

53.9 TRANSVERSE CRACK REPAIR - SPRAY PATCH

53.9.1 GENERAL

The Work consists of repairing cracks and contiguous pavement deterioration (up to 15 cm in width) by cleaning the crack of all loose rock, dirt, sand or other objectionable material, applying asphalt binder as tack material, filling the crack with a mixture of asphalt binder and washed, crushed aggregate and compacting the mix.

53.9.2 MATERIALS

The Contractor shall supply aggregate required for the Work. The Contractor shall produce crushed and washed aggregate meeting the following specifications in accordance with Specification 55.3, Aggregate Production and Stockpiling.

<u>Metric Sieve Size</u>	<u>Percent Passing</u>
12 500	100
10 000	90-100
5 000	20-100
2 500	5-30
1 250	0-10

The Contractor shall supply RS-1K emulsified asphalt for binder and tack purposes in accordance with Specification 55.5, Supply of Asphalt. The use of other asphalt binders will be subject to the approval of the Engineer.

53.9.3 EQUIPMENT

The Contractor shall supply all equipment necessary to complete the Work. The equipment required includes but is not limited to the following:

- sweeping and blowing or suction equipment capable of cleaning the crack of all near surface loose dirt, sand, rock or other objectionable material,
- a proprietary or prototype machine capable of spraying RS-1K asphalt into the crack, and then combining washed, crushed aggregate and RS-1K asphalt and spraying the mixture into the crack.
- appropriate compaction equipment

53.9.4 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.

Work shall not be performed when the atmospheric temperature at the work site is below 5° Celsius.

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

The Engineer will determine which transverse cracks are to be repaired.

All loose and objectionable material shall be removed from the near surface depth in the open crack by sweeping, blowing or suction means.

Clean cracks shall be sprayed with RS-1K emulsified asphalt, and then sprayed with the combined asphalt and washed aggregate mixture.

Some over spraying of the crack will be required to ensure a smooth transition between the repaired crack and the adjacent undisturbed pavement surface.

The repaired area shall be compacted to ensure adequate embedment of the RS-1K aggregate mixture into and over the crack.

53.9.5 TIME TO COMPLETE

The Contractor shall complete the Work within 60 calendar days of the issuance of the Work Order.

53.9.6 MEASUREMENT AND PAYMENT

Measurement will be in metres of the length of crack treated.

Payment will be made at the unit price bid per metre for "Transverse Crack Repair (Spray Patch) - Supply and Place". This payment will be full compensation for sweeping and cleaning the cracks; supplying the washed, crushed aggregate and RS-1K asphalt binder; producing, hauling, placing and compacting the mix; traffic accommodation and signing, and all labour, materials, equipment, tools and incidentals necessary to complete the Work.

The cost of supplying aggregate is included in the unit price bid for "Transverse Crack Repair (Spray Patch) - Supply and Place" and will not be paid for separately.

If, in the opinion of the Engineer, additional equipment (supplemental to what is normally used in the "Spray Patch" operation) is required to remove objectionable material from the cracks, payment for such equipment will be made as Extra Work in accordance with Specification 51.2, General (For Maintenance Work).

53.9.7 WARRANTY

The warranty period for this Work shall be 1 year.