

## **SECTION 613.50 Cross Stitching**

**613.50.1 Description of Work.** The work shall consist of repairing longitudinal pavement cracks by pinning the pavement slabs together with a series of alternating tie bars.

### **613.50.2 Material.**

**613.50.2.1 Tie Bars.** Tie bars shall be in accordance with Sec1057 and as shown on the plans.

**613.50.2.3 Epoxy.** Epoxy or Polyester Bonding Agents for Dowels shall be in accordance with Sec1039.

### **613.50.3 Construction Requirements**

**613.50.3.1** At each cross-stitch location, holes shall be drilled at a 35° angle to the pavement surface, starting a variable distance from the longitudinal joint, in a direction perpendicular to the crack. The drill bit diameter shall not exceed 1 1/8" (35 mm). Drilling shall alternate back and forth on either side of the longitudinal crack from hole to hole. Drilled holes shall not penetrate through the bottom of the slab. Drilled holes shall contain no loose debris and be completely clean.

**613.50.3.2** Epoxy shall be injected or poured into each hole. A tie bar shall be inserted in each hole such that the epoxy material is evenly distributed around the bar and extruding from the surface opening. Each bar shall be inserted far enough to allow 1 1/2" (40 mm) of cover as shown in the plans.

**613.50.3.3** The pavement surface shall have all excess epoxy removed and have a flush finish.

**613.50.3.4** Traffic shall not be permitted on the repaired pavement until the epoxy bonding material has cured in accordance with the manufacturers recommendations.

**613.50.4 Method of Measurement.** Measurement of cross stitching will be made per tie bar at each individual location.

**613.50.5 Basis of Payment.** The accepted quantity for cross stitching will be paid for at the contract unit price per cross stitch tie bar, complete in place. No direct payment will be made for any drilling, cleaning or epoxy material necessary to complete the work.