State of Illinois DEPARTMENT OF TRANSPORTATION Bureau of Local Roads & Streets

SPECIAL PROVISION FOR BITUMINOUS TREATED EARTH SURFACE

Effective: January 1, 2007 Revised: April 1, 2012

All references to Sections and Articles in this Special Provision shall be construed to mean specific Sections and Articles in the Standard Specifications for Road and Bridge Construction adopted by the Department of Transportation.

Description. This work shall consist of preparing an earth surface and applying bituminous materials.

Materials. Materials shall meet the requirements of the following Articles of Section 1000 - Materials:

 Item
 Article/Section

 (a) Bituminous Materials (Note 1)
 1032.01-1032.04, 1032.08-1032.10

 (b) Blotter Aggregate
 1004.05

Note 1. The Contractor may use any one of the types of bituminous materials as shown in the table below. When more than one grade is shown on a particular type, the Engineer reserves the right to specify the grade which shall be used.

Bituminous Material	Grade
Medium Curing Liquid Asphalt	MC-30, MC-70, MC-250, MC-800
Slow Curing Liquid Asphalt	SC-70, SC-250, SC-800
Road Oil	E-2, E-3, E-4

CONSTRUCTION REQUIREMENTS

Preparation of Earth Surface. The earth grade shall be reshaped prior to the application of the bituminous materials, and at the time the bituminous material is applied, the surface shall be smooth, well compacted, free from sod, vegetation, excess loose dirt or dust, and shall be dry enough that the wheels of the distributor will not rut or mar the surface. As soon as the road is closed to traffic and before application of the bituminous material, excess dust and loose dirt shall be either removed from the surface, or the surface wetted sufficiently to cause the excess dust or loose dirt to be consolidated with the solid soil beneath. If the removal of the dust and loose dirt leaves an uneven or rough surface, the earth grade shall be restored to a condition satisfactory to the Engineer.

Weather Limitations. This work shall be done between May 1 and October 1. Bituminous materials shall be applied only when the temperature of the air in the shade is above 60 °F (15 °C). No work shall be started if local conditions indicate that rain is imminent.

This work may be done between October 1 and October 30 providing the temperature of the air for three consecutive days immediately preceding the day of application has been, (1) above 60 °F (15 °C) in the shade each day, (2) a minimum of 40 °F (5 °C) and (3) the temperature of the air in the shade at time of application is above 60 °F (15 °C).

Quantity of Bituminous Material. The total quantity of bituminous material applied shall be not less than 0.25 gal/sq yd (1 L/sq m) nor more than 0.75 gal/sq yd (3 L/sq m), as required by the Engineer.

Application of Bituminous Material. The temperature of the bituminous material at the time of application shall be such that it will spray uniformly without clogging the spraying nozzles and shall be applied within the temperature ranges indicated in Article 1032.04. All flames shall be extinguished during application of the bituminous material.

The bituminous material shall be applied by means of a pressure distributor meeting the approval of the Engineer.

Where the total quantity of bituminous material to be applied is 0.4 gal (2 L) or more per sq yd (sq m), it shall be applied in two applications. Sufficient time shall elapse between successive applications to permit the bituminous material to be absorbed to such extent that the soil will not adhere to the wheels of the distributor.

Application of Blotter Aggregate. When specified, an application of a blotter aggregate shall be applied to the treated surface immediately after the application of the bituminous materials. The blotter aggregate shall be spread evenly with an aggregate spreader, meeting the approval of the Engineer, over the entire surface at the rate of 15-30 lb/sq yd (8-16 kg/sq m), the exact rate to be specified by the Engineer. The blotter aggregate shall be applied by spreader equipment operating backwards over the aggregate being placed. Hand spreading will be permitted only when approved by the Engineer.

Opening to Traffic. When blotter aggregate is not specified, the road shall be closed to traffic during the application of the bituminous material and shall remain closed for a period of not less than 48 hours after the final application, or longer if deemed necessary by the Engineer. Excess bituminous material remaining on the surface at the time the road is closed to traffic, shall be covered with a thin layer of loose earth sufficient to absorb the surplus bituminous material.

When blotter aggregate is specified, the road may be opened to traffic immediately after the application of blotter aggregate.

Method of Measurement. The bituminous material will be measured as specified in Article 1032.02. The unit of measurement will be shown on the plans.

The blotter aggregate will be measured in tons (metric tons) according to the requirements of Article 311.08(b), except payment will not be made for blotter aggregate in excess of 110 percent of the amount specified by the Engineer.

Basis of Payment. This work will be paid for at the contract unit price per gallon (liter) for BITUMINOUS MATERIAL APPLIED or at the contract unit price per ton (metric ton) for BITUMINOUS MATERIAL APPLIED and per ton (metric ton) for BLOTTER AGGREGATE.