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**CONSTRUCTION INFORMATION MEMORANDUM No. 4-97**

TO: All Division Engineers

FROM: William J. Hartzog  
Construction Engineer

RE: Densities on Bituminous Concrete Wearing Surfaces

Subarticle 306.03(g) states that bituminous pavement layers having a plan designated placement rate of 54 kg or less per square meter, or 99 pounds or less per square yard, be compacted to the satisfaction of the Engineer. Layers having higher placement rates have specified density requirements.

Revised Guidelines For Operation 6-10, signed by the Director on July 29, 1997, and distributed by Mr. Lockett's August 4, 1997, letter, specifies laydown rates for 424 and 429 mixes which require specified densities. However, there are many projects already let, but not completed, having thin layers requiring only that the pavement be compacted to the satisfaction of the Engineer.

For thin layers, this office recommends that a control strip, similar to BMTP-224-71A, be utilized to determine the roller pattern to be used to achieve maximum density. Paragraph 6.1 of BMTP-224-71A states in part that... "A test point within the control section shall be selected, and each coverage of this point shall be checked by the non-destructive test device. Complete roller coverage of the control strip layer being tested shall continue until no significant increase in density is recorded by the non-destructive test device at the test point."

An increase in the count recorded by the test device(nuclear density gage) for consecutive readings is an indication of a corresponding increase in the density being achieved. The roller pattern used to achieve the highest count on the test device should then be used for the placement of the layer. We believe that the implementation of this procedure will ensure proper density and longer pavement life.

PLA/pa

cc: Mr. Larry Lockett  
FHWA  
AAPA  
File