

## **53.40 ASPHALT PAVEMENT PATCHING - HAND**

### **53.40.1 GENERAL**

The Work consists of using hand tools to spread asphalt concrete pavement material on a prepared surface and compacting it to the lines and dimensions as directed by the Engineer. The work will be performed in areas larger than 0.5 m<sup>2</sup> and typically less than 5 m<sup>2</sup> in surface area. Long, narrow areas such as ruts or depressions exceeding 5 m<sup>2</sup> in surface area will also be considered for classification under this work method.

### **53.40.2 MATERIALS**

The requirements for the supply and production of materials for this work shall be the same as for those materials defined and used for work under Specifications 53.13 or 53.14 as applicable.

### **53.40.3 EQUIPMENT**

The Contractor shall supply all equipment necessary to complete the Work.

### **53.40.4 PROCEDURE**

All Work shall be performed during daylight hours only, unless adequate lighting exists which provides visibility of at least 700 metres and prior approval of the Engineer is obtained. No Work shall be performed when the visibility is less than 700 metres.

Traffic control and signing shall be performed in accordance with Specification 55.1, Traffic Accommodation and Temporary Signing.

Loose debris or other objectionable material shall be removed from the areas to be patched, by brooming or other methods and a prime or tack coat applied. Cleaning up the work area includes removal and disposal of all loose asphalt pavement material at disposal locations as approved by the Engineer. Disposal of material within the right-of-way will be subject to the approval of the Engineer.

For patching on existing pavement surfaces, the tack coat shall extend a sufficient distance beyond the edge of the repair area to allow for feathering of the patching material.

Patching material on the edges of a patch shall be feathered using rakes or lutes. Coarse material shall be removed from the patch edges.

Patching material shall be spread by hand, in uncompacted lifts not exceeding 100 mm in depth and compacted to produce a hard, stable surface which does not rut or otherwise distort under traffic loading. Where required and as directed by the Engineer, the patching material may be placed to a depth in excess of 100 mm.

Patching material placed in a depression shall be compacted such that the completed patch is approximately 15 mm higher than the surrounding undisturbed pavement, but with the material on the edges feathered to provide a smooth transition between the patch and the existing pavement surface.

### **53.40.5 INTERIM TRAFFIC MARKINGS (SPOTTING)**

Where newly constructed patches obliterate existing painted roadway lines, the Contractor shall provide interim painted traffic markings (spotting) on the patched area. The end points of the barrier lines shall be marked or otherwise referenced where applicable.

All spotting must be applied using the same colour of paint as the permanent marking. Spots are to be 10 centimetres wide and 30 centimetres long, applied lengthwise to the road surface and shall delineate the travel lanes and/or both edge lines as applicable. The maximum distance between spots shall be 15 metres on tangent sections and 10 metres on curves.

The spots and barrier line reference marks shall be completely covered with glass beads at the time of painting.

#### **53.40.6 TIME TO COMPLETE**

In urgent situations, the Contractor shall complete the Work within 10 calendar days of the issuance of the Work Order. When the Work is required expeditiously but is not urgent, the Engineer may request the Work be completed within 30 calendar days. In all other cases, the Contractor shall complete the Work within 60 calendar days of the issuance of the Work Order.

#### **53.40.7 MEASUREMENT AND PAYMENT**

Measurement will be in square metres of surface area hand patched.

In urgent situations where the Contractor is required to complete the Work within 10 calendar days of the issuance of the Work Order, an additional payment will be made at the unit price bid per occurrence for "Pavement Patching (Hand) - Premium". This payment will be full compensation for complying with the accelerated scheduling required to complete the Work, including accelerated scheduling for all related Work such as excavation and backfill, pit-run and granular base course.

In situations where the Contractor is required to complete the Work within 30 calendar days of the issuance of the Work Order, an additional payment will be made at the unit price bid per occurrence for "Pavement Patching (Hand) - Interim Premium". This payment will be full compensation for complying with the accelerated scheduling required to complete the Work, including accelerated scheduling for all related Work such as excavation and backfill, pit-run and granular base course.

Supplying and applying paint and glass beads will not be paid for separately but shall be considered incidental to the Work.

#### **53.40.7.1 Contractor Supply of Asphalt Mix**

Payment will be made at the unit price bid per square metre for "Pavement Patching (Hand) - Produce and Place". This payment will be full compensation for preparing the surface, supplying and applying the prime or tack coat, supplying the asphalt binder, producing the crushed aggregate, producing, hauling, placing and compacting the asphalt concrete mix, traffic accommodation and signing, and all labour, equipment, tools and incidentals necessary to complete the Work.

Payment for the supply of aggregate will be made in accordance with Specification 55.4, Supply of Aggregate.

#### **53.40.7.2 Department Supply of Asphalt Mix**

Payment will be made at the unit price bid per square metre for "Pavement Patching (Hand) - Pick up and Place". This payment will be full compensation for preparing the surface, supplying and applying prime or tack coat, picking up, hauling, placing and compacting the asphalt concrete mix, traffic accommodation and signing, and all labour, equipment, tools and incidentals necessary to complete the Work.

#### **53.40.8 WARRANTY**

The warranty period for this Work shall be 1 year.