

## SECTION 32 01 18

### FOG SEAL

#### PART 1 - GENERAL

##### 1.01 SECTION INCLUDES

- A. Application of liquid asphalt to hot mix asphalt surface at least 9 months of age.

##### 1.02 SUBMITTALS

- A. Certificate showing asphaltic material complies with Section 32 12 03.

##### 1.03 WEATHER

- A. Apply fog seal only when air and roadbed temperatures in the shade are greater than 50 deg. F. The temperature restrictions may be waived only upon written authorization from ENGINEER.
- B. Do not apply fog seal during rain, fog, dust, or other unsuitable weather.

#### PART 2 - PRODUCTS

##### 2.01 ASPHALT MATERIAL

- A. Select from the following.
  - 1. Emulsified Asphalt: Grade SS-1h, Section 32 12 03.
  - 2. Cationic Emulsified Asphalt: Grade CSS-1h, Section 32 12 03.
  - 3. Cationic Quick Set Asphalt: Grade CQS-1h, Section 32 12 03.
  - 4. Gilsonite based: GSB-88
- B. Rejuvenators:
  - 1. Asphalt and Maltene oil with polymer mix: PASS-QB
  - 2. Maltene oil based: Reclamite-TM

##### 2.02 SAND

- A. Clean natural aggregate passing the No. 4 sieve and retained on the No. 200 sieve.

#### PART 3 - EXECUTION

##### 3.01 PREPARATION

- A. Immediately prior to application, sweep surface with power broom or road sweeper to remove all dust, dirt and debris.
- B. Water flushing with a water truck allowed.
  - 1. Completed 24 hours prior to application of fog seal.
  - 2. Surface must dry completely prior to application.

3. Do not flush over cracks.

### 3.02 EQUIPMENT

- A. Use standard bituminous spreader with triple coverage by spray bar.

### 3.03 APPLICATION

- A. Dilute asphalt emulsion with water at a ratio of 1:1.
- B. For new asphalt (less than 2 yrs old), apply 0.08 +/- .004 gallons per square yard.
- C. For older asphalts, or when surface appears to have aged more aggressively, apply 0.10 +/- .004 gallons per square yard.
- D. Application rate may be adjusted based on observations of absorption.
  1. Test 1 square yard area with 0.08 gallons.
  2. If emulsion not absorbed in after 2 to 3 minutes, decrease application rate and test new area.
  3. If surface completely absorbs emulsion with ability to absorb more, increase application rate and test new area.
- E. Emulsion Temperature:
  1. Target 150 degrees F
  2. Maximum 190 degrees F
  3. Minimum 90 degrees F
- F. Stop application if any nozzle is not working properly.
- G. Blot areas with too much emulsion by spreading a light, uniform layer of sand.

### 3.04 PROTECTION

- A. Protect all structures, including curb and gutter, sidewalks, guardrails and guide posts from being spattered or marred. Remove any spattering, over-coating, or marring at no additional cost to City.
- B. Do not discharge bituminous material into borrow pits or gutters.
- C. Prevent tracking of fog seal onto adjacent surfaces.

### 3.05 OPENING TO TRAFFIC

- A. Material should set between 4 to 6 hours after application.
- B. Keep traffic off surface until material is not longer tacky and will not track out.
- C. To allow traffic on surface prior to complete setting of the emulsion, contractor may lightly sand surface at no additional expense to the City.
- D. Contractor responsible for any claims of damage by travelling public.

END OF SECTION