The application rate of the sealant shall be as follows:

Asphalt Emulsion	Application Rate* (gal./sq yd)
SS-1h or AE-NT	0.03 ±0.01**
RPE	0.15 ±0.01***

* The asphalt material shall not be diluted.
** Areas receiving greater than 0.04 gal./sq yd shall be lightly broomed to reduce the effects of excess sealant on the pavement surface.
*** The application rate shall be reduced when sealing milled corrugations in accordance with 606. The application rate shall be 0.11 ±0.01 gal./sq yd.

Temporary pavement markings in accordance with 801.12 shall be offset a sufficient distance from the longitudinal joint so as not to obstruct the installation of the pavement corrugations or the application of the liquid asphalt sealant.

The SS-1h or AE-NT sealant shall be cured a minimum of five days prior to applying the permanent pavement traffic markings in accordance with 808. The RPE sealant shall be cured a minimum of 48 h prior to applying the permanent pavement traffic markings in accordance with 808. Where pavement markings are to be grooved in accordance with 808.07(b)1, the minimum cure for the sealant shall not apply.

Transverse joints shall be constructed by exposing a near vertical full depth face of the previous course. For areas inaccessible to rollers, other mechanical devices shall be used to achieve the required density.

If constructed under traffic, temporary transverse joints shall be feathered to provide a smooth transition to the driving surface.

401.16 Density

Acceptance will be based on lots and sublots in accordance with 401.07.

Density of the compacted dense graded mixture will be determined from cores except where:

(a) the total planned lay rate to be placed over a shoulder existing prior to the contract award is less than 385 lb/sq yd, or

(b) the first lift of material placed at less than 385 lb/sq yd over a shoulder existing prior to the contract award.

Density of any random core location in these areas will be assigned a value of 94.0% MSG and compaction shall be in accordance with 402.15.

Open graded mixtures shall be compacted with six passes of a static tandem roller and will be assigned a value of 84.0% MSG. Vibratory rollers shall not be used on open graded mixtures.

Compaction of 4.75 mm mixtures shall be in accordance with 402.15, except vibratory rollers shall be operated in static mode and the vertical impact force capability of oscillatory rollers shall not be used.

Compaction of mixtures with original contract pay item quantities less than 300 t shall be in accordance with 402.15.

Density acceptance by cores will be based on samples obtained from two random locations selected by the Engineer within each sublot in accordance with ITM 802. One core shall be cut at each random location in accordance with ITM 580. The transverse core location will be located so that the edge of the core will be no closer than 3 in. from a confined edge or 6 in. from a non-confined edge of the course being placed. The maximum specific gravity will be determined from the samples obtained in 401.09.

The Contractor shall obtain cores in the presence of the Engineer with a device that shall produce a uniform 6.00 ±0.25 in. diameter pavement sample. Coring shall be completed prior to the random location being covered by the next course.

All core locations will be marked and shall be cored within two work days of placement. A damaged core shall be discarded and replaced with a core from a location selected by adding 1 ft to the longitudinal location of the damaged core using the same transverse offset.

The Contractor and the Engineer shall mark the core to define the course to be tested. If the core indicates a course thickness of less than two times the maximum particle size, the core will be discarded and a core from a new random location will be selected for testing.

Cores shall not be obtained from the following areas:

(a) Mixture placed on an approach, taper, gore area, crossover that is not placed simultaneously with the mainline.

(b) Mixture placed on a shoulder less than 8 ft in width that is not placed simultaneously with the mainline.

(c) Within 25 ft of a transverse construction joint.

(d) Within 25 ft of an acceptance sample taken in accordance with 401.09.

(e) Areas placed with paving equipment in accordance with 409.03(c)2 or 409.03(c)3.

If a random location falls within this area, the Engineer will randomly select another location within the sublot for coring. If an entire sublot falls within this area, test results from the previous sublot will be used for acceptance. If the previous sublot is not available, the subsequent sublot will be used for acceptance.

The Engineer will take immediate possession of the cores. If the Engineer's cores are subsequently damaged, additional coring will be the responsibility of the Department. Subsequent core locations will be determined by subtracting 1 ft from the random location using the same transverse offset.

The density for the mixture will be expressed as:

$$\text{Density, \%} = \frac{\text{BSG}}{\text{MSG}} \text{ x } 100$$

where:

BSG = average bulk specific gravity
MSG = maximum specific gravity

Samples for the bulk specific gravity and maximum specific gravity will be dried in accordance with ITM 572. The Engineer will determine the bulk specific gravity of the cores in accordance with AASHTO T 166, Method A or AASHTO T 331, if required. The maximum specific gravity will be mass determined in water in accordance with AASHTO T 209.

Within one work day of coring operations, the Contractor shall clean, dry, and refill the core holes with either HMA of similar or smaller size particles or bridge deck repair material from the QPL of Rapid Setting Patch Materials. The rapid setting patch material shall be mixed in a separate container and placed in the hole in accordance with the manufacturer's recommendations, consolidated by rodding, and struck-off flush with the adjacent pavement.

The Engineer's acceptance test results for each sublot will be available when the sublot testing is complete. Acceptance of the pavement for density, %MSG, will be reported to the nearest 0.01%. Rounding will be in accordance with 109.01(a).

401.17 Pavement Corrugations

Pavement corrugations shall be in accordance with 606.

401.18 Pavement Smoothness

Pavement smoothness will be accepted by means of an inertial profiler, a 16 ft straightedge, or a 10 ft straightedge as described below.

(a) Inertial Profiler with Smoothness Pay Adjustments

When a pay item for Inertial Profiler, HMA is included in the contract, the