Section 02743

TACK COAT

1.0 G E N E R A L

1.01 SECTION INCLUDES

A. Tack coat for asphaltic concrete paving.

B. References to Technical Specifications:

1. Section 01200 – Measurement and Payment Procedures
2. Section 01350 - Submittals

C. Referenced Standards:

1. American Society for Testing and Materials (ASTM)
   a. ASTM D 244, "Standard Test Methods and Practices for Emulsified Asphalts"

1.02 MEASUREMENT AND PAYMENT

A. Unless indicated as a Bid Item, no separate payment will be made for tack coat under this Section. Include cost in Bid Items for which this Work is a component.

B. If tack coat is included as a Bid Item, measurement will be based on the units shown in Section 00300 – Bid Proposal and in accordance with Section 01200 – Measurement and Payment Procedures.

1.03 SUBMITTALS

A. Make Submittals required by this Section under the provisions of Section 01350 – Submittals.

B. Submit product data for proposed tack coat.

C. Submit report of recent calibration of distributor.

2.0 P R O D U C T S

2.01 CUTBACK ASPHALT

A. Provide moisture-free, homogeneous material which will not foam when heated to 347° F and which meets following requirements:

1. Asphalt material for tack coat: RC-250 and meet following:

PROPERTIES	MIN.	MAX.
Water, percent	---	0.2
Flash Point, T.O.C., ºF	80	---
Kinematic Viscosity at 140º F, cst	250	400

2. Distillate: Expressed as percent by volume of total distillate to 680° F:

	MIN	MAX
to 437º F	40	75
to 500º F	65	90
to 600º F	85	---
Residue from 680º F Distillation		
Volume, percent	70	---

3. Tests on Distillation Residue:

	MIN.	MAX
Penetration at 77º F, 100g, 5 sec.	100	150
Ductility at 77º F, 5 cms	100	---
Solubility in trichloroethylene, %	99	---
Spot Test	All Negative	

2.02 EMULSION

A. Provide homogeneous material which shall show no separation of asphalt after mixing and shall meet the viscosity requirements at any time within 30 days after delivery.

1. Emulsion material for tack coat: SS-1 and meet following:

	MIN.	MAX
Furol Viscosity at 77º F, sec.	30	100
Residue by Distillation, %	60	---
Oil Portion of Distillate, %	---	2
Sieve Test, %	---	0.1
Miscibility (Standard Test)	Passing	Passing
Cement Mixing, %	---	2.0
Storage Stability, 1 Day, %	---	1
Test on Residue:		
Penetration at 77º F, 100 g, 5 sec	120	160
Solubility in Trichloroethylene, %	97.5	---
Ductility at 77º F, 5 cm/min, cms	100	---

2. For emulsions used for tack coats during the period of April 16 to September 15, volatile organic compound solvents (VOC) shall not exceed 12% by weight when tested in accordance with ASTM D 244.

3.0 E X E C U T I O N

3.01 EXAMINATION

A. Verify compacted base is ready to support imposed loads.

B. Verify lines and grades are correct.

3.02 PREPARATION

A. Thoroughly clean base course or concrete surface of loose material by brooming prior to application of tack coat.

3.03 APPLICATION

A. Apply tack coat uniformly by use of approved distributor at rate not to exceed 0.05 gallons per square yard of surface.

B. Paint all contact surfaces of curbs and structures, and all joints with thin uniform coat of tack coat.

C. Cutback Asphalt:

1. Do not use cutback asphalt during the period of April 16 to September 15.

2. Do not place tack coat in rain or when air temperature is below 50° F and falling. Materials may be placed when air temperature taken in shade and away from artificial heat is above 40° F and rising.

3. Temperature of tack coat shall be between 125° F and 180° F when applied.

4. Do not heat tack coat above 200° F at any time.

3.04 PROTECTION OF THE WORK

A. No traffic or placing of subsequent courses shall be permitted over freshly applied tack coat until authorized by the Engineer.

END OF SECTION