

ITEM 21

PRIME COAT

21.01 SCOPE OF WORK

This work shall consist of an application of bituminous material, and cover material if required, on a designated base, in accordance with the requirements of these Specifications and in reasonably close conformity with the lines shown on the Plans or established by the Engineer.

21.02 MATERIALS

Materials shall meet the requirements of the following items of these Specifications:

- ITEM 67.02 CUT-BACK ASPHALT, GRADE RC-70 OR RC 250
- ITEM 67.03 EMULSIFIED ASPHALT, GRADE AE-P
- ITEM 67.05 TAR, GRADE RT-2 OR RT-3
- ITEM 73.12 AGGREGATE FOR COVER MATERIAL, SIZE 78 OR 8

When the particular type and grade of bituminous material to be used is not shown on the Plans or otherwise designated, the Contractor shall select the type and the Engineer will designate the grade. Bituminous material may be conditionally accepted at the source.

The ranges of application temperatures in degrees Fahrenheit shall be as follows:

RT-2 and RT-3 (60 -130)	RC 70 (80 -150)
RC 250 (100 -175)	AE-P (60 -140)

21.03 EQUIPMENT

All equipment necessary for the satisfactory performance of this construction shall be on hand and approved before Contractor will be permitted to begin work. The equipment shall include a power broom or other mechanical sweeping equipment, bituminous heating equipment, a pressure distributor, a water sprinkler and such other equipment and small tools as may be required to perform the work in a satisfactory manner.

21.04 LIMITATIONS

Bituminous material shall be applied only between March first and December first, and only when the air temperature in the shade, away from artificial heat, is above 60 degrees Fahrenheit. Bituminous material may be applied to a surface that is slightly damp, but never to a wet surface.

21.05 PREPARATION OF SURFACE

The surface to be primed shall be prepared in accordance with the provisions of Item 14.

When delays in the priming operation occur, the prepared surface shall be satisfactorily maintained or reworked to meet the requirements of Item 14 before the priming operation is resumed.

21.06 APPLICATION OF PRIME

All areas to be treated shall be approved by the Engineer before application of the treatment. Bituminous material shall be applied to the width of the section to be primed by means of a pressure distributor at a uniform, continuous spread. The Engineer will designate the rate of application within the extreme limits indicated on the Plans. Application temperatures shall be within the ranges specified under Item 21.02. Any areas containing an excess or deficiency of priming material shall be corrected by the addition of blotter material or bituminous material, as directed by the Engineer.

The Contractor shall protect all structures and concrete surfaces from the bituminous material during the construction.

21.07 APPLICATION OF COVER MATERIAL

All areas to be treated shall be approved by the Engineer before application of the treatment. Bituminous material shall be applied to the width of the section to be primed by means of a pressure distributor at a uniform, continuous spread. The Engineer will designate the rate of application within the extreme limits indicated on the Plans. Application temperatures shall be within the ranges specified under Item 21.02. Any areas containing an excess or deficiency of priming material shall be corrected by the addition of blotter material or bituminous material, as directed by the Engineer.

The Contractor shall protect all structures and concrete surfaces from the bituminous material during the construction.

21.08 APPLICATION OF COVER MATERIAL

If, after the bituminous material has been applied, it fails to penetrate before the time that the roadway must be used by traffic, dry cover material shall be spread at a rate established by the Engineer, between eight (8) and twelve (12) pounds per square yard, to prevent damage to the primed surface. An excess of cover material shall be avoided.

21.09 MAINTENANCE AND PROTECTION

(a) The Contractor shall maintain the prime coat and the surface intact until it has been covered by the wearing surface or until the project is completed. No succeeding stage of construction shall be placed upon the prime coat until it is properly cured.

(b) The Contractor shall clean out any spots where the prime coat may have failed due to disintegration of the underlying surface material or for any other reasons. The exposed areas so produced shall be lightly dampened, refilling with approved material and thoroughly compacted to conform with the surrounding surface, after which bituminous prime shall be applied thereto with a hand spray. If satisfactory repairs cannot be accomplished by the above method, the Contractor shall fill the depressions with approved mixtures of bituminous material and fine aggregate, and compact them to conform to the surrounding surface.

(c) Any mineral aggregate and bituminous material used for repairs will be paid for at their contract unit prices, providing the cause of repair is beyond the Contractor's control.

21.10 METHOD OF MEASUREMENT (IF APPLICABLE)

Bituminous prime coat will be measured by the number of gallons (or the unit(s) specified in the bid schedule) of material used in the accepted work, as determined by the Engineer, at the temperature of application.

21.11 BASIS OF PAYMENT (IF APPLICABLE)

This item will be paid for at the contract unit price per gallon (or the unit(s) specified in the bid schedule) for prime coat complete-in-place, which price shall be full compensation for all bituminous prime coat as indicated or directed and in accordance with the conditions, stipulations, provisions and requirements contained herein; for completing all incidentals thereto; and for furnishing all materials, equipment, tools, labor and incidentals required to complete the item.

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