New way to find Technical Publications

Did you find what you were looking for? The Technical Publications team is working hard on improving our page to make finding documents quicker and easier. Look forward to:

- a reorganised catalogue that better groups related documents
- additional information about documents before you click
- easier access to the most popular documents, including specifications, standard drawings and MUTCD

Take a sneak peek at what’s coming. We’d love your feedback on the new design, categories, or anything else related to technical publications.

**PHASE 1 – NEXT FOUR MONTHS**

**SPECIFICATIONS and DRAWINGS**

**MRTS01** – Introduction to Technical Specifications
Harmonisation of Q test methods with AS test methods.

**MRTS05** – Unbound Pavements
Harmonisation of Q test methods with AS test methods. Minor amendments.

**MRTS07A** – Insitu Stabilised Subgrades using Quicklime or Hydrated Lime

**MRTS07B** – Insitu Stabilised Pavements using Cement or Cementitious Blends
Significant revision to the above Technical Specifications which includes the application of ‘best practice’, additional detail to improve clarity and consistency, and, standardisation of maximum lot sizes and minimum testing requirements. It also includes a new ‘extended limit’ and ‘reduced value’ for insufficient thickness of a stabilised layer.

**MRTS07C** – Insitu Stabilised Pavements using Foamed Bitumen
A significant revision which includes the application of ‘best practice’, additional detail to improve clarity and consistency, removal of Principal Supplied Bitumen work items, and, standardisation of maximum lot sizes and minimum testing requirements. It also includes a new ‘extended limit’ and ‘reduced value’ for insufficient thickness of a stabilised layer.

**MRTS08** – Plant-Mixed Heavily Bound (Cemented) Pavements
Harmonisation of Q test methods with AS test methods. Minor amendments.

**MRTS09** – Plant-Mixed Pavement Layers Stabilised Using Foamed Bitumen
A significant revision which includes the application of ‘best practice’, additional detail to improve clarity and consistency, removal of Principal Supplied Bitumen work items, and, standardisation of maximum lot sizes and minimum testing requirements. It also includes a new ‘extended limit’ and ‘reduced value’ for insufficient thickness of a stabilised layer.

**MRTS10** – Plant-Mixed Lightly Bound Pavements
Harmonisation of Q test methods with AS test methods including the following:
- permitting the use of ‘blended lime’ as an allowable stabilising agent
- removal of the requirement for cementitious blends to have minimum 40% portland cement
- inclusion of sulphate content requirement for water quality testing
- specification of minimum testing frequency for segregation.

**MRTS11** – Sprayed Bituminous Treatments (Excluding Emulsion)
Harmonisation of Q test methods with AS test methods. Updates related to the cessation of Principal supplied bitumen.

**MRTS12** – Sprayed Bituminous Emulsion Surfacing
Harmonisation of Q test methods with AS test methods.

**MRTS13** – Bituminous Slurry Surfacing
Harmonisation of Q test methods with AS test methods.

**MRTS18** – Polymer Modified Binder (including Crumb Rubber)
Minor amendments related to the size of crumb rubber allowed for the manufacture of crumb rubber modified binder.

**MRTS22** – Supply of Cover Aggregate
Minor updates to align with changes made to MRTS11 Sprayed Bituminous Treatments (Excluding Emulsion) and the new technical note TN175 Selection and Design of Sprayed Bituminous Treatments published in October 2017.

**MRTS35** – Recycled Materials for Pavements
Harmonisation of Q test methods with AS test methods. Minor amendments.

**MRTS39** – Lean Mix Concrete Sub-base for Pavements
Harmonisation of Q test methods with AS test methods.

**MRTS40** – Concrete Pavement Base
Harmonisation of Q test methods with AS test methods. Includes Contract Administration Checklist CAC064M Concrete Pavement Base – Assessment of Nominated Mix Submission (Hold Point 1) – MRTS40.

**MRTS70** – Concrete
Changes to this specification via formal industry-wide consultation. Major changes include:
- restructure of document, clarifying application to Special Class Concrete –v- Normal Class Concrete and Insitu Concrete –v- Precast Concrete
- consideration of updated AS 3600 and AS 5100
- embedding of Registration Scheme for assessment of precast procedures
- update of Aggregate Testing and Performance Criteria
- widened scope for Normal Class Concrete and clearer requirements. New Contract Administration Checklists CAC072M and CAC073M.

**Technical Publications News**

The Department of Transport and Main Roads is committed to continually reviewing and improving our technical publications to ensure we deliver best value for money and embrace the latest technological advancements.

To help you stay informed about any upcoming changes to technical publications we have provided a look ahead of proposed amendments, we have broken these into three timelines: next 4 months, 4 to 8 months and into the future.

- mrt.techdocs@tmr.qld.gov.au
- 07 3066 6396
MRTS71A – Stainless Steel Reinforcing
Alignment with MRTS71 Reinforcing Steel.

MRTS75 – Supply and Erection of Prestressed Concrete Girders
Revision to address feedback from stakeholders and alignment with content in the Design Criteria for Bridges and Other Structures to Clause 9.1 to now include ‘drilling or coring of holes into girders is not permitted’. New Annexure MRTS75.1 to specify registered proprietary products to be used for specific project / contract requirements.

MRTS101 – Aggregates for Asphalt
Harmonisation of Q test methods with AS test methods.

NEW MRTS213 – UPS for Roadside Devices
Defines the general design, supply, construction, installation, testing, commissioning and maintenance requirements for Uninterruptible Power Systems (UPS) for ITS and Traffic Signal Controller (TSC) applications.

NEW MRTS252 – Next Generation Traffic Signal Controllers
Specifies the minimum, mandatory and desirable requirements for permanently installed Traffic Signal Controllers for the state of Queensland.

WITHDRAW MRTS254 – Portable Traffic Signals
Technical Specification withdrawn and content split across MRTS264 Type-1 Portable Traffic Signals, and MRTS265 Type-2 Portable Traffic Signals.

NEW MRTS264 – Type-1 Portable Traffic Signals
Defines the design, supply, installation, testing and commissioning, performance, documentation, training, maintenance and handover requirements for Type-1 Portable Traffic Signals Systems.

NEW MRTS265 – Type-2 Portable Traffic Signals
Defines the design, supply, installation, testing and commissioning, performance, documentation, training, maintenance and handover requirements for Type-2 Portable Traffic Signals Systems.

NEW MRTS270 – Precast Geopolymer Concrete Elements
Applies to the manufacture of precast reinforced geopolymer concrete elements, with a design life of 50 years or under.

SD1149 – Traffic Signals / Road Lighting / ITS – Installation of Underground Electrical and Communications Conduit
Note 7 updated – Type 2.3 filling material, Relative Dry Density (RDD) from 90% to 95%.

SD1304 – Pipe Culverts – Wingwalls, Headwall and Apron for Pipe Diameter 750 to 2400 – Drawing 1 of 2 to 2 of 2
Revised drawing to increase the apron and wingwall reinforcement for shrinkage and temperature effects considering the full restraint condition in accordance with AS 3660 Concrete Structures.

SD1323 – Road Lighting – Luminaire Terminal Panel
Minor pole drip shield details added for consistency with major pole terminal panel details.

SD1327 – Traffic Signals / Road Lighting – Mains Connections
Note 8 amended to align with the polymeric cable guard installation requirements. This amendment is for consistency with the electricity entity requirements for Rate 2 and Rate 3 installations.

SD1369 – Traffic Sign – Details of Sign Stiffening Extrusion
Note 6(d) revised to achieve improved outcomes for the fixing of sign faces to the stiffening extrusion.

SD1396 – Traffic Signals / Road Lighting – Joint Use Traffic Signal and Road Lighting Pole and Footing Installation Details
Table amended for Joint Use (JU) pole footing reduced to 600 mm diameter for consistency with major pole footings.

SD1423 – Traffic Signals – Traffic Signal Controller Base Installation Details
References updated to align with the new SD1709 and SD1710.

SD1458 – Single Slope Concrete Barrier – Precast Concrete Barrier Fabrication Details – Drawing 1 of 2 to 2 of 2
This revision removes outdated and conflicting information between the current standard drawings, MRTS72 and the Manual of Uniform Traffic Control Devices (MUTCD).

SD1473 – Single Slope Concrete Barrier – Precast Concrete Barrier Installation Details
This revision removes outdated and conflicting information between the current standard drawings, MRTS72 and the Manual of Uniform Traffic Control Devices (MUTCD).

SD1699 – Traffic Signals / Road Lighting / ITS – Parts List
Part number / item(s) details updated in accordance with relevant standard drawings.

NEW SD1709 – Traffic Signals / ITS – Uninterrupted Power Supply (UPS) Base Installation Details


SD2045 – Bridge Kerbs – Standard Details of Cast Insitu Kerbs for Transversely Stressed PSC Deck Units
Revised to align with AS 5100, minimum cover to reinforcing.

SD2050 – Precast units – 10 m PSC Deck Unit – Drawing 1 of 6 to 6 of 6
Drawing revised and amended to align to SD2042 Deck Unit Design Assumptions and AS 5100.

SD2051 – Precast Units – 11 m PSC Deck Unit – Drawing 1 of 6 to 6 of 6
Drawing revised and amended to align to SD2042 Deck Unit Design Assumptions and AS 5100.

SD2052 – Precast Units – 12 m PSC Deck Unit – Drawing 1 of 6 to 6 of 6
Drawing revised and amended to align to SD2042 Deck Unit Design Assumptions and AS 5100.

SD2053 – Precast Units – 13 m PSC Deck Unit – Drawing 1 of 6 to 6 of 6
Drawing revised and amended to align to SD2042 Deck Unit Design Assumptions and AS 5100.

NEW SD4003 – Precast Planks for Boat Ramp – Type RG4000 FRP
Type RG4000 FRP is intended to be used where:
• expected loads are greater than the design load diagram
• the precast plank is required to be cut to length around floating walkway piles.

MANUALS

Bridge Scour Manual
Harmonisation to Austroads Guide to the Waterway Design for Structures – Chapter 5 – Bridge Scour.

Design Criteria for Bridges and Other Structures (DCBoS)
Update to incorporate Australian Standard AS 5100 (2017) for Bridge Design.

Materials Testing Manual (MTM)
Includes feedback from internal and external stakeholders. Harmonisation of Q test methods with AS test methods. Continued development of test methods for foamed bitumen testing.

Manual of Uniform Traffic Control Devices (MUTCD) Harmonisation
National harmonisation with AS 1742 and aligning TRUM Volume 1, Part 10:
• Part 9 Bicycle facilities

MUTCD – Part 3 – Works on Roads (Supplement)
Minor amendments following consultation and July 2018 release.

MUTCD – Part 4 – Speed Controls
Major update including incorporation of Part 4 Supplement content.

MUTCD – Part 5 – Street Name and Community Facility Name Signs
Acceptance of term ‘should’ expanded with amended definition.
Nuclear Gauge Testing Manual (NGTM)
Harmonisation of Q test methods with AS test methods.

Pavement Rehabilitation Manual
Update of the existing content specifically to Chapter 2 Pavement Evaluation and Chapter 5 Design of Pavement Rehabilitation Treatments: Mechanistic and Deflection Reduction Methods.

Road Drainage Manual (RDM)
Update design practices such as runoff estimation techniques to align with release of Australian Rainfall and Runoff (ARR) 2016. The updates will be released as technical notes to RDM until incorporation into the revised RDM.

Road Planning and Design Manual (RPDM)
Supplement to Austroads Guide to Road Design (AGRD) – Volume 3, Part 4A: Unsignalised and Signalised Intersections
Review changes between current and past AGRD versions. Update supplement with identified changes.

RPDM – Supplement to AGRD – Volume 3, Part 4C: Interchanges
Review changes between current and past AGRD versions. Update supplement with identified changes.

RPDM – Volume 6 – Lighting
Lighting to include LED requirements and general amendments.

Traffic and Road Use Management Manual (TRUM)
Volume 1 – Part 4, 5, 6, 9 and 10
Alignment to updated Austroads Guides.

TRUM Volume 1, Part 4 – Network Management
New content on pedestrian access and mobility planning.

TRUM Volume 1, Part 5 – Road Management
Minor corrections to referencing.

TRUM Volume 1, Part 6 – Intersections, Interchanges and Crossings
Update following November 2017 alignment and incorporation of content from TN131 Shared Path and Bicycle Path Termination Treatments. TN131 to be withdrawn.

TRUM Volume 1, Part 9 – Traffic Operations
Annual update regarding wet weather and flooding guidance.

TRUM Volume 1, Part 10 – Traffic Control and Communication Devices

TRUM Volume 3, Part 5 – Design Guide for Roadside Signs
New Appendix E added.

NEW TRUM Volume 3, Part 8 – Wildlife Signage Guidelines
Content from Technical Note 110 Wildlife Signage Guidelines being incorporated into this new Part. TN110 to be withdrawn.

PHASE 2 – FOUR TO EIGHT MONTHS

SPECIFICATIONS and DRAWINGS

MRTS03 – Drainage, Retaining Structures and Protective Treatments
Harmonisation of Q test methods with AS test methods.

MRTS04 – General Earthworks
Harmonisation of Q test methods with AS test methods.

MRTS05 – Unbound Pavements
A significant revision proposed to include the adoption of 'Modified C' grading, use of modified compaction for selected layers, use of Linear Shrinkage (LS) only (no Plasticity Index (PI)), and a min LS requirement. In addition changes to the Quarry Registration System will be made to accommodate the proposed changes.

MRTS06 – Reinforced Soil Structures
Harmonisation of Q test methods with AS test methods.

MRTS17 – Bitumen
Amendments to facilitate the increased use of Reclaimed Asphalt Pavement (RAP) in dense graded asphalt and to harmonise the specification with AS 2008.

MRTS18 – Polymer Modified Binder (including Crumb Rubber)
Minor updates to sampling and requirements for crumb rubber modified binders.

MRTS30 – Asphalt Pavements
Amendments to the requirements for high RAP content mixes and pavement surface preparation requirements.

MRTS39 suite – Lean Mix Concrete Sub-base for Pavements
Review and update planned with particular emphasis placed on harmonisation with the latest New South Wales (NSW) Roads and Maritime Services (RMS) equivalent specifications.

MRTS42 – Supply of Wax Emulsion Curing Compound for Concrete
Review and update planned with particular emphasis placed on harmonisation with the latest New South Wales (NSW) Roads and Maritime Services (RMS) equivalent specifications.
MRTS84A – Removal of Bridge Deck Wearing Surface
Harmonisation of Q test methods with AS test methods.

MRTS94 – Road Lighting
Update LED lighting requirements.

MRTS102 – Reclaimed Asphalt Pavement Material
Modifications to facilitate increased use of high RAP content mixes on Transport and Main Roads projects.

NEW MRTSXXX - Building Information Management (BIM)
To achieve a consistent approach for the delivery of bridge projects using BIM technologies and ensure that the department will be able to use and operate the BIM models into the future. This will also assist with key asset management practices.

NEW Fauna and Fish Passage Standard Drawings
NEW drawings in compliance with current legislative requirements.

MANUALS

Contract Administration System (CAS)
Alignment to 3PCM process changes, making the manual more user-friendly.

Drafting and Design Presentation Standards Manual (DDPSM) – Volume 1 Chapters 1 to 4
Re-assess content considering the impact of BIM including incidental on-going revisions.

DDPSM – Volume 1 Chapter 5
Re-assess content of new Chapter 5 considering the impact of BIM including visualisations as a road design tool and incorporation of BIM visualisation as a presentation tool.

MUTCD – Part 7 – Railway Crossings
Add new guidance to MUTCD Part 7 Railway Crossings to align with new guidance on Section 7 Rail Crossings in TRUM Volume 1 Part 6 Intersections, Interchanges and Crossings.

RPDM – Supplement to AGRD – Volume 3, Part 3 Geometric Design
Geometric information from Technical Note 128 (Selection and Design of Cycle Tracks - May 2015) to be considered for inclusion in RPDM.

RPDM – Supplement to AGRD – Volume 3, Part 4 Intersections and Crossings – General
Review changes between current and past AGRD versions. Update supplement with identified changes.

RPDM – Supplement to AGRD – Volume 3, Part 6A: Pedestrian and Cyclist Paths
Review changes between current and past AGRD versions. Update supplement with identified changes.

TRUM – Volume 1, Part 5 - Road Management
Update to align with 2017 Austroads Guide to Traffic Management (AGTM) Part 5 - Road Management.

TRUM – Volume 1, Part 6 - Intersections, Interchanges and Crossings
Add new guidance to Section 7 Rail Crossings to align with AGTM 2017 and sync with MUTCD Part 7 Railway Crossings.

NEW Transport Noise Management Code of Practice Volume 3 – Operational Railway Noise and Vibration
This code will replace the 'Interim Guideline - Operational Railway Noise and Vibration' and provide greater detail for the assessment and management of operational railway noise and vibration. Expected publication 2019.

POLICIES

EP150 – Procurement of Infrastructure Project Thresholds
Incorporate industry feedback and departmental strategic alignment.

EP160 – Low Value Infrastructure Procurement
Policy to explain new contract type for very low risk / low value work.

NEW Quarry Registration System
Update to accommodate the recent and proposed changes to Unbound Paving Material (MRTS05) Bound Paving Materials (MRTS08, MRTS09 and MRTS10), Cover Aggregate (MRTS12), Aggregates for Asphalt (MRTS101) and Concrete (MRTS70) specifications suites.

NEW Operation Policy for Non Commercial Quarry Resources Operation
New policy for the management of non-commercial quarry resources (e.g. borrow pits in the state controlled road reserve) to reduce financial and legislative risk following recent regulator audits. The policy requires improvement in operational practices and improved accountability for sites.

NEW Operational Policy for Sustainable Water
New policy to improve resilience to changes in water supply and ensure legal and continued supply. This will be achieved by managing existing supply, developing new supply and adopting water efficiency to supplement existing water sources.

NEW Route Numbering
New policy on MABC route numbering.

CONTRACTS

Consultants for Engineering Projects (MCFEP)
Procurement practice changes (incl. electronic tendering, Whole of Government (WoG), Engineering Consultant Scheme (ECS) and peer review). Aim to improve user efficiency and understanding.

TECHNICAL NOTES

TN63 – Clarification of Electrical Pit Requirements to MRTS78 and MRTS91
General review and update.

TN102 – Selecting Testing Frequencies for Acceptance Sampling of Pavement Materials
Review and update of TN102 following publication of default testing frequencies in pavement specifications.

TN148 – Asphalt Mix Design Registration
Content from TN75 Registration of Mix Designs for Asphalt Manufactured using Warm Mix Asphalt Technologies and TN104 Guidelines for Asphalt Mix Design Assessment to be incorporated into TN148.

NEW TNXXX – Assessment of nonconformances in lightly and heavily bound pavements
Provide advice on how to assess nonconformances that may occur during the production of lightly and heavily bound pavement material – particularly with regards to Unconfined Compressive Strength (UCS).

NEW TNXXX – Trafficking EME2 pavements
Provide advice on the suitability of EME2 asphalt to be trafficked during construction.

NEW TNXXX – Selection of Road Surfacing
New technical note intended to provide additional guidance for the election of road surfacings. This includes providing guidance about specifying skid resistance related properties for road surfacings at the time of construction.

NEW TNXXX – Use of High Percentages of Reclaimed Asphalt Pavement (RAP) Material in Dense Graded Asphalt
New technical note intended to provide additional guidance about the use of High Percentages of Reclaimed Asphalt Pavement (RAP) Material in Dense Graded Asphalt. Will be released in parallel with update to MRS30 / MRTS30 Asphalt Pavements suite.

WITHDRAW TN75 – Registration of Mix Designs for Asphalt Manufactured using Warm Mix Asphalt Technologies
Requirements superseded or incorporated in TN148.

WITHDRAW TN104 – Guidelines for Asphalt Mix Design Assessment
Requirements superseded or incorporated in TN148.
## TECHNICAL NOTES

<table>
<thead>
<tr>
<th>Technical Note</th>
<th>Description</th>
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<tr>
<td>TN66</td>
<td>Commercial and Fabricated Bolts and Nuts General review and update.</td>
</tr>
<tr>
<td>TN68</td>
<td>VMS Gantry Installation Procedure Inclusion of an additional installation practice.</td>
</tr>
<tr>
<td>NEW TNXXX</td>
<td>Fire Risk Management Model Release of a model that describes how bushfire risk will be evaluated in the state controlled road reserve for both construction and operation of the state controlled road network.</td>
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<tr>
<td>NEW TNXXX</td>
<td>Undertaking Bushfire Hazard Reduction in State Controlled Road reserves This technical note will assist maintenance contractors with bushfire hazard reduction in state controlled road reserves.</td>
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## Approved Products and Registered Suppliers

The department’s Approved Products and Registered Suppliers for infrastructure works are frequently updated. To see the status and how to register view via [Approved Products and Registered Suppliers](#).

### Definitions

- **SPECIFICATIONS and DRAWINGS:** Rules and procedures by which a product, process or activity can be specified or defined.
- **CONTRACTS:** The binding legal agreements between two parties.
- **TECHNICAL NOTES:** Provide clarity or additional options not previously detailed in a specification, manual or guideline, or address emerging issues.
- **MANUALS:** Technical information gathered into a single publication, discipline based.
- **POLICY:** Provides a desired position and a guide for action.
- **GUIDELINES:** Provide options on actions that will achieve optimal outcomes in line with Technical Standards.

### Contact Details

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