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.

Registrations for the Department of Transport and Main Roads’ 2018 Engineering Technology Forum are now open. Register before 11 August to take advantage of the discounted Early Bird price of $1380 – a $100 saving on the regular price.

The Engineering Technology Forum is a great opportunity for thought-leaders, technical experts and decision-makers to come together and work to a common vision. This year we have some really exciting topics on the program, including Cooperative-ITS and automated vehicles, Building Information Modelling (BIM) and cutting-edge pavement technologies.

To register or find out more about this year’s event, visit www.tmr.qld.gov.au/etforum.

PHASE 1 - Next four months

**SPECIFICATIONS and DRAWINGS**

**MRTS08 - Plant-Mixed Heavily Bound (Cemented) Pavements**
Major update and name change to this Specification suite, previously known as Plant-Mixed Stabilised Pavements using Cement or Cementitious Blends.

Lightly bound pavements using cement or cementitious blends now aligned with approach adopted for MRTS10 (formerly known as Cement Modified Bases (CMBs) / materials)).

**MRTS14 - Road Furniture**
Revision of sign sheeting classification to comply with revised AS 1906.1. Deletion of Class 1X specification.

**MRTS15 – Noise Fences**
Update of content on the removal and addition of noise fence panels. The order of technical requirements has been reviewed to improve clarity regarding design and construction requirements.

**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**
Clarity where recycled materials are permitted to be used in pavement construction and move the requirements for Bound Recycled Crushed Concrete (BRCC) to the updated MRTS08 Plant-Mixed Heavily Bound (Cemented) Pavements.

**MRTS45 - Road surface delineation**
Addition of requirement to use cold applied plastic for line marking on roads with AADT exceeding 40,000 vpd. Alignment of ATLM requirement near residential properties, and amendment to adhesive requirement for RRRP’s as Australian Standard has been withdrawn.

**MRTS51 – Environmental Management**
Updated to provide clarity and guidance to Contractors and Contract Administrators on the requirements within this Specification. There is now a requirement for the Contractor to generate and provide the Principal with As-Constructed drawings and maintenance and operational management plans of ‘permanent environmental infrastructure’. There have been corrections to Work Item Numbers in MRS51.

**MRTS52 - Erosion and Sediment Control**
Updated to remove remaining references to water quality management. All water quality requirements are specified in MRTS51.

**MRTS74 – Supply and Erection of Prestressed Concrete Deck and Kerb Units**
This specification has been revised incorporating industry feedback and findings from recent departmental projects. Some of the amendments include removal of Licence to Hire for prime movers and trolley equipment issued by the department, and the use of proprietary grouting products for grouting of transverse stressing holes.

**MRTS91 Conduits and Pits**
Clarification regarding the materials and installation of cables, pits, conduits and maintenance pit markers to prevent damage.

**MRTS201 – General Equipment Requirements**
Enclosure air temperature modifications to suit the requirements of operating equipment parameters. References to road lighting and traffic signals removed as these are managed in other documents. Enclosure lighting modification to energy saving LED.

**MRTS203 – Provision of Weigh-in-Motion System**
**NEW** MRS Specification (Measurement) created to provide information for bidding on projects that contain WIM (Weigh-in-Motion) components. Revision of Technical Specification (MRTS) with WIM system accuracy class definitions and addition of calibration requirements.

**MRTS206 – Provision of Variable Speed Limit and Lane Control Signs**
Updated to harmonise with the Australian Standard AS 5156:2000, and to include new functional and operational requirements.

**MRTS207 – Traffic Survey Data Management (TSDM) Foundation Equipment**
Specify the requirements on TSDM field cabinet and the foundation equipment installed inside the cabinet to support the operation of the basic TSDM system which features WIM, ANPR, VCU and Bluetooth. Measurement specification MRS207 created to provide information for bidding on projects that require the installation of TSDM field cabinet.

**MRTS208 – Roadway Ancillary ITS Infrastructure Monitoring and Control**
Details departmental expectations.

**MRTS210 – Provision of Mains Power**
Requirements included for ITS switchboards. Section on ‘Removal of mains connections’ has been relocated to MRTS228 Electrical Switchboards.
NEW MRTS219 – Internally Illuminated Pavement Markers (IIPMs)
New Technical Specification defines the performance criteria for both solar powered and externally powered IIPMs, designed to provide enhanced road and lane delineation at night and in adverse weather conditions, or where traditional Retro-Reflective Pavement Marker (RRPM) performance is limited due to gradient / geometry.

MRTS226 – Telecommunications Field Cabinets
Amendments include:
• Clarification on the standard and extended range of temperatures for cabinets.
• Removal of the switchboard component list as this is included in SD1689 along with the switchboard layout and single line drawing.
• Removal of section on surge diverters as the surge filter provides suitable protection making the diverter unnecessary.

MRTS228 – Electrical Switchboards
Amendments include:
• Clarification of switchboards for road lighting installations to include metered as well as unmetered switchboards.
• Clarification of the requirement to have a dedicated Earth pit, and
• Section on ‘Removal of mains connections’ has been deleted and incorporated into MRTS210.

MRTS234 – Communications Cable
Clarification of mandatory requirements for rodent protection of fibre cables, including cable testing requirements.

MRTS256 – Power Cables
Amendments to HDPE testing requirements, and modification of wording in Section 10 ‘Removal of cables’ to help ensure unused or abandoned cables are removed from conduits.

SD1174 - R C box culverts - Installation of precast units and construction of headwalls - Height = 375 to 600
General revision includes updating to AS 5100 (2017).

SD1305 - Pipe culverts - Headwall and apron for pipe diameter 375 to 675
General revision includes updating to AS 5100 (2017).

SD1307 - Access chamber - Details 1050 to 2100 Dia
General revision includes updating to AS 5100 (2017).
Reference to step irons is removed from the drawing as WH&S requires access into chambers by safe means that satisfy AS 1657.

SD1308 - Access chamber - Roof slabs 1050 to 2100 Dia
General revision includes updating to AS 5100 (2017).

SD1490 - Steel beam guardrail - Installation and setout footing details
General revision includes updating to AS 5100 (2017).

SD1314 - Traffic signals / Road lighting - Cable jointing pit drainage details
Drawing updated with circular pit to maintain consistency with type approvals and other technical specifications.

SD1323 - Road lighting - Luminare terminal panel
Terminal panel introduced to align with the recently approved minor poles for pathway lighting.

SD1327 - Traffic signals / Road lighting - Mains connections
Polymeric cable guard added as mandating requirements from some Electricity Entities. New part number added.

SD1328 - Road lighting / ITS - Lighting/Camera pole anchor cage fabrication details
Temporary nuts added to suit the new pole installation method. Helix pitch modified to cater 100dia. conduit. References and Sequence of installation updated accordingly.

SD1329 - Road lighting - Typical physical arrangement
Drawing updated with circular pits to maintain consistency across other technical documents.

Wordings ‘The wedge installation’ removed from note G7. The use of wedge installation belongs to SD1368 only. It is not to be used where signs have multiple posts.

SD1368 – Traffic Sign – Single Traffic Sign Support
Title amended to ‘Typical Wedge Installation for 60.3 OD Posts for Temporary Single Post Signs only Not Exceeding 1 m². Change was made to emphasise the intended use of the wedge installation detail. Changes in terminology to tables, notes and titles to structural grade steel (OD rather than NB) to make SD1368 consistent with SD1363.

SD1377 - Traffic signals / Road lighting - Joint use traffic signal and road lighting pole
References updated to provide clarification within the drawing.

SD1380 - Road lighting - Slip base pole and footing installation details for no crossfall
SD1381 - Road lighting - Slip base pole and footing installation details for crossfalls up to and including 1:6
SD1382 - Road lighting pole - Slip base pole and footing installation details for crossfalls greater than 1:6 up to and including 1:3
The current flowable consistency mortar is not widely available. HES plastic consistency mortar added as an alternative. References and sequence of installation updated accordingly.

SD1392 - Road lighting - Base plate mounted pole and footing installation details for crossfalls up to and including 1:2
SD1393 - Road lighting - Base plate mounted pole and footing installation details for crossfalls greater than 1:2
SD1395 - Road lighting - Base plate mounted pole and footing in concrete median barrier installation details
SD1403 - Traffic signals - Mast arm footing installation details
SD1404 - Traffic signals - Mast arm anchor cage fabrication details
SD1429 - Road lighting - Slip base pole and footing installation details for crossfalls greater than 1:6 up to and including 1:3 using concrete step tread
SD1684 - Road Lighting/ITS - Base Plate Mounted Hinged Pole Footing Installation Details for Crossfalls up to and Including 1:2
The current flowable consistency mortar is not widely available. HES plastic consistency mortar added as an alternative. Temporary nuts added for safe installation method. References and sequence of installation updated accordingly.

SD1396 - Traffic signals / Road lighting - Joint use traffic signal and road lighting pole and footing installation details
Pole placement distance from kerb added to assist designers and contractors. The current flowable consistency mortar is not widely available. HES plastic consistency mortar added as an alternative. Temporary nuts added for safe installation method. References and sequence of installation updated accordingly.

SD1415 - Traffic signals/Road lighting - Cable jointing pit type 60
Bedding material reference updated to maintain consistency across other technical documents.

SD1427 - Traffic signals/Road lighting - Mast arm (U series) installation details
SD1428 - Traffic signals - Traffic signal post base mounted Lanterns and push buttons reference updated to maintain consistency across other technical documents.

SD1430 - Road lighting - Switchboard pillar mounted
Earth conductor and electrode warning label added to comply with AS/NZS 3000. References updated accordingly.

SD1442 - Concrete gullies - Roadway type at concrete barriers
General revision includes the requirement of separation between the road barrier and the gully structure to avoid the transfer of barrier impact loads.

SD1452 - Traffic sign – Sight Board Installation Details for Rehabilitation of Existing Sheet 1 of 3
New standards for the installation of sight boards.

SD1490 - Steel beam guardrail - Installation and setout footing details
General revision includes updating to AS 5100 (2017).

SD1491 - Steel beam guardrail - Guardrail attachments to existing box culverts - Assembly and fabrication details
Steel plate grade specified and ‘fitness for purpose’ disclaimer added to clarify the intent of this drawing.

SD1624 - Road lighting - Junction box single phase wiring details
SD1625 - Road lighting - Junction box three phase wiring details
New dome junction box detail G added for bridge lighting installations. References updated accordingly.
SD1626 - Road lighting - Junction box active, neutral and earth bolting arrangements
Grub screws standardised in brass connector blocks to minimise the tool requirement.

SD1627 - Road lighting - Switchboard top mounted
Earth conductor and electrode warning label added to comply with AS/NZS 3000. References updated accordingly.

SD1673 - Traffic Signals / Road Lighting - Labels
Electrical label added for bridge installations to comply with AS/NZS 3000. References updated accordingly.

SD1679 - ITS - Telecommunications field cabinet base installation details
Earth conductor and electrode warning label added to comply with AS/NZS 3000. References updated accordingly.

SD1680 - Traffic signals / Road lighting - Extension to light pole and mast arm anchor cages

SD1683 - Pathway lighting - Anchor cage fabrication and installation details
Temporary nuts added to suit the new pole installation method. Helix pitch modified to cater 100 dia. conduit. References and sequence of installation updated accordingly.

SD1682 - Pathway lighting - Typical lighting requirements for off-road pathways
Part numbers added to maintain consistency across standard drawings suit. References and sequence of installation updated accordingly.

SD1685 - Traffic signals / Road lighting / ITS - Precast Concrete Surround for Circular Pit
References updated to maintain consistency.

SD1686 - Road Lighting - Switchboard Assembly Details - Drawing 1 of 3 to 3 of 3

SD1687 - Road Lighting - Metered Switchboard Assembly Details - Single Phase

SD1688 - Road Lighting - Metered Switchboard Assembly Details - Three Phase
Labels details added to comply AS/NZS 3000. References updated to maintain consistency.

SD1689 - ITS - Switchboard Typical Layout and Circuit Diagram Men System - Drawing 1 of 3 to 3 of 3
Wiring Schematic simplified, MEN requirement clarified and labels details added to comply to AS/NZS 3000. References updated to maintain consistency. Part numbers added.

SD1690 - ITS - Switchboard Assembly Details – Pole / Top Mounted
References updated to maintain consistency. Part numbers added.

SD1699 - Traffic signals / Road lighting / ITS - Parts list
Part numbers added.

SD1707 - Road lighting - Base plate mounted pole mounted on bridges wiring details
Recess requirements added to cater the space for road lighting dome junction box. Conduits and wiring system simplified. References updated to maintain consistency. Part numbers added.

NEW SD1708 - Traffic Signals – Sensor Extension to Traffic Signal Post

NEW SD1901 – TSDM – Foundation Equipment Cabinet Base Installation Details
NEW SD1902 – TSDM – Surveillance Post Typical Details
NEW SD1903 – TSDM – Surveillance Post Wiring Details
Details the installation of a typical TSDM cabinet (for WIM, ANPR, vehicle classification systems and Bluetooth) in field.

NEW SD1905 – TSDM – Foundation Equipment Cabinet Typical Details - Sheet 1
Details the physical arrangement and wirings of foundation equipment inside a typical TSDM cabinet.

NEW SD1906 – TSDM – WIM Piezo Sensor Installation Details
Details the installation of piezo sensors of a typical WIM system.

NEW SD1908 – TSDM – WIM Sensor Configuration Piezo-Loop-Piezo – Sheet 1

NEW SD1909 – TSDM – WIM Sensor Configuration Piezo-Piezo Loop-Piezo

NEW SD1910 – TSDM – WIM Sensor Configuration Piezo-Piezo

NEW SD1911 – TSDM – WIM Sensor Configuration Strain Gauge Sensor – Sheet 1
Details sensor configuration options for typical WIM system.

SD2042 - Precast Units - Design assumptions for transversely stressed standard deck units - Drawings 1 of 2 and 2 of 2
Revised to align with AS 5100 (2017) and other relevant departmental technical standards. All published Deck Unit standard drawings will be revised to align with this Design Assumptions Standard Drawing.

SD2055 - Precast Units – 15 m PSC deck unit - Drawing 1 of 6 to 6 of 6
Revised to align with AS 5100 (2017) and revision of SD 2042 Design Assumptions for Transversely Stressed Deck Units.

SD2059 - Precast Units – 19 m PSC deck unit - Drawing 1 of 6 to 6 of 6
Revised to align with AS 5100 (2017) and revision of SD 2042 Design Assumptions for Transversely Stressed Deck Units.

SD2065 - Precast Units – 25 m PSC deck unit - Drawings 1 of 6 to 6 of 6
Revised to align with AS 5100 (2017) and revision of SD 2042 Design Assumptions for Transversely Stressed Deck Units.

SD2200 - Bridge Traffic Barriers - Post and Rail Traffic Barriers
Regular Performance Level - Drawing 1 of 5 to 5 of 5
This interim update corrects the error in bolt size specified Rail Support Plate Type 2. Further, the ‘fitness for purpose’ disclaimer has been amended to specify that the details on this Standard Drawing are only to AS 5100 (2004) and that at this time do not meet the requirements of AS 5100 (2017).

Withdraw - SD2044 – Precast Units – 19 m PSC deck unit design assumptions
Standard Drawing 2044 Precast Units – 19 m PSC Deck Unit Design Assumptions is now superseded by Standard Drawing 2042 Design Assumptions for Transversely Stressed Deck Units.

Withdraw - SD2055 – Precast Units – 15 m PSC deck unit - 3D model (15’ skew) & 15 m PSC deck unit - 3D model (30’ skew)
The 3D model drawings associated with the 15m, 19m and 25m Deck Unit standard drawings will be withdrawn because the content is out of date.

Withdraw - SD2059 – Precast Units – 19 m PSC 19 m PSC deck unit - 3D model (15’ skew) & 19 m PSC deck unit - 3D model (30’ skew)
The 3D model drawings associated with the 15m, 19m and 25m Deck Unit Standard Drawings will be withdrawn because the content is out of date.

Withdraw - SD2065 – Precast Units – 25 m PSC deck unit - 25 m PSC deck unit - 3D model (15’ skew) & 25 m PSC deck unit - 3D model (30’ skew)
The 3D model drawings associated with the 15 m, 19 m and 25 m Deck Unit standard drawings will be withdrawn because the content is out of date.

MANUALS

- Sheet 1
Amendments to remove errors, removal of example diagrams and simplification of clauses which have caused confusion.

Pavement Design Supplement

Road Planning and Design Manual (RPDM) Volume 3, Part 3 Supplement – Geometric Design
Amendments to incorporate Austroads Guide to Road Design updated content.
Traffic and Road Use Management Manual (TRUM) Volume 1 Part 6 – ‘Intersections, Interchanges and Crossings’ Sections 8.1-1, 8.2.3-3

Reference In Section 8.1-1 updated link to Austroads Pedestrian Facility Selection Tool. The zebra on slip lane recommendation has been made more explicit.

Reference In Section 8.2.3-3 Pedestrian countdown timers, Clause 1.2 amended to ‘8.2.3-3 Pedestrian detectors at intersections & mid-block signalled pedestrian crossings’.

NEW TRUM Volume 1 Part 8 Supplement - Advisory Bicycle Lanes and Cycle Street

This supplement provides guidance on implementing advisory treatments where bicycle and motor vehicle traffic is mixed in low speed (<50 kph) and low traffic volume (<6,000 AADT) streets in urban environments.

TRUM Volume 1 Part 9 - Traffic Operations, Section 6.2-1 ‘Special events affecting roads in Queensland: A guide to securing approvals’

Information in Section 6.2-1 Special events affecting roads in Queensland: A guide to securing approvals replaced with direction to Transport and Main Roads Traffic management at special events webpage.

TRUM Volume 1 Part 10 Traffic Control and Communication Devices – Section 5.2.2-1 ‘Sign Legibility distance elements’

Correct error in Section 5.2.2-1 Sign legibility distance elements (diagram) which details legibility calculations for Variable Message Signs (VMS) on state-controlled roads, changing operator in the equation from subtraction (-) to addition (+).

TRUM Volume 2 Part 3 Speed Limits and Speed Management - Section 3.2-1 – ‘School Zones’

Multiple updates to Supplement Section 3.2-1 including new item (f) at Section 6.8 ‘Speeding in school zones’, additional information in Table 7.2 School zone speed limit signs at school zones on multi-lane roads, new definition ‘School days’ and additional information in definition ‘School zone’ at Glossary and updated and additional information at C3 Procedure for seeking approval to extend school zone times at individual schools.

NEW TRUM Volume 3 Part 7 - Tourist, Service and Welcome Signs


TRUM Volume 4 Part 3 - Electrical Design for Roadside Devices

Revised to improve readability and remove duplication. Noteworthy changes include:
- Definition for switchboards added.
- Extent and ownership of road lighting installations clarified.
- Disconnect times clarified.
- Cable operating temperatures of 75°C standardized.
- Use of 32A Electricity Entity fuse for traffic signal controllers clarified.
- Design requirements for connecting traffic signal controllers to a UPS and generator clarified.
- Use of pillar switchboards clarified.
- Pending change in supply voltage to 230 / 400 V +10% to -6% added.
- Guidelines for multidisciplinary projects added.

TRUM Volume 4 Part 4 - Rate 3 Road Lighting Junction Box Assembly

Road lighting dome junction box assembly has been reviewed to include editorial changes required to make the document easier to read. The installation sequence has also been clarified and simplified. A new earth label has been added and packaging for the two part resin changed.

NEW Event Traffic Management Design Guidelines (ETMDG)

A new guideline for traffic control measures and devices used at events on and near roads. These guidelines are intended for the design and planning for event traffic management aspects that are not explicitly covered under the Manual of Uniform Traffic Control Devices (MUTCD).

NEW Project Waste Reporting

Provide guidance to Contractors, Contract Administrators and Environmental Officers about the process for project waste reporting in accordance with Technical Specification MRTSS1 Environmental Management.

NEW Maintenance of Register of Licensed Electrical Workers and Electrical Contractor Licence

Documents the requirements and procedures for endorsement and removal of registered licenced electrical workers to and from Transport and Main Roads Electrical Contractor Licence.

NEW Options for Fencing and Edging Treatments for Cycling Infrastructure

NEW Priority Crossings for Shared Pathways

CONTRACTS

Minor Infrastructure Contract (MIC)

Update contract documents to incorporate Queensland Procurement Policy legislative changes regarding Building Industry Fairness (BIF) and Queensland Building and Construction Commission (QBCC), and requirements from other Queensland Government departments.

Routine Maintenance Performance Contract (RMPC)

Update to include a few minor changes.

Transport Infrastructure Contract (TIC)

Update contract documents to incorporate Queensland Procurement Policy legislative changes regarding Building Industry Fairness (BIF) and Queensland Building and Construction Commission (QBCC), and requirements from other Queensland Government departments.

Transport Infrastructure Project Delivery System (TIPDS)

Volume 3 Prequalification System

Revision includes new Contractor Performance Reporting criteria and Scoring Scheme in Appendix E. Other minor amendments in line with recent revisions of related publications.

TECHNICAL NOTES

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.

Withdraw TN111 - Drive tourism and welcome signage guidelines

Content incorporated into new TRUM Volume 3, Part 7 ‘Tourist, Service and Welcome Signs’.

Withdraw TN117 - Tourist signs for commercial tourist attractions on state controlled roads

Content incorporated into new TRUM Volume 3, Part 7 ‘Tourist, Service and Welcome Signs’.

Withdraw TN126 - Pavement Design Supplement

This technical note will be withdrawn following publication of the new Pavement Design Supplement as the content is no longer relevant.

Withdraw TN127 Asphalt Procurement Harmonisation with Roads and Maritime Services (RMS)

Technical Note 127 Asphalt Procurement Harmonisation with Roads and Maritime Services (TN127), published in August 2014, informed people about the process of harmonising Transport and Main Roads asphalt specification for heavy duty dense graded asphalt with the RMS equivalent. The ‘harmonised’ departmental asphalt specification was published in July 2015 so TN127 is no longer needed.

Withdraw TN142 - High Modulus Asphalt (EME2) Pavement Design

Relevant content will be transferred to the updated Pavement Design Supplement and the technical note will be withdrawn.
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<th>SPECIFICATIONS and DRAWINGS</th>
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<td><strong>MRTS01</strong> – Introduction to Technical Specifications</td>
<td>Harmonisation of Q test methods with AS test methods.</td>
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<td><strong>MRTS03</strong> - Drainage, Retaining Structures and Protective Treatments</td>
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<td><strong>MRTS04</strong> – General Earthworks</td>
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<tr>
<td><strong>MRTS05</strong> - Unbound Pavements</td>
<td>A significant revision to the specification is proposed including the adoption of ‘Modified C’ grading, use of modified compaction for selected layers, use of Linear Shrinkage (LS) only (no Plasticity Index (PI)), replace some Q aggregate test methods with AS test methods and a min LS requirement. In addition changes to the Quarry Registration System will be made to accommodate the proposed changes. Publication in late 2018 anticipated.</td>
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<td><strong>MRTS06</strong> – Reinforced Soil Structures</td>
<td>Harmonisation of Q test methods with AS test methods.</td>
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<td><strong>MRTS08</strong> – Plant-Mixed Heavily Bound (Cemented) Pavements</td>
<td>Harmonisation of Q test methods with AS test methods.</td>
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<td><strong>MRTS09</strong> – Plant-Mixed Pavement Layers Stabilised Using Foamed Bitumen</td>
<td>Harmonisation of Q test methods with AS test methods.</td>
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<td><strong>MRTS10</strong> – Plant-Mixed Lightly Bound Pavements</td>
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<td><strong>MRTS11</strong> – Sprayed Bituminous Treatments (Excluding Emulsion)</td>
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<td><strong>MRTS12</strong> – Sprayed Bituminous Emulsion Surfacing</td>
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<td><strong>MRTS13</strong> – Bituminous Slurry Surfacing</td>
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<tr>
<td><strong>MRTS17</strong> - Bitumen</td>
<td>Amendments to facilitate the increased use of Reclaimed Asphalt Pavement (RAP) in dense graded asphalt and to harmonise the specification with AS 2008.</td>
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<tr>
<td><strong>MRTS18</strong> – Polymer Modified Binder (including Crumb Rubber)</td>
<td>Minor updates to sampling and requirements for crumb rubber modified binders.</td>
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<td><strong>MRTS30</strong> Asphalt Pavements</td>
<td>Amendments to the requirements for high RAP content mixes and pavement surface preparation requirements.</td>
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<tr>
<td><strong>MRTS35</strong> - Recycled Materials for Pavements</td>
<td>Update to move the requirements for Bound Recycled Crushed Concrete (BRCC) to the updated MRTS08 Plant-Mixed Heavily Bound (Cemented) Pavements suite, and harmonisation of Q test methods with AS test methods where possible.</td>
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<td><strong>MRTS40</strong> – Concrete Pavement Base</td>
<td>Harmonisation of Q test methods with AS test methods.</td>
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<tr>
<td><strong>MRTS70</strong> - Concrete</td>
<td>Changes to this specification to be based upon feedback from formal industry wide consultation. Changes may also cascade to MRTS24 Manufacture of Precast Concrete Culverts, MRTS72 Manufacture of Precast Concrete Elements &amp; MRTS73 Manufacture of Prestressed Concrete Members and Stressing Units.</td>
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<tr>
<td><strong>MRTS71A</strong> - Stainless Steel Reinforcing</td>
<td>Alignment with MRTS71 Reinforcing Steel.</td>
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<td><strong>MRTS84A</strong> – Removal of Bridge Deck Wearing Surface</td>
<td>Harmonisation of Q test methods with AS test methods.</td>
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<td><strong>MRTS94</strong> – Road Lighting</td>
<td>Update LED lighting requirements.</td>
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<td><strong>MRTS101</strong> – Aggregates for Asphalt</td>
<td>Harmonisation of Q test methods with AS test methods.</td>
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<tr>
<td><strong>MRTS102</strong> – Reclaimed Asphalt Pavement Material</td>
<td>Modifications to facilitate increased use of high RAP content mixes on Transport and Main Roads projects.</td>
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<td><strong>MRTS206</strong> – Provision of Variable Speed Limit and Lane Control Signs</td>
<td>MRTS206 is to be updated to harmonise with the Australian Standard AS 5156:2000, and to include new functional and operational requirements.</td>
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<td><strong>MRTS228</strong> - Electrical Switchboards</td>
<td>Incorporate electricity supply authority meters (enable use of metered tariffs). Equipment design changes for manufacturers wishing to supply.</td>
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<td><strong>MRTS234</strong> Communications Cable</td>
<td>Clarification of mandatory requirements for rodent protection of fibre cables, including cable testing requirements.</td>
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<tr>
<td><strong>NEW</strong></td>
<td>Fauna and Fish Passage Standard Drawings</td>
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<td><strong>NEW</strong></td>
<td>New drawings in compliance with current legislative requirements.</td>
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<td><strong>Bridge Scour Manual</strong></td>
<td>More definitive advice on scour protection for bridges.</td>
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<td><strong>Design Criteria for Bridges and Other Structures</strong></td>
<td>Update to incorporate Australian Standard AS 5100 (2017) for Bridge Design.</td>
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<td><strong>MUTCD harmonisation</strong></td>
<td>National harmonisation with AS 1742:</td>
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<td>• Part 2 Traffic control devices for general use</td>
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<td>• Part 9 Bicycle facilities</td>
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<td><strong>Road Drainage Manual (RDM)</strong></td>
<td>Update design practices such as runoff estimation techniques to align with release of Australian Rainfall and Runoff (ARR) 2016.</td>
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<td>Review changes between current and past AGRD versions. Tabulate all identified changes to updated supplement.</td>
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<td><strong>Road Planning and Design Manual (RPDM)</strong></td>
<td>Supplement to Austroads Guide to Road Design (AGR) – Volume 3, Part 4A: ‘Unsignalised and Signalised Intersections’</td>
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<td>Lighting to include LED requirements and general amendments.</td>
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<td><strong>Supplement to MUTCD Part 4 – Speed Controls</strong></td>
<td>Criteria for defining high crash zones for Black Link Solutions revised.</td>
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<tr>
<td><strong>Structures Inspection Manual (SIM)</strong></td>
<td>Update to Part 3, Appendix F ‘Guidelines for the Management of Sub-Standard and Defective Bridges’.</td>
</tr>
<tr>
<td><strong>TRUM Volume 1 Part 4, 5, 6, 9 and 10</strong></td>
<td>Harmonisation to updated Austroads Guides.</td>
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TRUM Volume 1 Part 9
Traffic Operations, Section 6.1-1 'Operational standard for temporary restrictions of state-controlled roads due to wet weather and flooding (includes reopening roads)'
Review required to update contact details and reference material and incorporate information about replacement of 131940 website to QldTraffic website.

Traffic Operations, Section 6.1.5-1 'Traffic Incident Management Services Guidelines'
Review required following changes to district feedback and updated information.

TRUM Volume 1 Part 10
Traffic Control and Communication Devices, Section 6.5-1 'Bicycle Awareness Zones'
Review required following feedback by Local Government, updated information and to align with harmonised MUTCD Part 9.

POLICIES
EP153 Risk Context Profiling
Content being reviewed for currency.

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

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.

GUIDELINES
NEW Interim Guideline - Operational Railway Noise and Vibration
This interim guideline addresses operational noise and vibration assessment criteria for rail transport infrastructure.

NEW GUIDELINES:
- Options for Including Cycling Facilities in Road Pavement Rehabilitation and Resurfacing Projects
- Pedestrian Access and Mobility Planning (PAMP) Guidelines
- Retrofit separation treatment options to improve on-road cycling safety
- Treatment options for cyclists safety at captured left turn lanes

CONTRACTS
Routine Maintenance Performance Contract (RMPC)
Incorporate amendments to be applied by Local Government and RoadTek.

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.

TN128 Selection and Design of Cycle Tracks
Content being reformatted into supplements to the various Austroads Guides.

TN149 - Testing of Materials for Insitu Cement or Cementitious Blend Stabilisation
Harmonisation of Q test methods with AS test methods.

TN150 – Testing of Materials for Insitu Foamed Bitumen Stabilisation
Harmonisation of Q test methods with AS test methods.

TN151 – Testing of Materials for Lime Stabilisation
Harmonisation of Q test methods with AS test methods.

TN178 - Testing of Materials for Plant-mixed Cement or Cementitious Blend Stabilisation
Harmonisation of Q test methods with AS test methods.

TN179 - Testing of Materials for Plant-mixed Foamed Bitumen Stabilisation
Harmonisation of Q test methods with AS test methods.

NEW TNXXX Selection of Road Surfacings
New technical note intended to provide additional guidance for the selection 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 Percentage of Reclaimed Asphalt Pavement (RAP) Material in Dense Graded Asphalt
New technical note intended to provide additional guidance for the selection of road surfacings. This includes providing guidance about specifying skid resistance related properties for road surfacings at the time of construction.

PHASE 3 - Future

SPECIFICATIONS and DRAWINGS
MRTS24 - Manufacture of Precast Concrete Culverts
Amendments to address industry feedback, revision of document scope to relocate design / installation elements and increased alignment to Australian Standards.

MRTS25 - Manufacture of Precast Concrete Pipes
Amendments to address industry feedback and revision of document scope to relocate design / installation elements.

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. Harmonisation of Q test methods with AS test methods where possible.

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.

MRTS72 – Manufacture of Precast Concrete Elements
Minor update to be compatible with latest MRTS70 Concrete and ensure specification keeps up to date with current practice.

MRTS73 – Manufacture of Prestressed Concrete Members and Stressing Units
Minor update to be compatible with latest MRTS70 Concrete and ensure specification keeps up to date with current practice.

MRTS78 - Fabrication of Structural Steelwork
Updating specification to align with industry changes and customer needs.

MRTS79 - Fabrication of Aluminium Components
Improve clarity of document and align with MRTS78 Fabrication of Structural Steelwork.
NEW MRTSXXX - Building Information Management (BIM)
To achieve a consistent approach for the delivery of bridge projects using BIM technologies and ensures 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 MRTSXXX - Infrastructure Sustainability Projects over $100M
The specifications will align with the Infrastructure Sustainability Council of Australia’s rating scheme. Enquiries in relation to this specification can be forwarded to Environment@tmr.qld.gov.au

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 ongoing revisions.

Drafting and Design Presentation Standards Manual (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 harmonisation
National harmonisation with AS 1742:
- Part 3 Traffic control devices for works on roads
- Part 15 Direction signs, information signs and route numbering.

Pavement Rehabilitation Manual
Update of the existing manual with particular attention to Chapter 2 Pavement Evaluation and Chapter 5 Design of Pavement Rehabilitation Treatments: Mechanistic and Deflection Reduction Methods.

Supplement to Austroads Guide to Road Design (AGRD) – Part 4C: Interchanges
Review changes between current and past AGRD versions. Update supplement with identified changes.

Supplement to Austroads Guide to Road Design (AGRD) – Part 6A: Pedestrian and Cyclist Paths
Review changes between current and past AGRD versions. Update supplement with identified changes.

Supplement to Austroads Guide to Road Design (AGRD) – Part 6B: Roadside Environment
Review changes between current and past AGRD versions. Update supplement with identified changes.

Traffic and Road Use Management Manual (TRUM) Volume 3 Signing and Pavement Marking
Review and update of content.

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 December 2018.

Policies

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

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 Bushfire Risk Management Policy
The policy will outline the priorities for bushfire risk management to enable contractors to target the Severe Weather Management Plan content in relation to bushfire.

Guidelines

Completion of an Animal breeding place register
This guideline assists contractors and their agents to complete the Animal breeding place register for a Species Management Program (SMP). It also documents the standard expected by the department and endorsed by the regulator, the Department of Environment and Heritage Protection (EHP).

NEW TECHNICAL GUIDELINES:
- Audio Tactile Line Marking (ATLM) for Bicycle Safety
- Low-light pavement marking treatment options (moondeck, and in pavement LEDs)
- Retrofit intersection treatments (bicycle storage areas, hook turn storage boxes, and so on)
- Treatment options for multi-lane zebra crossings
- Flood immunity requirements on bicycle and pedestrian bridges
- Extended road seal options as a cost effective alternative to concrete footpaths in rural areas
- Use of pavement markings to supplement standard signage, endorsed for use in Qld

Technical Notes

TN66 Commercial and Fabricated Bolts and Nuts
General review and update.

TN68 VMS Gantry Installation Procedure
Inclusion of an additional installation practice.

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

NEW TNXXX 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.

NEW TNXXX 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.

NEW TNXXX Assessment of nonconformances in lightly and heavily bound pavements
Provide advice on how to assess non-conformances 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.

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 Specs, Manuals or Guidelines 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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