MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**REMOVAL OF HOT MIX ASPHALT BRIDGE DECK OVERLAY AND WATERPROOFING MEMBRANE**

BRG:CAW 1 of 2 APPR:JAB:DMG:02-16-24

**a. Description.** This work consists of removing the HMA overlay and waterproofing membrane on the bridge deck in accordance with the standard specifications and this special provision at the locations shown on the plans.

**b. Materials.** None specified.

**c. Construction.** Remove the existing HMA overlay and waterproofing membrane with a fine tooth mill.

Prior to commencing milling operations, physically determine the exact thickness of the existing HMA overlay and waterproofing membrane with hammer drills or other Engineer approved methods. Verify thicknesses at a minimum of every 20 feet longitudinally, and transversally at a distance equivalent to the milling drum length. If variations in thickness between measurements is equal to or greater than 1/4 inch, tighten verification spacing as directed by the Engineer.

1. Furnish fine tooth milling equipment, that meets the minimum requirements below, and consistently mills the surface in a minimum of two passes to the required grade without removal of deck concrete. Ensure the final pass is not thicker than 1/2 inch or as approved by the Engineer. Do not impair surface drainage or create any areas that allow water to pond. Furnish vacuum equipment to extract milled material and excess water from the bridge deck and pavement. Prevent dust from escaping into the air during the vacuuming operation. Begin operations at the west end of the limits of work.

Furnish milling machines equipped with the following features:

A. Automatically controlled and activated cutting drums,

B. Grade reference and transverse slope control capabilities, and

C. Minimum 3-foot-wide cutting drums with teeth spacing at a maximum 5/16 inch.

2. Minimize damage to the underlying concrete deck from the milling operation. Remove the HMA overlay as close as possible to the curb line, drain structures and bridge joints to avoid damage. Hand chip with a maximum 30-pound chipping hammer, hand grinder, scabbler, shot blaster, scarifier or other method approved by the Engineer to remove the HMA and waterproofing membrane material from around the above-mentioned features.

If determined unsuccessful by the Engineer, all fine milling activities will be suspended.

Propose other HMA removal methods to the Engineer for review and approval.

3. A HMA overlay is to be installed. Perform all work in accordance with the standard specifications under separate work items.

**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**

HMA Ovly and Waterproofing Membrane, Rem Square Yard

**HMA Ovly and Waterproofing Membrane, Rem** will be measured and paid for based on actual deck surface area where the removal occurred. Payment includes collection and disposal of removed membrane and HMA materials.