53.14 ASPHALT PAVEMENT PATCHING - PAVER

53.14.1 GENERAL

The Work consists of paver laying and compacting asphalt concrete pavement material on prepared surfaces in rutted areas or elsewhere on the roadway and to the finished lines and dimensions as directed by the Engineer. Painting of interim traffic markings (spotting) and the referencing of the ends of no passing zones (barrier lines) are included in the Work where patching obliterates existing pavement markings.

53.14.2 MATERIALS

The Contractor shall pick up asphalt concrete pavement material from an asphalt plant designated by the Engineer or produce asphalt concrete pavement material of the mix type specified in accordance with Specification 53.11, Production of Asphalt Concrete Pavement.

When required, the Contractor shall supply aggregate in accordance with Specification 55.4, Supply of Aggregate and produce crushed aggregate in accordance with Specification 55.3, Aggregate Production and Stockpiling for the designation and class of material specified.

The Contractor shall supply prime and tack coat materials in accordance with Specification 55.5, Supply of Asphalt. The types and grades of liquid asphalts for prime and tack coats will be the choice of the Contractor unless otherwise specified by the Engineer.

Paint and glass beads shall be supplied by the Contractor in accordance with the Special Provisions.

53.14.3 EQUIPMENT

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

An adjustable screed type paver capable of placing asphalt mix to a minimum width of 0.75 m will be required for patching on rutted pavement surfaces.

53.14.4 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 provided in accordance with Specification 55.1, Traffic Accommodation and Temporary Signing.

Before any asphalt concrete pavement is placed, loose debris or other objectionable material shall be removed from the area to be patched, by brooming or other methods, and a tack or prime coat applied. 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 placed on the edges of a patch shall be feathered using rakes or lutes. Course material shall be removed from the patch edges.

The asphalt concrete pavement material shall be placed with a paver 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.

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

Asphalt pavement material placed in a rutted depression in the direction of travel, shall be compacted such that the completed patch is level with the adjacent undisturbed pavement. In addition, the material on the edges of the patch shall be feathered to provide a smooth transition between the patch and the existing pavement surface.

53.14.4.1 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. Spotting shall be applied immediately following the completion of the patch. The end points of the barrier lines shall be marked or otherwise referenced where applicable.

All spotting shall be applied using the same colour paint as the permanent marking. Spots shall 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.

53.14.5 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.

53.14.6 MEASUREMENT AND PAYMENT

53.14.6.1 General

Measurement for asphalt pavement patching by paver on prepared surfaces other than in rutted areas will be in tonnes of pavement patching material placed.

Measurement for asphalt pavement patching of prepared surfaces in rutted areas will be in square metres of surface area paved.

Payment for hauling will be made in accordance with Specification 55.2, Hauling.

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

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 - 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 - 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.

53.14.6.2 Contractor Supply of Asphalt Mix

Payment will be made at the unit price bid per tonne for "Pavement Patching (Paver) - Produce and Place" or the unit price bid per square metre for "Pavement Rut Repair (Paver) - 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, 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.

53.14.6.3 Department Supply of Asphalt Mix

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

53.14.7 WARRANTY

The warranty period for this Work shall be 1 year.