2013 Bituminous Specification Change Highlights

(Includes 2360, 2357, and 2399)

Jan. 29, 2013

2360 Changes

2360.2 E.7 Minimum Ratio of Added Asphalt Binder to Total Asphalt Binder

(page 7 & 24)

Minimum Ratio of Added Asphalt Binder to Total Asphalt Binder: Table's 2360-8 and 2360-15 both discuss minimum ratios of add/total asphalt binder. A minimum ratio of 80% is now required for mixtures specifying PG 58-34, PG 64-34, and PG 70-34. A 65% ratio is allowed for non-wear mixtures specifying PG XX-28, PG 52-34, PG 49-34, and PG 64-22

2360.2 G.3 & G.4.b QC/QA-Verification Sampling

(page 11 & 13)

QA/Verification Sample: QC/QA-Verification sampling has been modified to increase the randomness in the testing process. The standard now is what was previously inserted in some District Contracts by Special Provision and had been called the "Modified Sampling Method". The new process requires the Agency to witness all sampling and take their portion immediately after the sample split. At the end of the day one of these "splits" is randomly submitted to the District Lab for testing.

<u>Mixture Sampling Location</u>: The Contractor has the option to sample either behind the paver or from the truck box at the plant site except in the metro area. All metro contracts will have a special provision requiring sampling from behind the paver unless the Engineer authorizes an alternate sampling location.

2360.2 G.7.1 Asphalt Binder Samples

(pages 19 & 20)

Asphalt Binder Sampling: Asphalt binder samples can no longer be taken from the transport. In order to verify the actual asphalt being incorporated into the mixture the Contractor must install a sampling valve located between the asphalt pump and the drum. All asphalt binder samples are to be taken from the sampling valve. Make note that a minimum of 1 gallon of binder must be drawn and wasted from the sampling valve before the actual sample is drawn.

2360.2 G.14.a Ratio of New Added Asphalt Binder to Total Asphalt Binder – Acceptance Criteria (page 24) Table 2360-15: Shows production acceptance criteria.

2360.2 G.14.c Individual Test Acceptance (Table 2360-16)

(page 25)

<u>Gradation:</u> Removed reduced payment for individual gradation failures. However, there is still reduced payment for moving average gradation.

2360.3 A.5 Mixing and Discharge of Materials

(page 27)

<u>Mixing Temperatures</u>: Limits mixing temperature to 30F above suppliers maximum recommended mixing temperature.

2360.3 B.3 Tack Coat

(page 30)

<u>Tack Coat</u>: Specification 2357 has been changed and will be discussed later, but, in 2360, the application of a uniform tack coat is stressed. A uniform application will not have streaks (corn rows), bare spots, puddles, or other irregular patterns. Additionally, emulsion samples are to be taken from the distributor.

2360.3 D.1.d Density Determination (Core Bulk Density)

(page 32)

<u>Density Determination (core bulk density)</u>: If less than 45% aggregate passes the #4 sieve, Engineer may require Corelok be used to determine bulk specific gravity.

2360.3 D.1.d One Percent Reduced Density

(page 34)

One Percent Reduced Density: It is now the Contractors decision if they want to waive reduced density. Contractor must notify the Engineer, in writing, after the first day and by the end of the third day of intent to waive reduced density.

2360.3 D.1.q Density Payment Schedule

(page 36 & 37)

<u>Density Less than 89%</u>: Footnote on Tables 2360-22 & 23 now provides better guidance of how to address failing lots with very low densities.

2360.3 D.2 Ordinary Compaction

(page 39)

<u>Ordinary Compaction</u>: Included bike paths, walking paths, and other non-traffic paving areas under Ordinary Compaction.

2360.3 D.3 Mat Density Option

(page 40)

Optional Department Only Core Testing: Included a section in density where the Contractor can request all cores be tested by the Agency.

2399 Specification (Pavement Surface Smoothness)

2399.1 Description Definition

Smoothness: The Mean Roughness Index (MRI) for a 0.1 mile segment.

Areas of Localized Roughness (ALR): The MRI for a 25 foot interval.

Table 2399-7 ALR Adjustments

<u>ALR Adjustments</u>: Changed the \$50 deduct to a \$100 deduct for ALR \geq 250 in/mi for HMA-A and HMA-B projects with a posted vehicle speed of > 45 mph.

2399.3 D.1.a

<u>Smoothness Adjustments</u>: No longer allow deducts to be canceled by incentive for projects with > 25% of all mainline density lots failing to meet minimum density requirements.

2357 Bituminous Tack Coat Specification

2357.2 Materials

<u>Dilution of Emulsion</u>: The specification allows the use of emulsions either undiluted or diluted 70/30. <u>Field dilution is not allowed.</u>

2357.3 D Application of Bituminous Tack Coat Material

<u>Tack Application</u>: Tack each lift even when placing multiple lifts in the same day and also when placing multiple lifts within hours of each other.

<u>Yield Check:</u> Perform a yield check at the beginning of each project to verify the tack application rate is correct.

2357.3 F Bituminous Sampling

Tack Sampling: Sample tack from the distributor.

2357.3 H Acceptance of Tack Material

Acceptance of Tack Material: Monetary adjustment for failures related to materials and workmanship.