

EXPECTED IMPLEMENTATION JULY 2017

353 CONCRETE PAVEMENT SLAB REPLACEMENT.

(REV 10-27-16) (FA 12-23-16) (7-17)

SUBARTICLE 353-10.2 is deleted and the following substituted:

353-10.2 Maturity Method Testing: Use a maturity curve to estimate the strength of the concrete for opening to traffic for each day of production. Embed temperature sensors at mid-depth in the slab, at 6 inches from the leading edge of the transverse joint and at 6 inches from the longitudinal joint or at locations designated by the Engineer.

Develop a strength-maturity relationship curve using the Arrhenius maturity function with an activation energy of 33,500 J/mol as outlined in FM 3-C1074, in a laboratory with personnel qualified to perform the method. Compressive strength tests, as specified in FM 3-C1074, will be performed to produce a five point curve with points before and after the anticipated time for opening to traffic. Submit the mix design supporting data and the maturity curve to the Engineer for his approval.

Any changes of a material source or proportion in the concrete mixture will require a new maturity curve.