

Specification (Measurement)

Transport and Main Roads Specifications MRS31 Heavy Duty Asphalt

January 2015





Copyright



http://creativecommons.org/licenses/by/3.0/au/

© State of Queensland (Department of Transport and Main Roads) 2015

Feedback: Please send your feedback regarding this document to: tmr.techdocs@tmr.qld.gov.au

Contents

| 1 Introduction | | 1 | |
|----------------|--|-----|--|
| 2 | Measurement of work | 1 | |
| | Standard Work Items | | |
| 2.2 | Work Operations | . 1 | |
| 2.3 | Calculation of quantities | . 2 | |
| 3 | Utilisation of a rejected lot for a reduced level of service | 2 | |
| 4 | Additional payment for a higher standard of surface evenness | 2 | |

1 Introduction

This Specification applies to the construction of dense graded asphalt layers for high load intensity low intervention pavements.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications* and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

2 Measurement of work

2.1 Standard Work Items

In accordance with the provisions of Clause 2 of MRS01 *Introduction to Specifications*, the standard work items covered by this Specification are listed in Table 2.1.

Table 2.1 - Standard Work Items

| Standard Item No. | Description | Unit of Measurement |
|----------------------|---|------------------------|
| 5563 | Dense Graded Asphalt Pavement, DG14HS mix | tonne |
| 5573 | Dense Graded Asphalt Pavement, DG14HP mix | tonne |
| 5574 | Dense Graded Asphalt Pavement, DG20HM mix | tonne |

2.2 Work Operations

Item 5563 Dense Graded Asphalt Pavement, DG14HS mix
Item 5573 Dense Graded Asphalt Pavement, DG14HP mix
Item 5574 Dense Graded Asphalt Pavement, DG20HM mix

Work Operations incorporated in the above items include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) being a registered asphalt manufacturer or engaging a subcontractor who is a registered asphalt manufacturer
- c) having a registered mix design or obtaining a registered mix design under the asphalt supplier registration system
- d) manufacture of the dense graded asphalt in accordance with the registered mix design
- e) delivery of the dense graded asphalt to the Works
- being a registered asphalt paving organisation or engaging a registered asphalt paving organisation
- g) laying, compacting and finishing any corrector layer
- h) laying, compacting and finishing the production asphalt
- i) protection of the compacted asphalt layer from moisture ingress
- j) providing an allowance for production asphalt used in temporary ramps and asphalt lost from cut-offs from joints and spillages

- k) provision of a laboratory and compliance testing facilities
- I) sampling, testing and quality assurance requirements
- m) delivery of the results for all tests and inspections to the Administrator within the nominated time, and
- n) removal and disposal of any nonconforming material or product, or any material or product not utilised for a reduced level of service, and replacement with conforming material or product.

2.3 Calculation of quantities

The quantity of asphalt shall be determined in accordance with Clause 2.3.3 of MRS30 *Dense Graded and Open Graded Asphalt*.

3 Utilisation of a rejected lot for a reduced level of service

The requirements for utilisation of a rejected lot for a reduced level of service shall be in accordance with those stated in Clause 3 of MRS30 *Dense Graded and Open Graded Asphalt* except that the following shall apply for DG14HS, DG14HP and DG20HM:

- a) pavement lots which have a characteristic value of relative compaction less than the stated minimum value but greater than or equal to 92.0% shall be utilised for a reduced level of service at a reduced value. The reduced value shall be determined in accordance with Table 3.
- b) where approved by the Administrator, pavement lots which have a characteristic value of relative compaction less than 92.0%, may be utilised for a reduced level of service at a reduced value provided that:
 - the pavement lot has a characteristic value of relative compaction greater than or equal to 88.0%
 - ii. the Contractor takes the necessary action to prevent recurrence of the nonconformance and
 - iii. the Contractor accepts payment for the lot at the reduced value given in Table 3.

Table 3 - Reduction in value for reduced compaction

| Asphalt Mix Type | Percentage Reduction in Value |
|------------------|-------------------------------|
| DG14HS | 3.33 x (92.5% – CV) |
| DG14HP | 3 x (93.0% – CV) |
| DG20HM | 3 x (93.0% – CV) |

CV = characteristic value of relative compaction (%)

4 Additional payment for a higher standard of surface evenness

The requirements for additional payment for a higher standard of surface evenness shall be in accordance with those stated in Clause 4 of MRS30 *Dense Graded and Open Graded Asphalt*.

