## Section 402. — ASPHALT CONCRETE PAVEMENT BY HVEEM OR MARSHALL MIX DESIGN METHOD

07/20/15–FP14

FLH Transmittal No. 1 07/20/15 4020010

Include the following when work is required for this Section.

Construction Requirements

### 402.03(c)(1) Aggregate and mineral filler.

Delete the text of paragraph (a)(2) and substitute the following:

*(2)* Designate target values within the gradation band specified for the nominal maximum aggregate grading shown in Table 703-4.

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Include the following when work is required for this Section.

### 402.03(d) Verification.

Amend as follows:

Add the following after Item (7):

**(8). Voids in the mineral aggregate (VMA).** The Contractor's VMA result is verified if the CO's result is within the specification limit in Table 402-2.

Delete Table 402-2 and substitute the following:

Table 402-2

Voids in Mineral Aggregate (VMA)

Hveem or Marshall Mix Design

| Sieve Size (1) | Voids in Mineral Aggregate,  % (2)(3) | |
| --- | --- | --- |
|  | Hveem | Marshall |
| No. 4 (4.75 mm) | 16.0-19.0 | 18.0-21.0 |
| ⅜ inch (9.5 mm) | 14.0-17.0 | 16.0-19.0 |
| ½ inch (12.5 mm) | 13.0-16.0 | 15.0-18.0 |
| ¾ inch (19 mm) | 12.0-15.0 | 14.0-17.0 |
| 1 inch (25 mm) | 11.0-14.0 | 13.0-16.0 |

(1) The largest sieve size listed in the applicable specification upon which material is permitted to be retained.

(2) VMA to be determined according to AASHTO R 35.

(3) When mineral filler or hydrated lime is used, include in the calculation for compliance with the VMA.