S-1 (3139) GRADED AGGREGATE FOR THINLAY ASPHALT MIXTURE

Always use with (THINLAY ASPHALT MIXTURE).

NEW WRITE-UP 08/10/16 ◄DO NOT REMOVE THIS. IT NEEDS TO STAY IN FOR THE CONTRACTORS.

The provisions of MnDOT 3139 are modified with the following:

S-1.1 Replace Table 3139-2, "Aggregate Gradation Broad Bands (percent passing of total washed gradation" with the following:

Table 3139-2
Thinlay Aggregate Gradation Broad Band (% passing of total washed gradation)

Sieve Size, inch (mm)	A modified % Passing	D % Passing
1" (25.0)	-	-
¾" (19.0)	-	-
½" (12.5)	100*	-
3/8" (9.5)	95 – 100	100*
#4 (4.75)	70 – 95	65-95
#8 (2.36)	45 – 80	45-80
#200 (0.075)	2.0 – 7.0	3.0-8.0

*The Contractor may reduce the gradation broadband for the maximum aggregate size to 97 percent passing for mixtures containing RAP, if the oversize material originates from the RAP source. Ensure the virgin material meets the requirement of 100 percent passing the maximum aggregate sieve size. Oversize material shall be no larger than the lift thickness to prevent aggregate dragging behind the screed.

S-1.2 Replace MnDOT Table 3139-3, "Mixture Aggregate Requirements" with the following:

Table 3139-3
Thinlay Aggregate Requirements

Aggregate Property	**Traffic Level 2**	**Traffic Level 3**
Min. Coarse Aggregate Angularity (ASTM D5821) (one face), %-	55	55
Min. Fine Aggregate Angularity (FAA) (AASHTO T304, Method A) %-	42	44
Max. Total Spall in fraction retained on the #4 [4.75mm] sieve –	1.0	1.0
Maximum Spall Content in Total Sample	1.0	1.0
Maximum Percent Lumps in fraction retained on the #4 [4.75mm] sieve	0.5	0.5
Class B Carbonate Restrictions	100% Allowed	100% Allowed
RAP must be processed to -1/2" or -3/8" for aggregate gradation A or D, respectively, except as noted above*.		