Subject: Profile Counts of Deck Profilographs

This Bulletin clarifies references to 'profile count' in Section 51-1.17, Finishing Bridge Decks, of the Standard Specifications. The 1992 edition of the specification states that:

The surfaces shall have a profile trace showing no high points in excess of 0.25-inch and the portions of the surfaces within the traveled way shall have a profile count of 5 or less in any 100-foot section.

This “profile count” refers to the summation of the height of scallops that are greater than 0.03" high and measured to the nearest 0.05" and expressed in tenths of inches. Thus, a count of 5 would reflect 0.5" of scallops recorded in a 100 ft section of profile trace. This is outlined in California Test 547.

The 1995/1999 editions of the specification states:

The surfaces shall have a profile trace showing no high points in excess of 6.35 mm, and the portions of the surfaces within the traveled way shall have a profile count of 13 or less in any 30-m section.

This profile count refers to the same criteria as listed above for the 1992 specification with the exception that the value is expressed in millimeters. Thus, if you had a count of five after following the procedure in California Test 547, you would multiply this value by 2.54 to obtain the “metric” value of the profile count.
Use the templates required by California Test 547 and perform the evaluation in accordance with the test method. When reporting the “count”, you **multiply the count** (which represents tenths of an inch in a hundred feet) **by 2.54** to obtain the “count” to compare to the metric specification reference (i.e. a count of 7 using the templates would equate to a metric profile count of 17.8).

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  BFelker, Construction Program Manager

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