjacent to the roadway shall be completely protected from the application operation by a covering approved by the Engineer. Any unnecessary splashing of the concrete shall be cleaned at the Contractor’s expense. The Contractor shall maintain the primed surface until the surface course has been placed. Maintenance shall include spreading any additional sand and patching any breaks in the primed surface with additional asphaltic material.

3.2.4 The pressure distributor used for applying asphaltic materials shall be equipped with pneumatic tires and shall be so designed and operated as to distribute the asphaltic material in a uniform spray without atomization, in the amount and between the limits of temperature specified. It shall be equipped with a fifth wheel speed tachometer registering metres per minute and so located as to be visible to the truck driver to enable him to maintain the constant speed required for application at the specified rate. The pump shall be operated by a separate power unit, or by the truck power unit. It shall be equipped with a tachometer registering litres per minute passing through the nozzles and readily visible to the operator.

3.2.5 Suitable means of accurately indicating at all times the temperature of the asphaltic material shall be provided. The thermometer well shall be so placed as not to be in contact with a heating tube. The distributor shall be so designed that the normal width of application shall not be less than 2 m, with provision for the application of lesser width when necessary.

3.2.6 If provided with heating attachments, the distributor shall be so equipped and operated that the asphaltic material shall be circulated or agitated throughout the entire heating process.