TRANSPORTATION CABINET
Frankfort, Kentucky 40622
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Steven L. Beshear
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CONSTRUCTION MEMORANDUM **No. 04-12**

TO: Chief District Engineers
District TEBMs for Project Delivery and Preservation
District Section Engineers

FROM: Steven Criswell, P.E. Director
Division of Construction

DATE: June 25, 2012

SUBJECT: 10-Foot Straight Edge

Sections 609.03.08 and 606.03.17 of the Standard Specifications require variations greater than 1/8 inch in bridge deck surfaces to be eliminated prior to the project being complete. In accordance with specifications, the Engineer should check the slab once it has cured to ensure that the deck is within the 1/8 inch tolerance. The Contractor is required to perform corrective action on the deck in areas exceeding the 1/8 inch variation.

Kentucky Method 64-326-12 outlines the methodology for performing a 10-foot rolling straightedge test. Kentucky Method 64-326-12 is attached to this memorandum and can be found at the following web address http://transportation.ky.gov/Materials/Documents/KM326_12.pdf . The new Kentucky Method provides detailed procedures for conducting the rolling straightedge testing and details of how high areas are to be addressed. A project will not be considered complete until all areas not meeting the specifications are brought within tolerance.

Please contact this office with questions concerning this memorandum.

Cc: B. Lewis KAHC
S. Waddle FHWA
PAIKY

Kentucky Method 64-326-12
Dated 06/11/12

10-FOOT ROLLING STRAIGHT EDGE TEST

1. SCOPE: This method covers the procedure for conducting a 10-foot rolling straight edge test on bridge decks, including overlays, and concrete pavement where ride quality requirements do not apply. The purpose of the test is to determine areas that fail to meet the 1/8 inch tolerance outlined in section 501, 606 and 609 of the Standard Specifications

2. APPARATUS: 10-Foot Rolling Straight Edge: Rolling straight edge that has three adjustable rods spaced every 2.5 feet along the device. The rods shall be adjustable to provide a 1/8 inch clearance in a straight line between the bottom of the rods and the bottom of the wheels.

3. PROCEDURE:

   3.1 A 10-foot rolling straight edge test is required on all new bridge decks, bridge deck overlays, and all concrete pavement where ride quality requirements do not apply.

   3.2 Department personnel should test the deck as soon as the deck has cured and has been cleared of all debris.

   3.3 Department personnel should begin testing concrete pavement as soon as the concrete has hardened sufficiently to support walking.

   3.4 Place rolling straight edge in the wheel path of all lanes, including turning lanes. The exceptions to this testing are at single point urban interchanges where the turning lanes cross the crown of the bridge deck and at intersections when designed differently by the concrete intersection's pavement elevation detail sheet.

   3.5 Adjust the rods to provide a 1/8 inch clearance in a straight line between the bottom of the rods and the bottoms of the wheels.

   3.6 For bridge decks, roll the device along the entire length of the deck in the wheel path of each lane between the armored edges of the bridge ends. For concrete pavements, roll the device along the entire length of new concrete pavement in the wheel path of each lane.

   3.7 If the device encounters a spot greater than 1/8 inch, it will scrape the bridge deck until it clears the "high spot" in the deck. Mark the high spot in the deck.

4. RESULTS:

   4.1 All high spots marked on the deck should be corrected to provide the required 1/8 inch variance allowed by specifications.

4.2 The Contractor should propose a method for correcting the high spots found during the straight edge test.

4.3 The proposed method of correction must be approved by the Engineer prior to the start of any corrective action.

APPROVED _____

DIRECTOR
DIVISION OF MATERIALS

DATE 06/11/12

Kentucky Method 64-326-12
Dated 06/11/12