To:

SUPERSEDED BY
EB 06-057
EFFECTIVE 5/3/07

New York State Department of Transportation
ENGINEERING INSTRUCTION

EI 05-019

Title: **REVISIONS TO STANDARD SPECIFICATION 490 COLD MILLING**

Distribution:
- ☐ Manufacturers (18)
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- ☐ _____( )

Approved:

Robert L. Sack, Deputy Chief Engineer, Technical Services

10-MAY-05
Date

ADMINISTRATIVE INFORMATION:

- This Engineering Instruction (EI) is effective beginning with projects submitted for the letting of September 8, 2005.
- No issuances are superseded by this EI.
- The shelf notes transmitted by this EI will be incorporated into the next revision of the Standard Specifications.

PURPOSE: The purpose of this EI is to transmit shelf notes for revised specifications for cold milling. The revisions are intended to be used as directed by EI 05-018 Design Guidance for Hot Mix Asphalt (HMA) Pavement Ride Quality Projects.

TECHNICAL INFORMATION: Production cold-mill planing is introduced and should be used on HMA mill and overlay projects using pavement ride quality specifications. Cold-mill planing applies the use of a 9-meter long, moving, averaging device to minimize pavement surface irregularities. The device can be a floating beam, ski, optical noncontact, or other suitable type. Averaging devices should not be specified on projects that require milling cleanly to the concrete of a composite pavement.

IMPLEMENTATION: The Design Quality Assurance Bureau (DQAB) will insert the transmitted shelf notes into design proposals with item number 490.15M Production Cold-Mill Surface Planing of Bituminous Concrete beginning with projects submitted for the letting of September 8, 2005. DQAB will incorporate the transmitted revisions into a future revision of the Standard Specifications.

TRANSMITTED MATERIALS: This EI transmits a shelf note which revises Section **490 Cold Milling** of the Standard Specifications.

BACKGROUND: The quality of a milled surface can directly affect the smoothness of an HMA overlay of the pavement. Humps, dips, or other surface imperfections caused by the milling process will often reflect through the subsequent paving courses. Similarly, if the existing pavement contains planar deviations, the same poor profile may result from milling, leaving only the paving course(s) to improve ride quality. The use of an averaging device such as a ski, and the application of surface tolerances during production cold milling can improve the contractor's ability to provide superior ride quality.

For more information about pavement ride quality, see EI 05-017 Special Specifications for Hot Mix Asphalt (HMA) Pavement Ride Quality, Levels 1 and 2, and EI 05-018 Design Guidance for Hot Mix Asphalt (HMA) Pavement Ride Quality Projects.

CONTACT: For additional information regarding these shelf notes for cold milling, contact Chad Corbett of the Materials Bureau at (518) 485-6096, or ccorbett@dot.state.ny.us.

Make the following changes to the Standard Specifications of January 2, 2002:

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Between lines 42 and 43, under §490-3 CONSTRUCTION DETAILS, ***insert*** the following:

"**490-3.04 Production Cold-Mill Surface Planing.** Production cold-mill surface planing of bituminous concrete surfaces shall be performed in accordance with the details and at the locations indicated on the plans. When specified, the milling machine shall control the profile and cross slope with a moving reference at least 9 meters in length. The moving reference may be a floating beam, ski, or other suitable type such that the resulting milled surface is sufficiently even.

In areas accessible to the milling machine, construct a milled surface to a maximum12 mm tolerance. If the pavement surface is not being constructed or has not been constructed to this tolerance based upon visual observation or upon riding quality, the Engineer may test the surface with a 5-meter straight edge or string line placed parallel to the centerline of the pavement and with a 3-meter straight edge or string line placed transversely to the centerline of the pavement on any portion of the pavement. Variations exceeding 12 mm will be satisfactorily corrected at no additional cost to the State."

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Line 15, under §490-5 BASIS OF PAYMENT, ***insert*** the following after Item No. 490.10 M:

"490.15 M	Production Cold-Mill Surface Planing of Bituminous Concrete	Square Meter"