

SECTION 513—JOINT REHABILITATION

513.1 DESCRIPTION—This work is construction of a sealant reservoir and sealing transverse contraction, construction, or expansion joints in existing Portland cement concrete pavements of the type indicated.

Joint Rehabilitation is classified into two types as follows:

- (a) **Type 1.** Joint Rehabilitation of existing saw-cut joints.
- (b) **Type 2.** Joint Rehabilitation of existing metal plate joints.

513.2 MATERIAL—

- (a) **Joint Sealing Material.** [Section 705.4\(b\)](#) or [\(c\)](#)
- (b) **Joint Backing Material.** [Section 705.9](#)
- (c) **Tape Bond Breaker.** Duct tape, the width of the sealant reservoir.

513.3 CONSTRUCTION—As shown on the [Standard Drawings](#), and as follows:

(a) Type 1.

1. General. Perform this work after spall repairs at the joint are completed. Clean and seal any unrepaired spalls 50 mm (2 inches) or less in dimension. Construct the joint sealant reservoir by sawing to the width and depth indicated for the appropriate existing joint spacing. In general, center the sealant reservoir around the existing joint opening. Immediately after sawing, flush the joint with water.

Place tape bondbreaker on bottom of joint reservoir immediately before sealing. Do not allow tape to extend up reservoir face more than 3 mm (1/8 inch).

2. Existing Wide Joint. If the existing joint is as wide as or wider than the required width of sealant reservoir, thoroughly clean the joint to the depth required for the sealant reservoir. Instead of sawing, the vertical faces of the joint may be thoroughly cleaned by sandblasting, or water blasting. If water blasting, use a waterblaster with a minimum operating capacity of 0.6 L/s (10 gallons per minute) at 48 MPa (7,000 pounds per square inch). Place joint backing material to the depth required for the sealant reservoir, if necessary.

3. Sealing. Immediately before placing the sealing material, sandblast all vertical faces of the joint and clean, with a compressed air stream measuring 700 kPa (100 pounds per square inch) at the source, free of oil, moisture, and other contaminants. Seal as specified in the applicable parts of [Section 501.3\(n\)](#).

(b) Type 2. Construct as specified for Joint Rehabilitation Type 1, except remove the portion of the existing steel plate that lies within the new sealant reservoir before sealing the joint. A maximum of 6 mm (1/4 inch) of the plate may protrude into the reservoir.

513.4 MEASUREMENT AND PAYMENT—Meter (Linear Foot)

The unit price includes cleaning and sealing of small unrepaired spalls.

Repair any damage to the existing shoulders because of this work at no additional expense to the Department.