

Main Roads Specification

MRS22

Supply of Cover Aggregate

TRADEMARKS ACKNOWLEDGEMENT

Terms mentioned in this document that are known or understood to be trademarks, whether registered or not, have been identified. Where trademarks have been confirmed as registered in Australia, this has been indicated by the addition of the ® symbol, otherwise the ™ symbol is used. While all care has been taken to identify trademarks, users should rely on their own inquiries to determine trademark ownership. Use of a term in this document as a trademark should not be regarded as affecting the validity of any trademark.

IMPORTANT INFORMATION

The requirements of this document represent Technical Policy of the department and contain Technical Standards. Compliance with the department's Technical Standards is mandatory for all applications for the design, construction, maintenance and operation of road transport infrastructure in Queensland by or on behalf of the State of Queensland.

This document will be reviewed from time to time as the need arises and in response to improvement suggestions by users. Please send your comments and suggestions to the feedback email given below.

FEEDBACK

Your feedback is welcomed. Please send to mr.techdocs@tmr.qld.gov.au.

DISCLAIMER

This publication has been created for use in the design, construction, maintenance and operation of road transport infrastructure in Queensland by or on behalf of the State of Queensland.

Where the publication is used in other than the department's infrastructure projects, the State of Queensland and the department gives no warranties as to the completeness, accuracy or adequacy of the publication or any parts of it and accepts no responsibility or liability upon any basis whatever for anything contained in or omitted from the publication or for the consequences of the use or misuse of the publication or any parts of it.

If the publication or any part of it forms part of a written contract between the State of Queensland and a contractor, this disclaimer applies subject to the express terms of that contract.

COPYRIGHT

Copyright protects this publication. Except for the purposes permitted by and subject to the conditions prescribed under the Copyright Act, reproduction by any means (including electronic, mechanical, photocopying, microcopying or otherwise) is prohibited without the prior written permission of the department. Enquiries regarding such permission should be directed to the Pavements, Materials, Geotechnical and Standards Division, Queensland Department of Transport and Main Roads.

© State of Queensland (Department of Transport and Main Roads) 2010



<http://creativecommons.org/licences/by-nc-nd/2.5/au>

Table of Contents

| | Page |
|--|------|
| 1 INTRODUCTION..... | 1 |
| 2 MEASUREMENT OF WORK..... | 1 |
| 2.1 Standard Work Items..... | 1 |
| 2.2 Work Operations..... | 1 |
| 2.3 Calculation of Quantities | 2 |
| 2.3.1 General | 2 |
| 2.3.2 Method A – Stockpile Measurement..... | 2 |
| 2.3.3 Method B – Truck Measurement | 2 |
| 2.3.4 Method C – Volume Measurement Using Weight | 2 |

Supply of Cover Aggregate

1 INTRODUCTION

This Specification applies to the supply and delivery of cover aggregate and prime cover material for use in sprayed bituminous surfacing treatments, and the construction of stockpile sites for storage of cover aggregate.

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

This Specification forms part of the Main Roads Specifications and Technical Standards 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 incorporated in this specification are listed in Table 2.1.

Table 2.1 – Standard Work Items

| Standard Item No. | Description | Unit of Measurement |
|-------------------|---|---------------------|
| 5011 | Supply of cover aggregate [<i>precoated</i> <i>unprecoated</i>], [<i>nominal size</i>] mm nominal size. | m ³ |
| 5012 | Supply of cover aggregate [<i>precoated</i> <i>unprecoated</i>], [<i>nominal size</i>] mm nominal size. | tonnes |
| 5013 | Supply of prime cover material, [<i>type of material</i>]. | m ³ |
| 5021 | Transport of materials, [<i>type of material</i>]. | m ³ |
| 5031 | Construction of stockpile site. | lump sum |

2.2 Work Operations

Item 5011 Supply of cover aggregate [*precoated* | *unprecoated*], [*nominal size*] mm nominal size.

Item 5012 Supply of cover aggregate [*precoated* | *unprecoated*], [*nominal size*] mm nominal size.

This item is used only where cover aggregate is supplied by the Contractor. Work Operations incorporated in the above item include –

- Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*;
- Winning and processing of the material;
- Loading, delivery and stockpiling of the cover aggregate; and
- Precoating, if required.

Item 5013 Supply of prime cover material, [*type of material*].

This item is used only where prime cover material is supplied by the Contractor. Work Operations incorporated in the above item include –

- Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*;
- Winning and processing of the material; and
- Loading, delivery and stockpiling of the prime cover material.

Item 5021 Transport of materials, [*type of material*].

This item is used only where cover aggregate and/or prime cover aggregate is supplied by the Principal for collection by the Contractor at the point of supply. Work Operations incorporated in the above item include –

- Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*;

- b) Taking delivery of cover aggregate or prime cover material at the location and by the mode nominated in the Contract; and
- c) Transport to the Site and stockpiling, if required.

Item 5031 Construction of stockpile site.

This item is used only for a materials supply contract. This item shall not be used where cover aggregate and/or prime cover material is supplied and spread under the Contract. Work Operations incorporated in the above item include –

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*;
- b) Clearing, grubbing, compacting and trimming of the natural ground;
- c) Drainage of the site and the construction of access tracks;
- d) Construction of a pavement and a seal, where stated elsewhere in this specification; and
- e) Supply of all construction materials.

2.3 Calculation of Quantities

2.3.1 General

For a material supply contract only, the quantity of cover aggregate and/or prime cover material shall be calculated by the method stated in Clause 1 of Annexure MRS22.1 which shall be one of the methods described in Clauses 2.3.2, 2.3.3 and 2.3.4.

For all other contracts, the quantity of cover aggregate and/or prime cover material shall be calculated in accordance with the method specified in Clause 2 of MRS11 *Sprayed Bituminous Surfacing (Excluding Emulsion)*.

2.3.2 Method A – Stockpile Measurement

The quantity of the material shall be calculated from the dimensions of the stockpile. For this purpose, the Contractor shall shape the stockpile to the requirements of Table 2.3.2.

Table 2.3.2 – Stockpile Shape Requirements

| Section | Dimension |
|----------------|---|
| Base | Rectangular or square in plan |
| Height | A constant height, maximum 2 metres |
| Side slopes | Between 1.5 horizontal to 1 vertical and 2 horizontal to 1 vertical |
| Top Surface | Trimmed flat |

2.3.3 Method B – Truck Measurement

The quantity of material in each truck shall be calculated from the dimensions of each load. If required by the Superintendent, the load shall be trimmed flat.

The total quantity of material shall be determined by the tally of the trucks and the quantity in each.

2.3.4 Method C – Volume Measurement Using Weight

The total dry volume of the material shall be calculated from the tally of the masses on weighbridge docketts which represent the delivered material. Convert mass to volume by weighing a set volume.

Where necessary, as determined by the Superintendent, deductions shall be made to the mass obtained from the tally of the weighbridge docketts to account for any water contained in the loads of material.