

SECTION 217 – BITUMINOUS SEAL

1. GENERAL

The work shall consist of the application of bituminous sealing material to an existing street surface. This item shall conform to the latest version of Section 608 of the Kansas Department of Transportation Standard Specifications (KDOT) and as herein.

2. MATERIALS

Emulsified Asphalt. Emulsified asphalt shall be Type CRS-1HP as specified in the latest version of Section 1203 of the Kansas Department of Transportation Standard Specifications.

Cover Material. Cover material shall be Type CM-D as specified by the latest version of Section 1108 of the KDOT Standard Specifications with the exception that the percent retained on the 3/8" sieve may range from 7 to 35 percent.

Base Material. Base material shall be Type SA-6 as specified by the latest version of Section 1111 of the KDOT Standard Specifications. Similar material that is generally twice the size/diameter of the cover material may be used if approved by the Engineer.

3. CONSTRUCTION REQUIREMENTS

Special care shall be exercised to prepare a place for the stockpile of material to prevent contamination by foreign material. Material wasted due to the Contractor's negligent stockpile preparation or maintenance will not be paid for by the City of Salina.

Before applying bituminous material, the surface to be treated shall be cleaned of all foreign material and broomed to remove dust. The construction shall consist of sealing the street surface. Where there is curb and gutter the gutter pan shall not be sealed. Side street returns shall be sealed as directed by the Inspector. Asphalt cement shall be applied at the rate of 0.38 (hot) gallons per square yard, or as field adjusted, with a pressurized distributor in a uniform continuous spread. A strip of building paper shall be used at the beginning of each spread according to the Standard Specifications.

Immediately after the application of the seal oil an approved cover material shall be spread with a self-propelled aggregate spreader at the rates designated in Table 608-1 of the Standard Specifications, or as field adjusted to prevent any bleeding of the asphalt without too much excess being broomed off. Immediately following the application of the cover material it shall be embedded by pneumatic rolling. A sufficient number of self-propelled pneumatic rollers shall be furnished so the initial complete roller coverage shall be completed within 15 minutes after the application of the cover material. Pneumatic rolling shall continue until seven complete roller coverages are obtained. **The asphalt shall not be broomed until the sweeping process does not dislodge the aggregate from the asphalt bond. The Contractor shall complete all brooming activities before opening the traveled way to unrestricted traffic.** Contractor shall pick up and haul away excess broomed material from streets that have curb and gutter.

The Contractor shall construct a continuous 500 foot long by one lane width test strip. This shall determine the initial optimum bituminous and aggregate application rates. The Engineer will review the test strip the next workday. Should deficiencies be noted, the Engineer may require another test.

Weather limitations listed in the Standard Specifications shall be followed. All work completed shall be in accordance with the Standard Specifications.

Paper or other covering material shall be placed at all metal section corner covers, water valve boxes, and manhole lids to protect them from the bituminous seal material.

4. MAINTENANCE OF TRAFFIC

Closing of streets for this work shall be at the direction of the Engineer and coordinated to result in the least practicable delay and inconvenience to traffic. Unless otherwise directed, all roads shall have one lane of traffic open in each direction at all times. The lanes being sealed shall be closed and guarded until damage will not occur from traffic. Sufficient flagmen, warning signs and barricades shall be provided by the Contractor to properly control traffic and to prevent traffic from traveling in the freshly applied materials. Barricades and barricading, signs and other warning devices will be in accordance with the Federal Highway Administration "Manual on Uniform Traffic Control Devices" provisions for "Traffic Controls for Street and Highway Construction and Maintenance Operations."

5. MEASUREMENT AND PAYMENT

Measurement shall be made based on tonnage of asphaltic cement and square yards of base material and cover material delivered and placed in accordance with specifications. Delivery tickets shall be required as documentation for payment. Payment for this work shall be made at the contract unit price per ton for Emulsified Asphalt of the specified type and grade and at the contract unit price per square yard for Base Material and Cover Material of the specified type and composition.