

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
FINE TEXTURE PAVEMENT MILLING

CFS:KPK

1 of 2

APPR:MJB:CJB:03-16-20
FHWS:APPR:04-03-20

a. Description. This work consists of fine texture milling and removal of existing hot mix asphalt (HMA) pavement from the project.

b. Equipment. Ensure the milling equipment is self-propelled with sufficient power, traction and stability to remove the existing HMA pavement to the specified depth and cross slope. Use a milling machine with a minimum overall length of 18 feet and minimum cutting width of 6 feet. Ensure the milling machine is configured with either a 0.3 inch tooth spacing, a 0.6 inch tooth spacing operated at a maximum speed of 40 feet per minute, or approved equal configuration and speed capable of meeting *ASTM E965* testing requirements. Equip the milling machine with a built-in automatic grade control system that can control the longitudinal profile and transverse slope to produce the specified results. Provide longitudinal controls capable of operating from any longitudinal grade reference, 30 foot contact ski minimum or 30 foot non-contact sonic ski minimum. The transverse control must have an automatic system for controlling cross-slope at a given rate.

c. Construction. Schedule the milling operation to minimize the duration and placement of traffic on the milled surface. Ensure the milling operation does not proceed more than 5 miles ahead of the paving operation. Coordinate milling and paving operations to minimize the exposure to traffic. The milled surface may be exposed to traffic for a maximum of 72 hours. Failure to overlay the milled surface within the 72 hour time frame will result in the assessment of Liquidated Damages as specified in subsection 108.10.C.2 of the Standard Specifications for Construction. Repair any damage to the pavement structure resulting from extended exposure of the milled surface to traffic as directed by the Engineer at the Contractor's expense. Maintain the milled surface, including any necessary provisions for adequate drainage, as directed by the Engineer.

Ensure the pavement is milled to the depth as specified on the plans and/or in the proposal in a manner that will restore the pavement surface to a uniform cross-section and longitudinal profile as directed by the Engineer. The Engineer may adjust the average milling depth by 3/4 inches during each milling pass at no additional cost to the Department to minimize delamination of the underlying pavement course. Ensure the cross slope of the milled surface is established by an automatic cross slope mechanism. Ensure that the milled area is free from gouges, continuous grooves, ridges and has a uniform texture. Ensure the vertical edge created from the milling operation has a maximum horizontal gouge in the vertical edge milling of 1.0 inch. Adjust the mill to meet the maximum 1.0 inch gouge in vertical edge by speed adjustment, drum speed or teeth adjustments as directed by the Engineer. If traffic is to be maintained on the milled surface prior to the placement of the new HMA course, provide suitable transition's between areas of varying thickness to create a smooth longitudinal riding surface. Prior to opening the milled surface to traffic, clean the pavement surface with a power broom or other approved equipment to remove fine material which will create dust under traffic.

Ensure the milled surface has a texture such that the variation from the edge of the 10-foot straightedge to the top of ridge between two ridge contact points does not exceed 1/4 inch. The difference in height from the top of any ridge to the bottom of the groove adjacent to that ridge will not exceed 1/8 inch. Correct any point in the surface not meeting these requirements at the Contractor's expense.

Ensure the milling operation is providing an acceptable surface texture by achieving a maximum Macro texture of 0.08 inches thickness in accordance with *ASTM E965*. Perform three tests within the first 5,000 square yards of milling, then one test every 7,500 square yards thereafter. If the required maximum depth is exceeded in one of the first three tests, repeat the test procedure until continuous required depths are achieved or the initial 5,000 square yards section will be repeated.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

| Pay Item | Pay Unit |
|----------------------------------|-------------|
| Fine Textured Pavt Milling | Square Yard |

Fine Textured Pavt Milling includes furnishing all labor, material, tools, equipment and incidental's involved in the milling operation, removing milling residue, cleaning the pavement and testing per *ASTM E965*.