## MICHIGAN DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISION FOR LONGITUDINAL GROOVING OF CONCRETE PAVEMENT

CFS:ARB 1 of 2 APPR:TEH:JAB:05-17-13 FHWA:APPR:10-09-13

- **a. Description.** This work consists of diamond grooving existing concrete pavement surfaces at locations shown on the plans, or as directed by the Engineer.
- **b. Equipment.** Provide machinery, tools, and equipment necessary for proper execution of the work as described in this special provision. Do not use flailing devices. Use machines that:
  - are self-propelled and built for grinding and/or grooving concrete pavements;
  - have a minimum head width of 3 feet:
  - provide enough power, traction, and stability to maintain specified depth of cut and cross slope; and
  - are able to achieve a uniform depth of cut, flush to all inlets, manholes, bridge joints, and other appurtenances within the paved area.
- **c. Construction.** Begin and end longitudinal grooving at lines perpendicular to the pavement centerline.

Start each work shift with machines equipped with a full complement of diamond grooving blades that are capable of cutting grooves of the specified width, depth, and spacing.

Cease operations when two or more grooving blades on any individual grooving machine become incapable of cutting grooves as specified.

At least 90 percent of any selected 2 foot by 100 foot area of concrete pavement must be grooved. Limit ungrooved pavement within the selected area to that which occurs as a result of pavement irregularities.

Do not groove within 1 foot of inductive loop, environmental surface, or weigh in motion detectors.

Do not groove within 3 inches of any longitudinal joint.

Control and dispose of grooving residue in accordance with subsection 603.03.C of the Standard Specifications for Construction, and in accordance with any special provision for managing diamond grinding slurry. Allow the Department access to obtain samples of the grooving residue and cooling water for chemical testing.

**d. Tolerance.** Groove pavement 0.12 inch ( $\pm 0.03$  inch) wide by 0.16 inch ( $\pm 0.03$  inch) in depth, with a land area between the grooves of 0.75 inch ( $\pm 0.05$  inch).

**e. 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    |
|------------------------------|-------------|
| Longit Grooving of Conc Pavt | Square Yard |

Longit Grooving of Conc Pavt will be measured by area to the nearest square yard of concrete pavement grooved and accepted. The quantity of concrete pavement will be determined by multiplying the width and length of the grooved area without deduction for grooving omitted at edges, joints, and/or other devices. Payment for Longit Grooving of Conc Pavt includes full compensation for furnishing all labor, materials, supplies, tools, equipment and incidentals for doing all work involved in grooving the concrete pavement, including cleanup and the work of collection, hauling, disposal and spreading of the grooving residue.