

02 July 2008

SPECIFICATIONS AND NOTES

AN IMPORTANT NOTE FOR THE READER

These specifications and notes contain best practice in construction and maintenance specifications.

They are the result of extensive investigation and research by Transit New Zealand and represent sound constructive advice. The specifications are instructions to contractors and the notes are guidelines for consultants. As such these documents should be considered for application in the interests of safety, effectiveness and efficiency. However, while all possible care and effort has been taken in their development, these documents relate to situations, practices and procedures that are likely to change.

Transit New Zealand accepts no responsibility for failure in any way related to the application of these specifications and notes. They should not be deemed as providing either the formal or the only answers to any particular situation or set of circumstances. Therefore, they need to be considered and applied with due care and forethought and should **not** be relied on in isolation from other sources of advice and information.

The documents are available to be viewed, and downloaded in PDF file format, from the Transit New Zealand website at: <http://www.transit.govt.nz/technical/specifications.jsp>

If you wish to receive notification by email when documents are amended please send an email message with your Email Address, Company Name, Contact Name, Postal Address, Telephone Number and Fax Number to:

Enquiries: Email enquiries to: specs@transit.govt.nz

TNZ	TITLE	ISSUE DATE
BASECOURSE		
B/02	Construction of Unbound Granular Pavement Layers	2005
B/02 Notes	Construction of Unbound Granular Pavement Layers	2005
B/5	Specification for In-situ Stabilisation of Modified Pavement Layers	2008
B/5 Notes	Notes to Specification for In-situ Stabilisation of Modified Pavement Layers	2008
B/5 Changes	Changes to B/5 Specification for In-situ Stabilisation of Modified Pavement Layers	2008
EQUIPMENT		
E/3	Roadmarking Paint Applicators	WITHDRAWN
E/4	Certification of Thermoplastic Roadmarking Applicators and Pre-Heating Tanks	WITHDRAWN
FORMATION		
F/1	Earthworks Construction	1997
F/1 Notes	Earthworks Construction	1997
F/2	Pipe Subsoil Drain Construction	2000
F/2 Notes	Pipe Subsoil Drain Construction	2000
F/3	Pipe Culvert Construction	2000
F/3 Notes	Pipe Culvert Construction	2000
F/4 Notes	Fence Construction	May 1975
F/5	Corrugated Plastic Pipe Subsoil Drain Construction	2000
F/5 Notes	Corrugated Plastic Pipe Subsoil Drain Construction	2000
F/6	Fabric Wrapped Aggregate Subsoil Drain Construction	2003
F/6 Notes	Fabric Wrapped Aggregate Subsoil Drain Construction	2003
F/7	Geotextiles	2003
F/7 Notes	Geotextiles	2003
GENERAL		
G/1	Temporary Traffic Control (Superseded by the Code of Practice for Temporary Traffic Management)	WITHDRAWN
G/1 Addendum No 1	1996 to the Specification for Temporary Traffic Control	WITHDRAWN
G/1 Notes	Temporary Traffic Control	WITHDRAWN
G/2	Supply of Aggregate by Weight	1981
G/2 Notes	Supply of Aggregate by Weight	1981

TNZ	TITLE	ISSUE DATE
MATERIAL		
M/1	Roading Bitumens	2007
M/1 Notes	Roading Bitumens	2007
M/1 Changes	Roading Bitumens	2007
M/3 Notes	Sub-Base Aggregate	1986
M/4	Basecourse Aggregate	2006
M/4 Changes	Basecourse Aggregate	2006
M/4 Notes	Basecourse Aggregate	2006
M/5 Notes	Regional Basecourse Aggregates (Nelson Addition)	WITHDRAWN
	(Napier)1993	WITHDRAWN
M/6	Sealing Chip	2004
M/6 Notes	Sealing Chip	2004
M/6(Dacite)	Amendment for Sealing Chips for use with Tauhara Dacite	1995
M/6 Notes (Dacite)	Dacite (Tauhara) Sealing Chip	1987
M/7	Roadmarking Paints	2006
M/7 Notes	Roadmarking Paints	2007
M/10	Asphaltic Concrete	2005
M/10 Notes	Asphaltic Concrete	2005
M/10P	(Auckland) Asphaltic Concrete	WITHDRAWN
M/10DP	Amendment for use with Drum Mixing Plants	WITHDRAWN
M/11	Pre-Coating Sealing Chips	June 1975
M/12	Raised Pavement Markers	1998
M/12 Notes	Raised Pavement Markers	2007
M/13	Adhesion Agents	1989
M/13 Notes	Adhesion Agents	1986
M/14	Edge Marker Posts	2005
M/14 Notes	Edge Marker Posts	2007
M/15	Lime for use in Soil Stabilisation	1986
M/15 Notes	Lime for use in Soil Stabilisation	1986
M/16P	W-Section Highway Guardrail	WITHDRAWN
M/17P	W-Section Bridge Guardrail	1989
M/18P	Fibreglass Reinforced Plastic Highway Lighting Columns	1990
M/19	Tubular Steel Lighting Columns	1994
M/19 Notes	Notes to the Specification for Tubular Steel Lighting Columns	2002
M/20	Long-Life Roadmarking Materials	2003
M/20 Notes	Long-Life Roadmarking Materials	2003
M/23	Road Safety Barrier Systems	Oct. 2006
M/23 Appendix A	Road Safety Barrier Systems	Apr. 2007
M/23 Appendix B	Road Safety Barrier Systems	WITHDRAWN
M/23 Notes	Road Safety Barrier Systems	December 2005
M/24	Roadmarking Materials	2006
M/24 Notes	Roadmarking Materials	2007
PSV Chart	Suppliers of Surfacing Aggregate – Polished Stone Values	2004

PAVING AND SURFACING & CONSTRUCTION

P/3	First Coat Sealing	1995
P/3 Notes	First Coat Sealing	1989
P/4	Resealing	1995
P/4 Notes	Resealing	1989
P/5P	Rubber Latex in Reseal Binders	1985
P/5P Notes	Rubber Latex in Reseal Binders	1985
P/9	Construction of Asphaltic Concrete Paving	June 1975
P/9P	(Auckland) Construction of Asphaltic Concrete Paving	November 1992
P/11	Open Graded Porous Asphalt	2007
P/11 Notes	Open Graded Porous Asphalt	2007
P/11 Changes	Changes to Open Graded Porous Asphalt	2007
P/12	Pavement Marking	2000
P/12 Notes	Pavement Marking	1998
P/13P	Cement Concrete Highway Pavements (Contact TNZ Head Office for Technical Advice)	WITHDRAWN
P/14	Installation of Raised Pavement Markers	1995
P/14 Notes	Installation of Raised Pavement Markers	1995
P/15P	Fabrication and Assembly of Standard Guardrails and Handrails for Highway Bridges and Bridge Approaches	WITHDRAWN
P/16	Installation of Edge Marker Posts	1993
P/16 Notes	Installation of Edge Marker Posts	1992
P/17	Performance Based Specification for Bituminous Reseals	2002
P/17 Notes	Performance Based Specification for Bituminous Reseals	2002
P/21	Performance Based Specification for Edge Marker Posts	2003
P/21 Notes	Notes for the Performance Based Specification for Edge Marker Posts	2003
P/22	Reflectorised Pavement Marking	2006
P/23	Performance Based Specification for Hotmix Asphalt Wearing Course Surfacing	2005
P/23 Notes	Notes to the Performance Based Specification for Hotmix Asphalt Wearing Course Surfacing	2005
<u>P/24</u>	<u>Performance Based Specification for Traffic Signs</u>	<u>2008</u>
<u>P/24 Notes</u>	<u>Notes for the Performance Based Specification for Traffic Signs</u>	<u>2008</u>
P/26	Improvement of Pavement Macrottexture by use of High Pressure Water and Grooving	2003
P/26 Notes	Improvement of Pavement Macrottexture by use of High Pressure Water and Grooving	2003
P/28	Maintenance and Installation of Inductive Loops at Traffic Monitoring Sites	Nov. 2006

QUALITY ASSURANCE

QG Notes	Guideline on Roles in Quality Assurance	1996
Q/1	Chipsealing	1995
Q/2	Hot Mix Asphalt	1995
Q/1 Notes & Q/2 Notes	Chipsealing and Hot Mix Asphalt	June 1995
Q/3	Normal QA Level Contracts	1995

TNZ	TITLE	ISSUE DATE
Q/4	High QA Level Contracts	1995
Q/3 and Q/4 Notes	Normal and High QA Level Contracts	1995
STANDARDS		
S/5P	Concrete Weigh Pit	1987
S/5P Notes	Concrete Weigh Pit	1987
S/6	Bridge Inspection Policy	2000
TESTING		
T/1	Benkelman Beam Deflection Measurements	June 1977
T/3	Measurement of Texture by the Sand Circle Method	1981
T/4	Description of Test Locations on Highways	1981
T/5	Size, Shape and Grading of Grades 1-4 Sealing Chips	1987
T/6	Pore Size Distributions of Filter Fabric	1986
T/7	Permeability of Filter Fabrics	1983
T/8	Roadmarking Paint Applicator Testing	December 2006
T/8 Changes	Changes to Roadmarking Paint Applicator Testing	December 2006
T/9	Procedure for the Estimation of the Kerosene Content	2003
T/10	Skid Resistance Deficiency Investigation and Treatment Selection	2002
T/10 Notes	Skid Resistance Deficiency Investigation and Treatment Selection	2002
T/11	Determination of the Permeability of Hot Mix Asphalt Pavements	2003
T/12	Long-Life Pavement Marking Material Applicator Testing	2003
T/12 Notes	Long-Life Pavement Marking Material Applicator Testing	2003
MAINTENANCE		
C Series to SOMAC	Changes	2006
C Series to SOMAC	List and Disclaimer	2006
C1	General Maintenance	1995
C1 Addendum No 1	1997 to the Specification for General Maintenance	1997
C1 Notes	General Maintenance	1995
C2	Temporary Traffic Control	WITHDRAWN
C3	Repair Potholes	1993 Replaced 2006
C3 Notes	Repair Potholes	1993
C3 Replacement	Repair Potholes Replacement	2006
C4	Digout Repairs in Flexible Pavements	1995 Replaced 2006
C4 Notes	Digout Repairs in Flexible Pavements	1993
C4 Replacement	Digout Repairs in Flexible Pavements Replacement	2006
C5	Repair of Surface Openings and Minor Surface Levelling	1993 Replaced 2006
C5 Notes	Repair of Surface Openings and Minor Surface Levelling	1992
C5 Replacement	Repair of Surface Openings and Minor Surface Levelling Replacement	2006
C6	Repair of Surface Defects	1995 Replaced 2006
C6 Notes	Repair of Surface Defects	1992

TNZ	TITLE	ISSUE DATE
C6 Replacement MAINTENANCE (continued)	Repair of Surface Defects Replacement	2006
C7	Repair of Edge Break	1995 Replaced 2006
C7 Notes	Repair of Edge Break	1992
C7 Replacement	Repair of Edge Break Replacement	2006
C8	Adjusting Surface Boxes	1992 Replaced 2006
C8 Notes	Adjusting Service Corners	1992
C8 Replacement	Adjusting Surface Boxes Replacement	2006
C9	Emergency Work	1995 Replaced 2006
C9 Notes	Emergency Work	1992
C9 Replacement	Emergency Work Replacement	2006
C10	Maintenance of Unsealed Shoulders	1995 Replaced 2006
C10 Notes	Maintenance of Unsealed Shoulders	1992
C10 Replacement	Maintenance of Unsealed Shoulders Replacement	2006
C11	Unsealed Pavements: Repair of Potholes	1992 Replaced 2006
C11 Notes	Unsealed Pavements: Repair of Potholes	1992
C11 Replacement	Unsealed Pavements: Repair of Potholes Replacement	2006
C12	Unsealed Pavements: Surface and Shape Restoration	1995 Replaced 2006
C12 Notes	Unsealed Pavements: Surface and Shape Restoration	1991
C12 Replacement	Unsealed Pavements: Surface and Shape Restoration Replacement	2006
C13	Unsealed Pavements: Digout Repairs	1992 Replaced 2006
C13 Notes	Unsealed Pavements: Digout Repairs	1992
C13 Replacement	Unsealed Pavements: Digout Repairs Replacement	2006
C14	Unsealed Pavements: Supply and Place Maintenance Aggregate	1991 Replaced 2006
C14 Notes	Unsealed Pavements: Supply and Place Maintenance Aggregate	1991
C14 Replacement	Unsealed Pavements: Supply and Place Maintenance Aggregate Replacement	2006
C15	Removal of Surface Detritus	1993 Replaced 2006
C15 Notes	Removal of Surface Detritus	1992
C15 Replacement	Removal of Surface Detritus Replacement	2006
C16	Maintenance of Stormwater Structures	1992 Replaced 2006
C16 Notes	Maintenance of Stormwater Structures	1992
C16 Replacement	Maintenance of Stormwater Structures Replacement	2006
C17	Litter and Rubbish Removal	1993
C17 Notes	Litter and Rubbish Removal	1992
C18	Maintenance of Edge Marker Posts	1995
C18 Notes	Maintenance of Edge Marker Posts	1992
C19 Notes	Maintenance of Guardrails and Median Barriers	1991 Replaced 2006
C19 Notes Replacement	Maintenance of Guardrails and Median Barriers Replacement	2006
C20	Erection and Maintenance of Traffic Signs, Chevrons, Markers and Sight Rails	2003
C20 Notes	Erection and Maintenance of Traffic Signs, Chevrons, Markers and Sight Rails	2003
C21	Vegetation Control	July 1997
C21 Notes	Vegetation Control including Mowing and Chemical Control	WITHDRAWN

TNZ	TITLE	ISSUE DATE
MAINTENANCE (continued)		
C22	Specification for Winter Maintenance	2005 Replaced 2006
C22 Notes	Notes to Specification for Winter Maintenance	2005
C22 Replacement	Specification for Winter Maintenance Replacement	2006
C23 Notes	Repair of Corrosion Protection Systems	2000
C24	Maintenance of Highway Lighting	1991
C24 Notes	Maintenance of Highway Lighting	1991
C25	Maintenance and Repair of Traffic Signal Installations	1991
C25 Notes	Maintenance and Repair of Traffic Signal Installations	1991
C26	Specification for the Cleaning and Recoating of Steelwork Coated with Lead Based Paint	2003
C26 Notes	Notes for the Cleaning and Recoating of Steelwork Coated with Lead Based Paint	2003
HM03	Definitions	2006
HM09	Incident Response	2006
HM10	Winter Maintenance	2006
HM11	Surfacings	2006
HM12	Digouts	2006
HM13	Depressions	2006
HM14	Edgebreak	2006
HM15	Service Covers	2006
HM16	Shoulder Maintenance	2006
HM17	Barrier Repairs	2006
HM19	Potholes	2006
HM20	Detritus and Slip Removal	2006
HM21	Drainage Systems	2006
HM23	Unsealed Pavements	2006
HM24	Drainage Improvements	2006
MR09	Pre-surfacing Repairs (identical to OR09 Pre-Surfacing Repairs)	2006