SECTION 471—BITUMINOUS SEAL COAT USING PRECOATED AGGREGATE

471.1 DESCRIPTION—This work is application of bituminous material immediately followed by an application of bituminous precoated aggregate.

471.2 MATERIAL—

(a) Bituminous Precoating Material. One of the following, as specified in Section 702:

Class of Material	Type of Material	Application Temperature °C (F) Minimum	Maximum
MC-30	Cut-back Asphalt	20 (70)	50 (120)
MC-70	Cut-back Asphalt	40 (100)	65 (150)
SS-1h (E-8A)	Emulsified Asphalt	20 (70)	65 (150)
CSS-1h (E-8C)	Cationic Emulsified Asphalt	20 (70)	65 (150)
PG 64-22	Asphalt Cement	135 (275)	175 (350)
PG 58-28	Asphalt Cement	120 (250)	165 (325)

(b) Bituminous Material. One of the following, as specified in Section 702:

Class of Material	Type of Material	Application Temperature °C (F) Minimum	Maximum
RS-2 (E-2)	Emulsified Asphalt	60 (140)	80 (175)
CRS-2 (E-3)	Cationic Emulsified Asphalt	60 (140)	80 (175)
PG 46-40	Asphalt Cement	120 (240)	150 (300)

Only use PG 46-40 on shoulders.

(c) Coarse Aggregate. Section 470.2(b)

(d) Preparation of Pre-Coated Aggregate. Use free-flowing, pre-coated aggregate so it can be stocked, handled, and uniformly spread by a self-propelled spreader. Prepare pre-coated aggregate as follows:

1. Asphalt Cement. Use an asphalt cement to pre-coat the aggregate only if it pre-coats the aggregate to the Representative's satisfaction. Provide a pre-coating with 0.6% to 1.2% residual bituminous binder (by mass (weight) of the mix). Dry the aggregate in a batch or continuous type bituminous plant conforming to the requirements of Bulletin 27. Precoat the aggregate in the pug mill. Mix the materials at a mixing temperature not exceeding 175 °C (350F). Stock mixed material on a suitable base area and no higher than 1.2 m (4 feet).

2. Other Bituminous Materials. The Contractor may use damp aggregate and a stabilization plant. Provide a pre-coating with 0.4% to 1.0% residual bituminous binder. If using damp aggregate with cut-back asphalts, sufficiently cure the pre-coated aggregate before use to prevent pickup. Do not exceed an aggregate temperature of 65 °C (150F) if using cutback asphalts.

Select an application rate sufficient to provide a thin, brownish, and translucent film on the aggregate. Cover at least 90% of the total visible surface area of the aggregate. Before producing the pre-coated aggregate, prepare a sample of the pre-coated aggregate for the Representative's inspection.

The Representative will use the sample to establish the visual inspection standard associated with at least 90% of the visible surface area covered.

During production, the Representative will determine if less than 90% of the visible surface area is covered. If the Representative determines less than 90% of the visible surface area is covered, the Contractor may determine the percent of uncoated material passing the 75 µm (No. 200) sieve after dry sieving for 10 minutes. The Representative will accept the pre-coated aggregate if the percent passing does not exceed 0.5%. Stock mixed material on a suitable base area and, if using heated aggregates, no higher than 1.2 m (4 feet).

471.3 CONSTRUCTION—Section 470.3 and as follows:

(d) Protection of Surface. If required, sweep the surface with a power broom to remove loose chips before and after opening the road to traffic. For emulsified asphalt, allow sufficient time for the seal coat to completely cure before opening the road to all traffic.

471.4 MEASUREMENT AND PAYMENT—

(a) Area Basis. Square Meter (Square Yard)

(b) Material Used Basis.

1. Coarse Aggregate. Square Meter (Square Yard)
The unit price includes the bituminous precoating material.

2. Other Bituminous Material. Liter (Gallon)

(c) Crack Filling and Sealing. Section 469.4