

05 July 2019

## OVERVIEW OF UPDATES

### MASTER SPECIFICATIONS FOR ROADWORKS, AND STANDARD SPECIFICATION FOR ROADWORKS V 4.0 – JULY 2019

The significant updates to the Master Specifications for Roadworks, and to the Standard Specification for Roadworks V 4.0 are shown below.

#### FEEDBACK

If you have any suggestions for improvement, such as additional or modified text for the Roadworks specification, please contact the Manager Specification Services, Telephone 8946 5021, or e-mail to [specification.services@nt.gov.au](mailto:specification.services@nt.gov.au)

#### UPDATES

<b>Table – Overview of Updates to Roadworks Specifications</b>		
<b>CLAUSE</b>	<b>CHANGE</b>	
Minor editorial changes, updates to web page URLs, updates to Australian Standards and other cited documents and organizations, updated Civil Standard Drawings numbers. Some clause renumbering due to addition of new clauses.		
<b>01 MISCELLANEOUS PROVISIONS</b>		
1.1	Standards	Personal Protective Equipment standards added
1.2	Definitions	Several new definitions added
1.4	Environmental Management	References to Standard Specification for Environmental Management added, referring to submission of CEMP, and preservation of cultural and heritage sites and artefacts.
1.6	Volatile substance management	New clause.
1.7	Permits to access land for works on roads	New clause.
1.8	Camp site	Requirements made explicit
1.12	Plant and equipment	Warning beacons on plant – requirements made explicit
1.13	Safety	Requirements made explicit
1.22	As constructed information	Provision of As Cons condition precedent to Practical Completion Show design levels and as constructed levels
1.24	Work near areas where crocodiles may be present	New clause
1.25	Time allowed for assessment of documents	Additions to lists of documents
<b>02 PROVISION FOR TRAFFIC</b>		
		Comprehensive update to entire work section
<b>03 CLEARING, GRUBBING AND REHABILITATION</b>		
		Minor updates
<b>04 EARTHWORKS</b>		
		Minor changes/clarifications
4.1	General	Gravel from pastoral leases at no cost to Principal
4.3	Definitions	Some definitions amended/clarified
4.4.2	Earthworks in cut	Requirements for excess material made explicit
4.5	Earthworks in fill	Minor change to preparation prior to filling
4.6.2	Standard fill	Default values for properties provided
4.7	Preparation and maintenance of subgrade surface	Requirements made explicit

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<b>CLAUSE</b>		<b>CHANGE</b>
4.8.2	Earthworks for drainage - Levees	Fill Plasticity Index now the same for all regions.
4.8.4	Table drain offlets	Requirements made explicit
4.8.5	Earthworks for drainage – Table drain blocks	Fill Plasticity Index now the same for all regions.
4.16.3	Conformance – Proof rolling	Plant requirements made explicit
<b>05 CONFORMANCE TESTING</b>		
5.9	Test frequencies, compliance testing	Changes to Table – Asphalt Testing – Number of cores per lot. Minor changes to sampling frequencies for fresh concrete. New table for surface roughness testing. Table for MDD curing times amended.
5.10	Test results	Interim results no longer required Surface roughness testing added
5.11	Lot testing - Compaction of soils	Asphalt deleted Minor changes to dry density ratios table Conformance of compaction for asphalt amended
5.11.2	Conformance of compaction of asphalt	Now based on Air Voids Ratio
	Table – Dry density ratios for conformance	Values in column B altered
<b>06 PAVEMENTS AND SHOULDERS</b>		
		Significant changes
6.7	Pavement acceptance	Requirements made explicit
<b>07 STABILISATION AND MODIFICATION</b>		
		Significant changes Scope broadened Requirements made explicit
<b>08 SPRAY SEALING</b>		
		Minor changes to content, including minor changes to tables
8.4.1	Material requirements - Aggregates	Flakiness Index changed Aggregate source rock properties requirements made explicit
		Supply of aggregate deleted
8.4.5	Cut back bitumen	Table – Cut back bitumen properties modified
8.6	Final preparation of pavement surface	Requirements modified
8.8.2	Binder coat requirements	Cut back for Prime changed
8.8.4	Binder coat - PMBs	Requirements modified slightly
8.8.5	Tender quantities	Requirements modified
8.11	Precoating aggregate	Requirements made explicit
8.13.4	Spraying – Preparation for sprayer run	Requirements made explicit
8.15.4	Application of aggregate – Vibrating self-propelled rollers	New clause added
8.17	Waste material	New Hold Point added
8.20.1	Bitumen equivalent volumes	Table moved from Measurement and Payment
<b>09 DENSE GRADED ASPHALT</b>		
9.5.4	Bituminous binder	Table – PMBs for asphalt – additional property test added
9.7.4	Surface preparation – Shape and surface roughness	Clause relocated

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<b>CLAUSE</b>		<b>CHANGE</b>
9.7.5	Surface preparation – Temporary works	Tables deleted – relocated to 9.13 Conformance
9.10	Spreading	Changes to Laying Pattern, and 3 joints clauses
9.12	Conformance	Several minor changes and addition of tables relocated from 9.8.5
<b>10 SLURRY SURFACING</b>		
10.9	Application	Damaged work to be replaced irrespective of whether rain was expected or not.
10.11	Surplus, waste and defective materials	Disposal to be at a legal waste disposal site
10.13	Records	Original Daily Record Sheets not required – copies to be forwarded.
<b>11 MISCELLANEOUS CONCRETE WORKS</b>		
11.1	Standards	AS 2349 and AS 2350 replaced by AS/NZS 2350.0 and AS/NZS 2350.1 Corrugated metal structures deleted
11.4.1	Ready-mix concrete	Required properties presented in table
11.9	Conformance	Tolerances presented in table
<b>12 DRAINAGE WORKS</b>		
12.5.2	Materials – Rubber ring joint pipes	New clause
12.5.4	Materials – Bedding	Plasticity Index requirement made explicit
12.6.7	Construction of culverts and structures – Laying pipe culverts	Requirements made explicit regarding orientation of pipe
12.6.10	Construction of culverts and structures - Backfill	Clarification on locations where backfill is to be stabilised
12.11.1	Subsoil drains - Excavation	Details deleted – reference to CS drawings added
12.11.2	Subsoil drains – Filter material	Details simplified – Table deleted
12.11.5	Subsoil drains – Laying and backfilling	Requirements clarified regarding items to be fitted
<b>13 PROTECTION WORKS</b>		
		Minor editorial changes to terminology to clarify intent
<b>14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES</b>		
14.4	Tactile ground surface indicators	New clause
14.5.6	Fencing – Temporary site safety fence	Requirements for site safety fences made explicit
14.5.7	Fencing – Pedestrian fence	Requirements for pedestrian fences made explicit
14.7.2	Road signs – Anti-spear fixings for hazard markers (sight boards)	New clause. New requirements for anti-spear fixings to hazard marker boards
14.7.3	Road signs - Materials	Term “anchor” changed to “footing” in tables
14.7.3	Road signs - Materials	Two new sign sizes added to table (750x900 and 1500x800)
<b>15 PAVEMENT MARKING</b>		
		Comprehensive update to entire work section
<b>16 LANDSCAPE</b>		
16.3	Materials	Table - Seed mix application rate north of Adelaide River changed
16.7	Batter protection by hydroseeding	New clause
<b>17 DUCTING AND CONDUITS</b>		
		Minor updates
<b>18 TRAFFIC CONTROL SIGNALS AND INTELLIGENT TRANSPORT SYSTEMS</b>		

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		Minor updates
<b>19 TRAFFIC COUNTING STATIONS</b>		
		Minor updates
<b>20 STREET LIGHTING</b>		
		Minor updates
<b>21 DIRECTIONAL BORING</b>		
		Comprehensive update to entire work section
<b>22 PROTECTIVE COATINGS</b>		
		Minor updates
<b>23 MEASUREMENT AND PAYMENT</b>		
		Minor updates
23.4.4	Earthworks in fill	Allow for preparation prior to filling and benching
23.6	Pavements and shoulders	Headings reworded
23.6.2	Reconstruction and widening of existing pavements	Overlay and rework measured in square metres
23.6.4	Pavement acceptance	New item
23.8.3	Spray sealing – Prime, enrichment, emulsion, primer seal and seal coats	Table of equivalent volumes relocated to SPRAY SEALING
23.9.4	Dense graded asphalt – Rate of payment adjustments	Level 4 adjustment rate deleted from table
23.9.5	Dense graded asphalt – Surface roughness	Lot subdividing permitted if IRI exceeds 2.5
23.15	Pavement marking	Comprehensive update
<b>24 REFERENCED AUSTRALIAN STANDARDS</b>		
		Minor updates
<b>25 OTHER REFERENCED AUTHORITIES AND DOCUMENTS</b>		
		Minor updates
<b>26 ACTS, REGULATIONS, CODES, AND AUTHORITIES</b>		
		Minor updates
<b>27 CIVIL STANDARD DRAWINGS FOR ROADWORKS</b>		
		Updated drawing numbers
<b>28 NORTHERN TERRITORY CLIMATE ZONES TABLE</b>		
		No change
<b>29 HOLD POINTS AND WITNESS POINTS SCHEDULES</b>		
	Standard Specification and web page only, not included in TDO	New section
<b>30 UPDATES OVERVIEW</b>		
	Standard Specification and web page only, not included in TDO	New section