

Roads

Master Specification

RD-PV-C6 Reinstatement of Existing Pavements

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RD-PV-C6 Reinstatement of Existing Pavements

1 General

- 1.1 This Part specifies the requirements for the reinstatement of an existing pavement above an excavation carried out for purposes such as the installation, maintenance or inspection of culverts, drainage structures, pits, cables, conduits and pipes.

2 Construction of Pavement

- 2.1 Unless specified otherwise, reinstatement of an existing pavement shall be undertaken in accordance with the applicable figure specified in the "Pavement Reinstatement Configurations", available from:
https://www.dpti.sa.gov.au/contractor_documents/works_on_roads_by_other_organisations.
- 2.2 Notwithstanding the above requirement, a reinstated pavement shall not be of a lesser standard and thickness than the existing pavement.
- 2.3 The supply of pavement materials shall comply with RD-PV-S1 "Supply of Pavement Materials".

3 Shoulders

- 3.1 The reinstatement of unsealed shoulders shall match finished shoulder level and existing crossfall.
- 3.2 Sealed shoulders shall be resealed with materials matching the original surface.
- 3.3 If traffic is diverted onto the road shoulder as part of traffic management, the shoulder shall be returned to the condition that existed prior to the Works taking place.

4 Unbound and Cement Treated Pavements

- 4.1 Unbound granular pavement layers shall be uniformly compacted in horizontal layers not exceeding 200 mm thickness (loose).
- 4.2 Specified compaction shall be determined using AS 1289, test method 5.2.1 (modified compaction) and tested at the frequency specified in Table RD-PV-C6 4-1.

Table RD-PV-C6 4-1 Compaction Testing Frequency – Unbound Pavement

Pavement Area	Testing Frequency
0 - 25 m ²	one test per layer
25 - 100 m ²	minimum 2 tests per layer
over 100 m ²	2 tests per layer and an additional test per layer for every 100 m ² or part thereof over 100 m ²

- 4.3 Cement treated pavements shall comply with RD-PV-S2 "Plant Mixed Stabilised Pavement".

5 Temporary Pavement Surface

- 5.1 The open surface of any pavement layer shall be maintained to prevent deterioration and the ingress of water prior to the application of the final surfacing.
- 5.2 In the event that the reinstatement and / or surrounding pavement layers become affected by the ingress of water prior to the application of final surfacing, all affected material shall be removed and replaced with conforming material.
- 5.3 If the final surfacing is not placed before the reinstatement is opened to traffic, a temporary asphalt or bituminous surface, similar to that previously existing, shall be provided and maintained in a safe and trafficable condition for all road users, including cyclists and pedestrians.

- 5.4 Where asphalt is used as the temporary surface, the minimum depth of asphalt shall be 50 mm.

6 Surfacing General

- 6.1 The supply and placing of the surfacing shall be undertaken in accordance with the requirements of the applicable figure in the Pavement Reinstatement Configurations document.
- 6.2 Unless approved otherwise in writing, the final surfacing shall extend:
- For a transverse Trench: Not less than that shown in Appendix 1: Minimum Surfacing Reinstatement Requirements.
 - For a longitudinal Trench: Full lane width.
- 6.3 The joint between the existing and reinstated final surfacing shall not be positioned within the wheel path.

7 Asphalt Surfacing

- 7.1 The final wearing course of the reinstatement of asphalt surfaced pavements shall be extended beyond the sides of the Trench by cold planning and reinstating to a minimum depth of 50 mm.
- 7.2 Unless approved otherwise in writing, the wearing course shall be laid with a paver. Within the DPTI Metropolitan Region, the wearing course shall contain polymer modified binder.
- 7.3 Asphalt layers, including the final surfacing, shall comply with the quality requirements, level tolerances and surface irregularity acceptance criteria of RD-BP-S2 "Supply of Asphalt" and RD-BP-C3 "Construction of Asphalt Pavements", except that the frequency of sampling and testing shall be in accordance with Table RD-PV-C6 7-1.

Table RD-PV-C6 7-1 Sampling and Testing Frequency - Asphalt

Pavement Area	Testing Frequency
0 - 30 tonnes	2 samples & tests
31 - 150 tonnes	4 samples & tests
151 - 300 tonnes	6 samples & tests
> 300 tonnes	6 samples & tests plus 1 sample & tests for each additional 200 tonnes or part thereof

- 7.4 The asphalt mix shall be registered with DPTI in accordance with RD-BP-S2 "Supply of Asphalt" and be identified as such on cart notes.
- 7.5 Attention is drawn to Clause 6.4 "Tack Coating" of RD-BP-C3 "Construction of Asphalt Pavements" which requires tack coating to be applied to vertical edges between old and new asphalt pavements. On completion of reinstatement, any residual saw cuts shall be sealed to prevent water ingress into the pavement in accordance with Clause 6.3 "Joint Sealing".

8 Joint Sealing

- 8.1 The joint sealing compound shall:
- be Class 170 bitumen to AS 2008 "Residual Bitumen for Pavements", modified with an appropriate polymer;
 - be designed to penetrate the joint or saw cut, adhere to the surface, and resist crack propagation; and
 - remain stable on the pavement surface during periods of extreme temperature and shall be approved in accordance with RD-BP-S3 "Supply of Pavement Crack Sealant" prior to use.
- 8.2 The grit shall comply with Sealing Aggregate SA5-2.
- 8.3 Prior to placement of sealant, joints or saw cuts shall be thoroughly cleaned of foreign material, without damage to the adjoining sound pavement, to provide a clean, dry environment.

- 8.4 If the pavement is damp, warm / hot compressed air may be used to dry of the surface of the joints or saw cut.
- 8.5 Sealing shall not be undertaken unless the surfaces that the sealant will be applied to are dry.
- 8.6 Joints and saw cuts shall be cleaned to a minimum depth 15 mm.
- 8.7 In excessively deep cuts, the void may be plugged with grit to within 15 mm of the pavement surface.
- 8.8 All voids shall be filled with sealant material to a level of not less than 15 mm below the pavement surface.
- 8.9 The level of sealant after gritting shall be flush with the adjoining road pavement.
- 8.10 The width of the visible bond on the pavement surface shall be as narrow as practical.
- 8.11 The sealant shall not run out over the pavement surface beyond the extent of the joint or saw cut.
- 8.12 Grit shall be placed on the surface of all sealant while it is sufficiently hot for the grit to adhere to the sealant.
- 8.13 Grit shall be placed at the minimum application necessary to provide adequate skid resistance and prevent pick-up of the sealant by traffic.

9 Sprayed Bituminous Surfacing

- 9.1 The reinstatement of sprayed bituminous surfacing shall be undertaken in accordance with the requirements of RD-BP-C5 "Application of Sprayed Bituminous Surfacing".
- 9.2 Sprayed bituminous surfacing shall comprise of a primer seal and sprayed bituminous surfacing, with the surfacing placed not less than 48 hours after the primer seal has been placed.
- 9.3 The surfacing shall match the size and texture of the existing adjacent road and be finished off evenly and flush with the adjoining pavement surface.
- 9.4 The resultant surfacing shall be within the tolerance of 15 mm as measured by a 3 m straight edge in any direction.

10 Reinstatement of Other Infrastructure

- 10.1 All pavement marking, road furniture, drainage systems, secondary paving and similar infrastructure which has been removed or damaged during the excavation and reinstatement work shall be replaced to the standard matching the existing and in accordance with the relevant parts of the DPTI Master Specification as listed in Table RD-PV-C6 10-1.

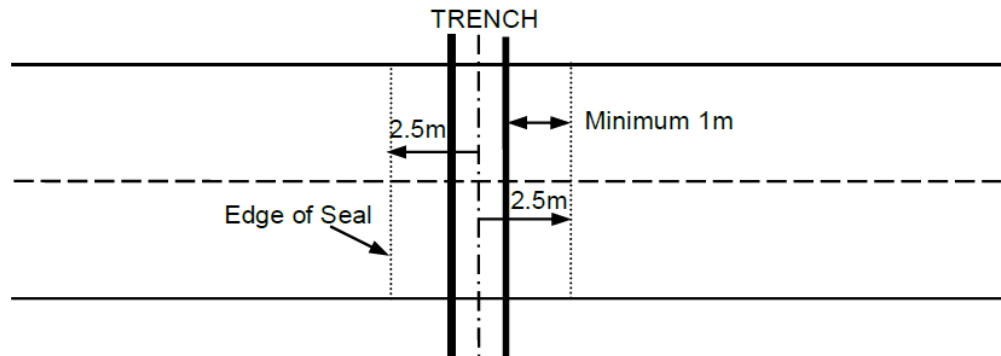
Table RD-PV-C6 10-1 Reinstatement of other infrastructure requirements

Infrastructure Type	Requirement
Pavement marking (includes raised pavement markers or pavement bars)	<p>Replacement in accordance with RD-LM-C1 "Application of Pavement Marking".</p> <p>The marking shall be completed within 5 working days of the completion of the final surfacing.</p>
Road Furniture (includes road signs, guide posts, safety barrier)	<p>Replacement in accordance with:</p> <ul style="list-style-type: none"> RD-BF-C1 "Supply and Installation of Steel Beam Road Safety Barrier Systems", RD-LM-S2 "Supply of Signs"; and RD-LM-C4 "Sign Installation". <p>Suppliers of signs shall be prequalified with DPTI.</p>

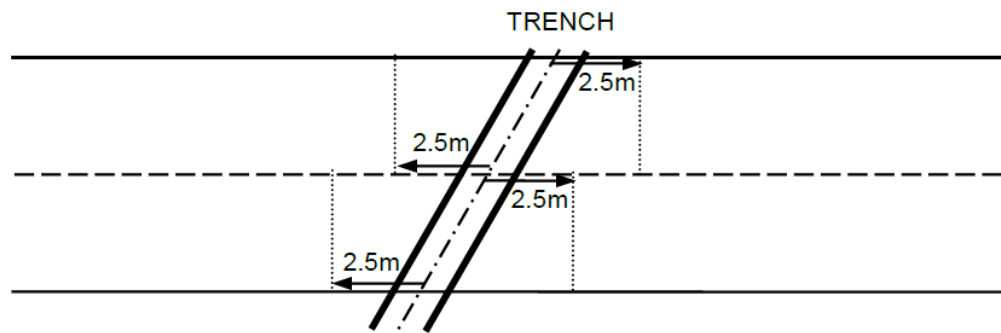
Infrastructure Type	Requirement
Concrete kerb and gutter or median type kerb	Replacement in accordance with PV-DK-C2 "Kerbing". Kerb reinstatement shall be completed within 3 days of reinstatement of the road pavement.
Vegetation	Any vegetation shall be replaced with vegetation that is of the same type and in the same positions as that removed or damaged in accordance with Division L "Landscaping" of the DPTI Master Specification.
Medians and traffic islands	Where the existing median consists of compacted granular material, the median shall be reinstated with PM2/20 compacted to no less than 92% of the dry density determined using AS 1289, test method 5.2.1 (modified compaction).
Footpaths and brick paved areas	Match existing pavement (i.e. base and any sub-base) configuration and surfacing type.
Road drainage systems	Report damage.

11 Appendix 1: Minimum Surfacing Reinstatement Requirements

Trenching at 90 degrees to the road



Trenching diagonally across the road



Trenching along the road

