

SECTION 32 12 36.14

ONE COURSE SURFACE TREATMENT**PART 1 - GENERAL****1.1 DESCRIPTION**

- A. This item shall consist of a wearing surface composed of a single application of asphaltic material covered with aggregate, constructed on the prepared base course in accordance with these specifications.

1.2 MEASUREMENT AND PAYMENT

- A. Asphaltic materials will be measured at the point of application on the road in gallons at the applied temperature. Aggregate will be measured by the cubic yard of material in vehicles at the point of stockpiling.
- B. The work performed and materials furnished as prescribed by this item will be paid for at the unit prices bid for "Asphalt" and "Aggregate" of the specified type and grade which shall be full compensation for cleaning and sprinkling the base; for furnishing, preparing, hauling, and placing all materials; for all freight; for rolling; and for all manipulations, labor, tools, equipment, and incidentals necessary to complete the work.

PART 2 – PRODUCTS**2.1 MATERIALS**

- A. ASPHALTIC MATERIALS: The asphaltic material used shall be one or more of the materials prescribed in SECTION 32 05 17 - ASPHALTS, OILS AND EMULSIONS.
- B. AGGREGATE: The aggregate used shall be Type C, Grade 3, unless otherwise specified in the Plans and Specifications, and shall meet the requirements of SECTION 32 05 16 - AGGREGATE FOR SURFACE TREATMENTS.

PART 3 – EXECUTION**3.1. CONSTRUCTION:**

- A. GENERAL: One course surface treatment shall not be applied when the atmospheric temperature is 60° F and falling. However, it may be applied when the temperature is above 50° F and rising. The temperature must be taken in the shade and away from artificial heat. Asphaltic material shall not be placed when general weather conditions are not suitable in the opinion of the Engineer.

The area to be treated shall be cleaned of dirt, dust, or other deleterious matter by sweeping or other approved methods. If necessary the surface shall be lightly sprinkled with water just prior to the application of the asphaltic material.

- B. **EQUIPMENT:** Asphaltic material shall be applied on the clean surface by an approved type of self-propelled pressure distributor. The distributor shall be able to distribute the material in the specified quantity evenly and smoothly under pressure. The contractor shall provide all necessary facilities for determining the temperature of asphaltic material in the heating equipment and the distributor. This will aid in determining the application rate and for securing uniformity at the junction of two distributor loads. The distributor shall have been recently calibrated and the Engineer shall be furnished an accurate and satisfactory record of the calibration. Should the yield on the asphaltic material appear to be in error after beginning the work, the distributor shall be recalibrated in a manner satisfactory to the Engineer before proceeding with the work. All storage tanks, piping, retorts, booster tanks and distributors used in storing or handling asphaltic materials shall be kept clean and in good operating condition at all times. They shall be operated in a manner so that there will be no contamination of the asphaltic materials with foreign material.
- C. **APPLICATION:** Asphaltic material shall be applied for the full width of the surface treatment in one application, unless the width exceeds twenty-six (26) feet. No traffic or hauling will be permitted over the freshly applied asphaltic material. Asphaltic material shall not be applied until the contractor can assure immediate covering.
- D. **AGGREGATE:** Aggregate shall be immediately and uniformly applied and spread by an approved self-propelled continuous feed aggregate spreader. The aggregate shall be applied at the approximate rates indicated in the specification or as directed by the Engineer.
- E. **SURFACE:** The entire surface shall be broomed, bladed or raked as required by the Engineer. The surface shall also be thoroughly rolled with the type or types of rollers as specified in the Plans and Specifications and/or as approved by the Engineer. Rolling equipment shall meet the requirements for SECTION 32 11 29.02 - ROLLING. The Contractor shall be responsible for the maintenance of the surface until the work is accepted by the Engineer.
- F. **TEMPERATURE AND VISCOSITY:** It shall be the responsibility of the contractor to provide and maintain in good working order a recording thermometer at the storage heating unit at all times. The Engineer will select the temperature of application. This temperature will be based on the temperature-viscosity relationship that will permit application of the asphalt within the limits recommended in SECTION 32 05 17 - ASPHALTS, OILS AND EMULSIONS. The recommended range for the viscosity of the asphalt is 100 to 120 centistokes. The contractor shall apply the asphalt at a temperature within 15° F of the selected temperature.

END OF SECTION