

SLURRY SEALING

SECTION 32 01 13

PART 1 – GENERAL

1.1 SUMMARY

- A. Provide slurry sealing over existing asphalt paving areas as indicated on drawings.
- B. Provide striping for parking, roadway, fire lanes and handicapped markings as indicated on drawings.

1.2 SUBMITTALS

- A. None required.

1.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers, which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Standards: Comply with the provisions of the following specifications and standards, except as noted or specified, or as accepted or directed by the Architect.
 - 1. ASTM C 131-89, "Test Method for Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine".
 - 2. ASTM D 242-85, "Specifications for Mineral Filler for Bituminous Paving Mixtures".
 - 3. ASTM D 977-86, "Specifications for Emulsified Asphalt".
 - 4. ASTM D 2397-85, "Specifications for Cationic Emulsified Asphalt".
 - 5. Paint handicap spaces to conform to ADA, ANSI A117.1 and local code requirements.

1.4 PROJECT CONDITIONS

- A. Weather limitations:
 - 1. Apply slurry sealant when ambient temperature is above 50° F, and when temperature has not been below 35° F for 12 hours immediately prior to application. Do not apply when existing paving is wet or contains an excess of moisture.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Design Requirements
 - 1. This specification shall meet requirements of International Slurry Seal Association, Type I.

- B. Asphalt Emulsion
 - 1. Conform to requirements of ASTM D 977 or ASTM 2397.
 - 2. Minimum percent of emulsion to aggregate shall be 18 percent.
- C. Aggregate
 - 1. Mineral aggregate consisting of natural or manufactured sand, slag, or combination thereof.
 - a. Smooth textured sand of less than 1.25% water absorption shall not exceed 50% of total combined aggregate.
 - b. Material shall be clean and free from organic matter and other deleterious substances and show loss of not more than 35 when tested in accordance with ASTM C 131.
 - c. Mineral fillers shall meet requirements of ASTM D 242, and following gradation requirements:

1).	<u>Sieve Size</u>	<u>% Passing by Weight</u>
(a).	#4	100
(b).	#8	90 to
(c).	16	65 to 90
(d).	30	40 to 60
(e).	50	25 to 42
(f).	100	15 to 30
(g).	200	10 to 20
- D. Water – Potable and free from harmful soluble salts.
- E. Lane and Parking Area Marking Paint: Colors as indicated on drawings. Alkyd-resin type, ready-mixed, AASHTO M 248, Type I.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Immediately prior to applying slurry, clean surface of loose material, silt spots, vegetation, oil spots, and other objectionable material. Power brooms, power blowers, air compressors, water flushing equipment, and hand brooms shall be suitable for cleaning existing pavement.
- B. Apply tack coat of one-part emulsion, 3 parts water at rate of 0.05 to 0.10 gallons per sq. yd.

3.2 APPLICATION

- A. Equipment, tools, and machines used in performance of work of this Section shall be maintained in satisfactory working order during performance of work of this Section.
 - 1. Slurry mixing machine shall be continuous flow mixing unit capable of delivering accurately predetermined proportion of aggregate, water, and asphalt emulsion to mixing chamber and to discharge thoroughly mixed production on continuous basis.
 - 2. Attach to mixer mechanical type squeegee distributor equipped with flexible material in contact with surface to prevent loss of slurry from distributor.
- B. Surface may be pre-wetted by fogging ahead of slurry box providing no water is accumulated in front of slurry box.

- C. Maintain adequate amounts of slurry in spreader to insure complete coverage. No lumping, balling, unmixed aggregate, or streaking due to oversize aggregate shall be permitted.
- D. Use approved squeegees to spread slurry in areas not accessible to slurry mixer.
- E. Apply at rate of 6 to 10 lbs. per sq. yd. based on dry aggregate weight.
- F. Roll with 6 to 8 ton pneumatic tired roller with minimum contact pressure of 40 psi after emulsion has broken.
- G. No unsightly joints or other visual imperfections are permitted on finished product.
- H. Traffic and Lane Markings:
 - 1. Cleaning: Sweep and clean surface to eliminate loose material and dust.
 - 2. Striping: Use lane-marking paint, factory-mixed, quick-drying, and non-bleeding; yellow, blue, red, or white color as indicated on drawings or selected by Architect.
- 3. Site Tolerances:
 - a. General: Make lines parallel, evenly spaced, and with sharply defined edges.
 - b. Line Widths:
 - 1). Plus or minus ¼-inch variance on straight segments.
 - 2). Plus or minus ½-inch variance on curved alignments.
- 4. Do not apply traffic and lane marking paint until layout and placement has been verified by Architect.
- 5. Do not apply until slurry sealant has cured 72 hours minimum.
- 6. Apply paint with mechanical equipment to produce uniform 4" wide straight edges. Apply in 2 coats at manufacturer's recommended rates. Colors as indicated on drawings.

3.3 PROTECTION & CLEANING

- A. Allow treated areas to cure 24 hours minimum before opening to traffic.
- B. Remove drips, overspray, improper markings, and paint material tracked by traffic by sand blasting, wire brushing, or other method approved by Architect prior to performance.

END OF SECTION