

**ITEM 18502.4467 M - REPAIR OF SPALLED AREAS, JOINTS AND/OR  
CRACKS IN PORTLAND CEMENT CONCRETE PAVEMENT**

**DESCRIPTION:**

This work shall consist of removing cracked, spalled or delaminated concrete and/or existing asphalt patches and/or overlays at spalled areas, longitudinal joints, transverse joints and cracks. This work shall be done at the locations and to the dimensions indicated on the plans or where directed by the Engineer. However, in no instance shall the smallest dimension be less than 300 mm. The excavated area is to be cleaned and tack coated, and filled with asphalt concrete.

**MATERIALS:**

The materials shall meet the requirements of the following sections:

Asphalt Emulsion Tack Coat .... 702-90  
Hot Mix Asphalt Concrete (Type 1, 3, 6 or 7).

**CONSTRUCTION DETAILS:**

The Contractor shall schedule his work to insure that removal and replacement at each location will be completed within the time allotted for closing of traffic lanes found under the requirements for maintenance of traffic.

Material may be removed by a milling machine, powered rotary rock or concrete cutter, chipping hammer weighing not more than 18 kg or other means approved by the Engineer. If a milling machine is used, it shall be equipped with a means to control dust and other particulate matter. The cutting device shall be capable of producing a finished depth within 6 mm of the dimensions specified. The removal operation shall be performed in such a manner that the milled area is immediately cleaned of all loose material and dust, without producing objectionable dust. The patch limits shall be extended beyond the detected, delaminated or spalled area by 75 mm to 100 mm to assure removal of all unsound concrete. Power brooms shall be equipped with dust control devices.

Portland cement concrete and/or asphalt concrete patches which are loose, cracked, and/or delaminated adjacent to or in the spalled areas, joints and/or cracks shall be removed to 90 mm below the existing concrete pavement surface. Deteriorated portland cement concrete and/or asphalt concrete patches below this depth shall be cleaned and repaired as ordered by the Engineer. Excavated sides shall be nearly vertical. All reinforcing, joint supports, etc. encountered during removal of deteriorated concrete shall be cut flush, removed and disposed of by the contractor.

All excavated material shall become the property of the Contractor and shall be disposed of in a manner approved by the Engineer.

Prior to tack coating, the excavated surface shall be cleaned of dust, dirt and loose material and dried. Tack coat or asphalt concrete repair shall be placed only when ambient and surface temperatures are above 7° C and exposed surfaces are dry.

All excavated surfaces shall be sprayed or painted with asphalt emulsion tack coat. Complete coverage and uniform coating shall be obtained.

The asphalt concrete shall be placed and compacted in the prepared hole. Holes that cross an existing joint shall be filled across the joint; new joints do not have to be formed. Asphalt concrete shall be kept hot until placed, using insulated units or other means. No asphalt concrete shall be placed if its temperature is below 120° C.

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The asphalt concrete shall be thoroughly compacted with a small vibratory roller approved by the Engineer. The asphalt concrete shall be overfilled slightly for compaction and to prevent bridging the roller. The resulting patch shall be dense, smooth and no more than 10 mm above the existing surface.

**METHOD OF MEASUREMENT:**

The quantity to be measured under this item shall be the actual number of square meters of existing pavement repaired as specified.

**BASIS OF PAYMENT:**

The unit price bid per square meter shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work including the asphalt concrete.