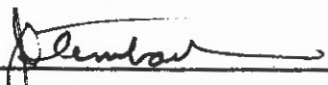


TO: MODIFIED BY EB 81-037 EFFECTIVE 8/25/81	ENGINEERING BULLETIN NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Distribution: <input checked="" type="checkbox"/> Main Office <input checked="" type="checkbox"/> Regions <input type="checkbox"/> Special	Code: <u>EB 81-4</u>
APPROVED:  <hr/> Jack Sternbach, Deputy Chief Engineer, (Construction)	Date: <u>01/19/81</u> Supersedes:

This Engineering Bulletin Expires _____

Section 407 - Tack Coat of the Standard Specification has been revised. The revised specification calls for the elimination of Material's Item 702-340, Asphalt Emulsion (HFMS-2h), 702-3601 Asphalt Emulsion (SS-1h) and 702-4051 Cationic Asphalt Emulsion (CSS-1h). These will be replaced by Material's Item 702-90 Asphalt Emulsion for Tack Coat. When the contract calls for the application of a bituminous tack coat, the attached specification shall be implemented.

This Bulletin will serve as proper documentation that an approved substitution is allowed. Therefore it will not be necessary to prepare an Order-on-Contract for this change as per EI 80-28. The project file shall include a copy of this Bulletin.

Attachment

PREL.	FINAL
DESIGN	LANDSCAPE
RECEIVED	
FACILITIES DESIGN DIVISION	
JAN 22 1981	
CIRC.	FILE

SECTION 407 - TACK COAT

407-1 DESCRIPTION. This work shall consist of preparing and treating an existing bituminous or portland cement concrete surface with bituminous tack coat in accordance with these specifications and in reasonably close conformity with the limits shown on the plans or established by the Engineer.

407-2 MATERIALS. The bituminous tack coat shall meet the requirements of the following designation:

Asphalt Emulsion for Tack Coat 702-90

The bituminous tack coat will be sampled and tested in accordance with the Department's written instruction.

407-3 CONSTRUCTION DETAILS.

407-3.01 EQUIPMENT. The contractor shall provide a distributor for applying the tack coat.

The distributor shall be designed, equipped, maintained and operated so that the tack coat can be heated and applied uniformly on variable widths of surface up to 15 feet at readily determined and controlled rates from 0.05 to 2.0 gallons per square yard, with uniform pressure, and with an allowable variation from any specified rate not to exceed 0.02 gallons per square yard. Distributor equipment shall include a tachometer, accurate metering device or a calibrated tank, and a thermometer for measuring temperatures of tank contents. Distributors shall be equipped with a power unit for the pump, and full circulation spray bars adjustable laterally and vertically.

The distributor may be equipped with an attached bristle broom designed such that it drags on the pavement behind the spray bars. If the broom is used, it shall be adjustable laterally and vertically so that the full width of the applied tack coat is broomed uniformly into the pavement surface.

Distributors shall be equipped with an approved bituminous material sampling valve. The valve shall be installed as described in Department written instructions. When samples are taken through such valves, they shall be considered representative of all material in the tank.

Smaller power spray units or hand spray equipment will be permitted only in areas where the Engineer determines that the use of a distributor is impractical.

407-3.02 APPLICATION OF BITUMINOUS MATERIAL. The tack coat shall be uniformly applied by a pressure distributor to a prepared clean pavement. The tack coat shall be applied as approved by the Engineer to offer the least inconvenience to traffic and to permit one-way traffic, where practical, to prevent pickup or tracking of the bituminous material.

SECTION 407 - TACK COAT (cont.)

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Tack coat shall not be applied on a wet pavement surface or when the surface temperature is below 45F. The temperature and areas to be treated shall be approved by the Engineer prior to application. The application rate shall be 0.05 - 0.10 gallons per square yard as approved by the Engineer.

407-4 METHOD OF MEASUREMENT. The quantity to be paid for will be the number of gallons of asphalt emulsion for tack coat measured at 60F incorporated into the work.

407-5 BASIS OF PAYMENT. The unit price bid per gallon for tack coat shall include the cost of furnishing materials and all equipment and labor necessary to complete the work.

<u>ITEM NO.</u>	<u>ITEM</u>	<u>PAY UNIT</u>
407.01	TACK COAT	Gallon

TABLE 702-9
 ASPHALT EMULSION - TACK COAT

MATERIAL DESIGNATION	702-90	
	Min.	Max.
<u>Tests on Asphalt Emulsion Tack Coat:</u>		
Sieve Test, percent	-	0.10
Residue by Distillation, percent	28	40
Oil Distillate, Volume Total Emulsion percent	-	2
<u>Test on Residue from Distillation Test:</u>		
Penetration, 77F, (25C) 100g, 5 Sec.	40	90

Materials Requirements:

The asphalt emulsion tack coat shall be produced by diluting one of the following bituminous materials with suitable emulsifier solution and thoroughly mixing into a homogeneous liquid:

	GRADE	<u>MATERIAL DESIGNATION</u>
Asphalt Emulsion	HFMS-2h	702-3401
Asphalt Emulsion	SS-1h	702-3601
Cationic Asphalt Emulsion	CSS-1h	702-4501

<u>Suggested Temperature Range</u>	
Spraying, (F)	75-150
(C)	25- 60

NOTE: Tack coat shall be pumpable and sprayable.