



Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ERIK FENNIMAN
INTERIM SECRETARY

January 15, 2019

Khoa Nguyen
Director, Office of Technical Services
Federal Highway Administration
3500 Financial Plaza, Suite 400
Tallahassee, Florida 32312

Re: State Specifications Office
Section: **334**
Proposed Specification: **3340802 Superpave Asphalt Concrete.**

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Wayne Rilko of the State Materials Office to modify the language.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to dan.hurtado@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on file

Dan Hurtado, P.E.
State Specifications Engineer

DH/dt
Attachment

cc: Florida Transportation Builders' Assoc.
State Construction Engineer

SUPERPAVE ASPHALT CONCRETE.(REV ~~11-13-18~~ 1-15-19)

SUBARTICLE 334-8.2.2 is deleted and the following substituted:

334-8.2.2 Two or Less Sublot Test Results: In the event that two or less sublot test results are available for a LOT, Pay Factors will be determined based on Table 334-6, using the average of the accumulated deviations from the target value. (~~Except for Density,~~ ~~D~~deviations are absolute values with no plus or minus signs.) Use the 1-Test column when there is only one sublot test result and use the 2-Tests column when there are two sublots.

Table 334-6 Small Quantity Pay Table		
Pay Factor	1 Sublot Test Deviation	2 Sublot Test Average Deviation
Asphalt Binder Content		
1.05	0.00-0.23	0.00-0.16
1.00	0.24-0.45	0.17-0.32
0.90	0.46-0.55	0.33-0.39
0.80	>0.55	>0.39
No. 8 Sieve		
1.05	0.00-2.25	0.00-1.59
1.00	2.26-4.50	1.60-3.18
0.90	4.51-5.50	3.19-3.89
0.80	>5.50	>3.89
No. 200 Sieve		
1.05	0.00-0.55	0.00-0.39
1.00	0.56-1.10	0.40-0.78
0.90	1.11-1.50	0.79-1.06
0.80	>1.50	>1.06
Air Voids		
1.05	0.00-0.50	0.00-0.35
1.00	0.51-1.00	0.36-0.71
0.90	1.01-1.70	0.72-1.20
0.80	1.71-2.00	1.21-1.41
0.70	2.01-2.50	1.42-1.77
0.55	>2.50	>1.77
Density ⁽¹⁾		
1.05	+(0.00-12.00), - (0.00-0.50)	+(0.00-01.740), - (0.00-0.35)
1.00	+(12.01-23.00), - (0.51-1.00)	+(01.741-12.410), - (0.36-0.71)
0.95	+(23.01-23.50), - (1.01-2.00)	+(12.411-2.180), - (0.72-1.41)
0.90	+(23.51-34.00), - (2.01-3.00)	+(2.181-23.850) - (1.42-2.12)
0.80	+ >34.00	+ (>23.850), - (>2.12)

Table 334-6 Small Quantity Pay Table		
Pay Factor	1 Sublot Test Deviation	2 Sublot Test Average Deviation
(1). Each density test result is the average of five cores. The target density is 93.00 percent of G_{mm} (92.00 percent when compaction is limited to the static mode or for layers specified to be one inch thick). When compaction is limited to the static mode, no vibratory mode in the vertical direction will be allowed. Other vibratory modes will be allowed, if approved by the Engineer. In this case, the target density is 92.00 percent of G_{mm} .		

SUBARTICLE 334-8.2.3.1 (TABLE 334-7) is deleted and the following substituted:

Table 334-7 Specification Limits	
Quality Characteristic	Specification Limits
Passing No. 8 sieve (percent)	Target \pm 3.1
Passing No. 200 sieve (percent)	Target \pm 1.0
Asphalt Content (percent)	Target \pm 0.40
Air Voids (percent)	4.00 \pm 1.20
Density, vibratory mode (percent of G_{mm}):	93.00 + 23.050 , - 1.20
Density, static mode (percent of G_{mm}):	92.00 + 34.050 , - 1.50 ⁽¹⁾
(1): No vibratory mode in the vertical direction will be allowed. Other vibratory modes will be allowed, if approved by the Engineer.	

SUBARTICLE 334-8.3 is deleted and the following substituted:

334-8.3 Composite Pay Factor (CPF): A CPF for the LOT will be calculated based on the individual PFs with the following weighting applied: ~~3450~~% Density (D), 25% Air Voids (V_a), ~~250~~% asphalt binder content (P_b), 10% Passing No. 200 (P_{-200}) and 5% Passing No. 8 (P_{-8}). Calculate the CPF by using the following formula:

$$\text{CPF} = [(0.\del{3450} \times \text{PF D}) + (0.25\del{90} \times \text{PF } V_a) + (0.2\del{500} \times \text{PF } P_b) + (0.100 \times \text{PF } P_{-200}) + (0.050 \times \text{PF } P_{-8})]$$

Where the PF for each quality characteristic is determined in either 334-8.2.2 or 334-8.2.3, depending on the number of subplot tests. Note that the number after each multiplication will be rounded to the nearest 0.01.

The pay adjustment shall be computed by multiplying the CPF for the LOT by the bid price per ton.

SUPERPAVE ASPHALT CONCRETE.**(REV 1-15-19)**

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0.55	>2.50	>1.77
Density ⁽¹⁾		
1.05	+ (0.00-2.00), - (0.00-0.50)	+ (0.00-1.40), - (0.00-0.35)
1.00	+ (2.01-3.00), - (0.51-1.00)	+ (1.41-2.10), - (0.36-0.71)
0.95	+ (3.01-3.50), - (1.01-2.00)	+ (2.11-2.80), - (0.72-1.41)
0.90	+ (3.51-4.00), - (2.01-3.00)	+ (2.81-3.50) - (1.42-2.12)
0.80	+ >4.00	+ (>3.50), - (>2.12)

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$$\text{CPF} = [(0.400 \times \text{PF } D) + (0.250 \times \text{PF } V_a) + (0.200 \times \text{PF } P_b) + (0.100 \times \text{PF } P_{-200}) + (0.050 \times \text{PF } P_{-8})]$$

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The pay adjustment shall be computed by multiplying the CPF for the LOT by the bid price per ton.