408-R-564 SEALING CRACKS AND JOINTS

(Revised 09-16-10)

The Standard Specifications are revised as follows:

SECTION 408, BEGIN LINE 9, INSERT AS FOLLOWS:

408.02 Materials

Materials shall be in accordance with the following:

Asphalt Emulsion for	
Crack Sealing, AE-90, AE-90S, AE-150	902.01(b)
Asphalt Binder for Crack Sealing, PG 64-22	*902.01(a)*
Fine Aggregates, No. 23 or 24	904
Joint Sealing Materials	906.02

SECTION 408, BEGIN LINE 30, DELETE AND INSERT AS FOLLOWS:

408.05 Routing and Filling Cracks and Joints

Cracks and joints shall be routed when specified, with a ~~vertical-spindle router with carbide-tipped or diamond router bits~~ *routing machine capable of cutting a uniform shape* to form a reservoir not exceeding ~~0.5~~ *0.75* in. (~~13~~ *19* mm) wide with a minimum depth of 0.75 in. (19 mm). The operation shall be coordinated such that routed materials do not encroach on pavement lanes carrying traffic and all routed materials are disposed of in accordance with 104.07. Cracks and joints shall be filled with ~~asphalt rubber~~*hot poured joint sealant* to within 0.25 in. (7 mm) of the surface in accordance with the manufacturer's recommendations.

SECTION 507, BEGIN LINE 9, DELETE AND INSERT AS FOLLOWS:

507.02 Materials

Materials shall be in accordance with the following:

Asphalt Emulsion AE-90, AE-90S, AE-150	902.01(b)
Asphalt Binder for Crack Sealing, PG 64-22	*902.01(a)*
Dowel Bars	910.01(b)10
Fine Aggregates, Size No. 23 or 24	904
Joint Sealing Materials	906.02
Rapid Set Patching Materials	901.07

SECTION 507, BEGIN LINE 28, DELETE AND INSERT AS FOLLOWS:

(a) Routing, Cleaning and Sealing

Cracks in PCCP shall be routed and cleaned when specified. Cracks shall be routed with a ~~vertical-spindle router with carbide-tipped or diamond router bits~~ *routing machine capable of cutting a uniform shape* to form a reservoir not exceeding ~~0.5~~ *0.75* in. (~~13~~ *19* mm) wide with a minimum depth of 0.75 in. (19 mm). The operation shall be coordinated such that routed materials do not encroach on pavement lanes carrying traffic and all routed materials are disposed of in accordance with 104.07. The cracks shall be cleaned with compressed air or by other suitable means. Air compressors shall be capable of producing a minimum air pressure of 100 psi (690 kPa). Water blasting shall not be utilized.

Cracks shall be sealed with ~~asphalt rubber~~ *hot poured joint sealant* in accordance with the manufacturer recommendations within 0.25 in. (7 mm) of the surface. A distributor in accordance with 409.03 shall be used with an indirect-heat double boiler kettle and mechanical agitator. The ~~asphalt rubber~~ *hot poured joint sealant* shall be placed utilizing a "V" shaped wand tip, to allow the penetration of the materials into the cracks.

Application of ~~asphalt rubber~~ *hot poured joint sealant* shall be completed without covering existing pavement markings. When traffic is to be maintained within the limits of the section, temporary traffic control measures in accordance with 801 shall be used. Treated areas shall not be opened to traffic until the ~~asphalt rubber~~ *hot poured joint sealant* has set.

SECTION 507, BEGIN LINE 49, DELETE AND INSERT AS FOLLOWS:

(b) Cleaning and Filling

The cracks shall be cleaned by blowing with compressed air or by other suitable means when specified. Air compressors shall be capable of producing a minimum air pressure of 100 psi (690 kPa). Water blasting shall not be utilized.

Cracks shall be filled with asphalt ~~emulsion~~ *material*. The cracks shall be completely filled or overbanded not to exceed 5 in. (125 mm), or as required. Asphalt ~~emulsion~~ *material* shall be placed utilizing a "V" shaped wand tip, to allow the penetration of the materials into the cracks. The filled cracks shall be covered with sufficient fine aggregate to prevent tracking of the asphalt ~~emulsion~~ *material*. All excess cover material shall be removed from the pavement.

Application of asphalt ~~emulsion~~ *material* shall be completed without covering existing pavement markings. When traffic is to be maintained within the limits of the section, temporary traffic control measures in accordance with 801 shall be used. Treated areas shall not be opened to traffic until the asphalt ~~emulsion~~ *material* has set.

SECTION 507, BEGIN LINE 80, DELETE AND INSERT AS FOLLOWS:

Joints shall be sealed with joint sealing materials in accordance with the sealant manufacturer's recommendations. Transverse joints shall be sealed with silicone sealant or preformed elastomeric joint sealant. Longitudinal joints shall be sealed with ~~an asphalt rubber~~ *hot poured joint* or silicone sealants.

SECTION 507, BEGIN LINE 95, DELETE AND INSERT AS FOLLOWS:

Joints shall be filled with ~~asphalt rubber~~ *hot poured joint sealant* in accordance with the manufacturer's recommendations within 0.25 in. (7 mm) of the surface. A distributor in accordance with 409.03 shall be used with an indirect-heat double boiler kettle and mechanical agitator. The ~~asphalt rubber~~ *hot poured joint sealant* shall be placed utilizing a "V" shaped wand tip, to allow the penetration of the materials into the joints.

SECTION 906, BEGIN LINE 78, DELETE AND INSERT AS FOLLOWS:

~~**4. Asphalt Rubber Sealant**~~

~~**a. Requirements**~~

~~The asphalt rubber sealant shall be a single component asphalt sealant that contains a minimum of 18% recycled rubber by weight of asphaltic components. Seventy~~

~~percent of the rubber shall be ground reclaimed rubber. The asphalt rubber sealant shall be in accordance with ASTM D 6690, type I.~~

~~b. Packaging~~

~~The asphalt rubber sealant shall be delivered in the manufacturer's original sealed packaging. Each container shall be marked legibly with the manufacturer's name, name of material, the batch or lot number, the expiration date, the recommended pouring temperature, and the safe heating temperature.~~

~~c. Installation~~

~~The rubber asphalt sealant shall be installed in accordance with manufacturer's recommendations. The backer rod shall be in accordance with manufacturer's specifications and 906.02(b) if a backer rod is required.~~

~~d. Certification~~

~~The Contractor shall supply a type A certification in accordance with 916 for each batch or lot of material furnished.~~