1. ASPHALT TACK OIL - GENERAL

1.1 DESCRIPTION

- .1 This section specifies requirements for asphalt tack coat.
- .2 The work includes supply of asphalt tack material, equipment and placing of tack coat.

1.2 RELATED WORK

.1 Hot Mix Asphalt Concrete Paving - Section 05140

1.3 SAMPLES

- .1 At least four (4) weeks prior to commencing work submit to the Engineer two (2) five (5) litre containers of asphalt tack coat material proposed for use. Submit emulsified asphalt samples in plastic containers.
- .2 Identify name of supplier of asphalt tack oil.
- .3 Provide access for the Engineer to sample material actually incorporated into work as required.

1.4 MATERIALS CERTIFICATION

.1 Upon request submit Manufacturer's test data and certification that asphalt tack material meets requirements of this section.

1.5 MEASUREMENT FOR PAYMENT

- .1 Asphalt tack will be measured in square metres of tack coat placed in accordance with requirements specified in this section.
- .2 Application of asphalt tack to edges of existing curbs, gutters, headers, manholes and like structures is incidental to the work required in this section.

2. PRODUCTS

2.1 MATERIALS

.1 Asphalt Tack: Anionic emulsified asphalt, slow setting (SS-1h) to the following requirements:

REQUIREMENTS TESTS ON EMULSION	ASTM TEST	METHOD	MIN.		MAX.
Saybolt Viscosity, Flurol Seconds at 25 C.		D244	20		60
Residue By Distillation, % By Mass		D244	55		-
Settlement In 5 Days, % By Mass	D244	-		5.0	
Storage Stability Test, 24 hr., % By Mass	D244	-		1.0	
Sieve Test, % Retained On a No. 1 000 Sieve, % by Mass	D244	-		0.10	
Cement Mixing Testing, % By Mass		D244	-		2.0

TEST ON RESIDUE

Penetration At 25 C, 100 g, 5 sec, dmm	D5	40	100
Ductility At 25 C, cm	D113	60	-
Solubility In Trichlore- thylene, % By Mass	D2042	97.5	-

3.0 EXECUTION

3.1 EQUIPMENT

- .1 **Pressure Distributer:** Designed, equipped, maintained and operated so that asphalt material at uniform temperature may be applied uniformly on variable widths of surface up to five (5) metres at readily determined and controlled rates from 0.2 to 5.4 L/m² with uniform pressure, and with an allowable variation from any specified rate not exceeding 0.1 L/m².
- .2 Capable of distributing asphalt material in uniform spray without atomization at temperature required. The spray patterns made by alternate nozzles shall meet with no overlap, to avoid streaking. Nozzles shall be of the same manufacture, size, and type, and shall be set in the spray bar so that all nozzle slots make the same angle with the longitudinal axis of the spray bar.
- .3 Equipped with metre registering lineal metres per minute, visibly located to enable the operator to maintain constant speed required for application at specified rates.
- .4 Pump equipped with flow meter registering litres per minute passing through the nozzles and visible to the operator of the distributor. The pump shall operate by a separate power unit independent of the truck power unit.
- .5 Equipped with an easily read, accurate and sensitive device which registers the temperature of the liquid in the reservoir.
- .6 Equipped with accurate volume measuring device or calibrated tank.
- .7 Equipped with heating attachments and circulation or agitation capability.

3.2 APPLICATION

- .1 Obtain Engineer's approval of existing surface before applying tack oil.
- .2 Temperature condition emulsified asphalt to between 20 C and 50 C.
- .3 Apply undiluted emulsified asphalt tack coat material to existing pavement surface at a rate not greater than 0.5L/m².
- .4 Paint contact surfaces of curbs, gutters, headers, manholes and like structures with thin, uniform coat of asphalt material.
- .5 Do not apply asphalt tack coat when air temperature is less than 5 C or when rain is forecast within two (2) hours.

ASPHALT TACK OIL

- .6 Avoid applying tack coat to surfaces that will be visible when paving is completed.
- .7 Evenly distribute excessive deposits of tack coat by brooming.
- .8 Keep traffic off tacked areas until tack coat has cured.
- .9 Permit tack coat to cure before placing asphalt paving mixtures.