



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

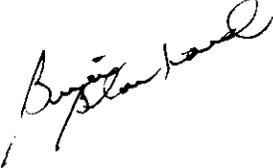
STEPHANIE KOPELOUSOS
SECRETARY

January 16, 2008

DCE MEMORANDUM NO. 01-08
(FHWA Approved: 1/15/08)

This Memo Has Expired

TO: DISTRICT CONSTRUCTION ENGINEERS

FROM: Brian Blanchard, Director, Office of Construction 

COPIES: District Bituminous Engineers, David Sadler, Jim Musselman, Duane F. Brautigam, David Wang, Jim Warren (ACA)

SUBJECT: ACCEPTANCE TESTING FOR PAVEMENT SMOOTHNESS BY LASER PROFILE (REPLACES DCE MEMO 14-04)

In order to simplify the implementation of Specification subarticle 330-12.6 (Acceptance Testing for Pavement Smoothness by Laser Profiler), several modifications to the specification were recommended by the Asphalt Smoothness Committee. The major changes are as follows:

- (1) Define partial LOT (330-12.6.3) – For bridge approaches, departures, and the beginning and end of the project, when the segment being tested is less than 0.1 mile, the segment will be called partial LOT.
- (2) Report of Ride Number (RN)(330-12.6.3) – The RN of each LOT/partial LOT will be reported to one decimal place in lieu of two decimal places.
- (3) Revisions on Note 1 and Note 2 (Table 330-3) – These revisions will simplify the straightedge operations and pavement smoothness acceptance.

For contracts let January 2004 through December 2007, please process a \$0.00 specification change to replace subarticle 330-12.6 included in the contract with the revised subarticle 330-12.6 that is attached.

This memorandum serves as blanket approval to process a specification change and should be attached to the Work Order or Supplemental Agreement.

If you have any questions, please contact David Wang at (850) 414-4152.

BB/ww

Attachment: Subarticle 330-12.6

**SURFACE REQUIREMENTS.
(REV 8-2-04)**

ARTICLE 330-12 (Pages 239 – 242) is expanded by the following sub-article:

330-12.6 Acceptance Testing for Pavement Smoothness by Laser Profiler: The Department will perform acceptance testing for smoothness on the completed pavement surface. The pavement smoothness will be determined by the high-speed Laser Profiler on limited access or other high-speed roadways where the design speed is equal to or greater than 50 miles per hour [80 km per hour]. Testing will be performed on mainline traffic lanes only. Ramps, acceleration and deceleration lanes, turn lanes, and other areas not suitable for testing with the high-speed Laser Profiler; will be tested for acceptance in accordance with 330-12.3.

The pavement smoothness as determined by the high-speed Laser Profiler will be expressed as a Ride Number (RN), in accordance with ASTM E 1489.

330-12.6.2 Requirements for Last Layer Prior to Friction Course: Straightedge the pavement behind the compaction operation in accordance with FM 5-509. Correct all deficiencies in excess of 3/16 inch [5 mm] in accordance with 330-12.4.

330-12.6.3 Acceptance Criteria for Friction Course: Upon completion of the friction course, the pavement smoothness of each lane will be determined by a single pass of the Laser Profiler furnished and operated by the Department in accordance with FM 5-549. In no case will the pavement be retested once the smoothness is determined. For evaluation purposes, the pavement will be divided into 0.1 mile [0.16 km] LOTs. For bridge approaches, departures, and the beginning and end of the project, when the segment being tested is less than 0.1 mile [0.16 km], the segment will be called a partial LOT. Upon completion of the testing, the Engineer will furnish a test report documenting the RN of each individual LOT and partial LOT. The RN will be reported to one decimal place. The acceptance criteria for pavement smoothness are shown in Table 330-3.

| Ride Number (RN) | Method of Acceptance |
|------------------------------|------------------------------|
| Greater than or equal to 4.0 | Acceptance with full payment |
| less than 4.0 | See Note 1 and Note 2 |

Note 1: For all full LOTs and partial LOTs with a RN less than 4.0, and the test report indicates that there is significant roughness (RN < 3.5 in 0.01 mile interval) within each LOT/partial LOT; correct all deficiencies in excess of 3/16 inch [5 mm] in accordance with 330-12.4 as identified by the 15 foot [4.572m] rolling straightedge. Correct all deficiencies in excess of 3/8 inch [10 mm] in accordance with 330-12.4 for bridge approaches, departures, and the beginning and end of the project, and segment with 15 feet [4.572m] measured toward the new pavement from the bridge joints or project beginning and end. Notify the Engineer of the location and time of correction a minimum of 48 hours before beginning the correction operation. Perform all corrections in accordance with 330-12.4. Upon completion of the corrections, straightedge the pavement with a 15 foot [4.572m] rolling straightedge as observed by the Engineer. Assure that there are no deficiencies greater than 3/16 inch [5 mm] in any full LOT/partial LOT.

Note 2: When no significant roughness is noted in the test report for a full LOT/partial LOT, this full LOT/partial LOT will be accepted with full payment. When there are three deficiencies or more identified by the 15 foot [4.572m] rolling straightedge within a full LOT/partial LOT separated by less than 50 feet [15 m] consecutively, remove and replace the entire full LOT/partial LOT at no cost to the Department.

The Engineer may waive the corrections and penalties if the deficiencies are caused by manholes, valve boxes, intersections, etc. that are beyond the control of Contractor.