

SPECIFICATION, SPECIAL PROVISIONS AND DRAWINGS
REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Double chip seal emulsion application rates stated in section 404 require approximately 60% of the total emulsion demand to be placed on the bottom layer; Industry emulsion manuals as well as the Asphalt Handbook specifically recommend approximately 40% of the total emulsion demand to be placed on the bottom layer.

The Department has only recently begun to construct double chip seals on mainline and problems have occurred on SR-58 in the Vincennes District as well as on SR-252 in the Seymour District. The 60% total emulsion rates on the bottom layer has produced too much oil that has caused bleeding thru to the top layer; corrections to date have had to include milling the surface to restore friction.

PROPOSED SOLUTION: Keep the total emulsion demand as currently stated in section 404 but change the percentages to 40% of the total emulsion for the bottom layer and 60% of the total emulsion for the top layer.

APPLICABLE STANDARD SPECIFICATIONS: 404

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: Seal Coat, SYS

Submitted By: Michael Prather & Michael Buening

Title: Area Pavement Engineer

Phone Number: 234-8250, 232-5242

Date: 09/03/13

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad-Hoc committee comprised of Michael Buening, Jason Lowther, Bill Tompkins, and Adam Redman of Asphalt Materials.

REVISION TO STANDARD SPECIFICATIONS

SECTION 404- SEAL COAT
 404.04 COVER AGGREGATE

(Proposed revision shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 404, BEGIN LINE 21, DELETE AND INSERT AS FOLLOWS:

404.04 Cover Aggregate

Aggregate shall be in accordance with the following requirements. When slag is used as an alternate to natural aggregate, adjustments will be made in accordance with 904.01, to compensate for differences in specific gravity.

Coarse Aggregates, Class B or Higher

Size No. 8, 9, 11, or 12..... 904

Fine Aggregate, Size No. 23 or 24..... 904

The types of seal coats shall be as follows:

Type (see Note 1)	Application	Cover Aggregate Size No. and Course	Rates of Application per sq yd	
			Aggregate, lb	Asphalt Material, Gal. at 60°F
1 or 1P (see Note 2)	Single	23, 24	12 - 15	0.12 - 0.16
2 or 2P	Single	12	14 - 17	0.29 - 0.33
3 or 3P	Single	11	16 - 20	0.36 - 0.40
4 or 4P	Single	9	28 - 32	0.63 - 0.68
5 or 5P	Double	Top: 12 Bottom: 11	16 - 19 16 - 20	0.33 - 0.37 0.41 - 0.46 0.36 - 0.40 0.28 - 0.31
6 or 6P	Double	Top: 11 Bottom: 9	18 - 22 28 - 32	0.41 - 0.46 0.62 - 0.68 0.63 - 0.68 0.42 - 0.46
7 or 7P	Double	Top: 11 Bottom: 8	18 - 22 28 - 32	0.41 - 0.46 0.62 - 0.68 0.63 - 0.68 0.42 - 0.46

Note 1 - AE-90S shall be used for type P seal coats.
 Note 2 - HFRS-2 shall not be used with type 1 seal coat.

COMMENTS AND ACTION
 404.04 COVER AGGREGATE

<p>Motion: Second: Ayes: Nays:</p>	<p>Action: <input type="checkbox"/> Passed as Submitted <input type="checkbox"/> Passed as Revised <input type="checkbox"/> Withdrawn</p>
<p>Standard Specifications Sections affected: SECTION 404.04 pg. 275.</p>	<p><input type="checkbox"/> 2014 Standard Specifications Book <input type="checkbox"/> Revise Pay Items List</p>
<p>Recurring Special Provision affected: NONE</p>	<p><input type="checkbox"/> Create RSP (No.____) Effective ____ Letting RSP Sunset Date: ____ <input type="checkbox"/> Revise RSP (No.____) Effective ____ Letting</p>
<p>Standard Sheets affected: NONE</p>	<p>RSP Sunset Date: ____</p>
<p>Design Manual Sections affected: NONE</p>	<p>Standard Drawing Effective ____ <input type="checkbox"/> Create RPD (No. ____) Effective ____ Letting</p>
<p>GIFE Sections cross-references: NONE</p>	<p><input type="checkbox"/> Technical Advisory</p>
	<p>GIFE Update Req'd.? Y __ N __ By ____ Addition or ____ Revision</p>
	<p>Frequency Manual Update Req'd? Y __ N __ By ____ Addition or ____ Revision</p>
	<p>Received FHWA Approval? ____</p>