ITEM 490.17010003 - PRODUCTION COLD MICRO-MILLING

DESCRIPTION. This work shall consist of the milling, shaping and removal of portions of existing surfaces by a cold micro-milling process, and subsequent cleaning, utilizing equipment and procedures meeting the requirements in this specification. The work shall consist of production cold micro-milling of Hot Mix Asphalt (HMA) pavement as indicated in the contract documents and as shown on the plans.

MATERIALS. Provisions of §490-2, Materials, shall apply except as modified below:

Equipment. The micro-milling machine shall be capable of removing travel lanes, including ramps, using a minimum of 12-foot milling drum. Milling shall be performed using a down-cut drum. The contractor shall be knowledgeable of equipment capabilities and is advised that the texture specified may not be obtainable at high production speeds. The drum shall have maximum tooth spacing of 0.20 inches (5 mm) and have a minimum of 3 wraps of teeth. The carbide cutting teeth shall be uniform in diameter with a uniform length, with a ±0.02 inch tolerance. The tooth holder blocks shall be uniform and not cause variations in the cut radius greater than ±0.02 inches. The contractor shall submit copies of the manufacturer’s equipment specifications 7 days prior to milling the test section that show the drum configuration meeting the specification requirements. Small areas, tapered lanes, etc., may be milled by a smaller machine acceptable to the Engineer.

The advancing ground speed of the milling operation shall be a function of the RPMs of the milling drum such that the full uniform texture pattern is achieved. The speed of milling operation, in feet per minute, shall be limited to 2/3 times the drum RPMs. Any proposal to advance faster than this speed shall be discussed with the Engineer and proven on the test strip, and result in no repeated inconsistencies in texture during production milling. If these inconsistencies are present, the machine speed will be reduced to the recommended speed as stated above.

CONSTRUCTION DETAILS. Provisions of §490-3.01, Construction Details, General shall apply.

Production Cold Micro-Milling. Production cold micro-milling of bituminous surfaces shall be performed in accordance with the details and at the locations indicated on the plans.

The milled area shall include the left lane/shoulder joint, the right lane/shoulder joint and everything in between. The cut shall be no deeper than ¾” or ½ the thickness of the existing overlay, whichever is less. It shall also be no deeper than necessary to texture the low points of wheel ruts.

The entire surface shall be textured, shall be substantially free from waves or irregularities, and shall not vary from a 10-foot straight edge by more than 1/8 inch. There can be occasional exceptions as determined by the engineer where the bottom of a wheel path and other low point defects may not be textured in order to maintain acceptable profile. The texture produced for the finished pavement shall be a uniform surface with longitudinal striations. The difference between the high and low points of the surface texture shall be approximately 1/16 inch.

On the first day of milling, after acceptance of the proposed equipment submittal, the contractor will construct a test strip at specified ground speed. The texture and consistency of profile and cross slope of this test section will be evaluated by the Engineer. If the contractor proposes to mill at higher...
ITEM 490.17010003 - PRODUCTION COLD MICRO-MILLING

speeds than this specification allows, a test strip must be constructed to demonstrate the texture achieved will meet the specification limits.

METHOD OF MEASUREMENT. Provisions of §490-4, Method of Measurement, shall apply.

BASIS OF PAYMENT. Provisions of §490-5, Basis of Payment, shall apply.

Payment will be made under:

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<thead>
<tr>
<th>Item No</th>
<th>Item</th>
<th>Pay Unit</th>
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<tbody>
<tr>
<td>490.17010003</td>
<td>Production Cold Micro-Milling</td>
<td>Square Yard</td>
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