

## C-Series to SOMAC Changes March 2006

The following pages outline the major changes made as a result of the C-Series to SOMAC project stage 1, to March 2006.

The C-Series to SOMAC project has so far addressed the:

- SOMAC Highway Maintenance (HM) Pro-Forma
- SOMAC Method Resurfacing (MR) Pro-Forma
- SOMAC Output Resurfacing (OR) Pro-Forma

The new documents replacing the old Transit New Zealand C-Series maintenance specifications are as follows:

<b>New Name</b>	<b>Old Name</b>
HM09 Incident Response	TNZ C9 Specification for Emergency Work
HM10 Winter Maintenance	TNZ C22 Specification for Winter Maintenance
HM11 Surfacing	TNZ C6 Specification for Repair of Surface Defects
HM12 Digouts	TNZ C4 Specification for Digout Repairs in Flexible Pavements
HM13 Depressions	TNZ C5 Specification for Repair of Surface Openings and Minor Surface Levelling
HM14 Edgebreak	TNZ C7 Specification for Repair of Edge Break
HM15 Service Covers	TNZ C8 Specification for Adjusting Service Covers
HM16 Shoulder Maintenance	TNZ C10 Specification for Maintenance of Unsealed Shoulders
HM17 Barrier Repairs	TNZ C19 Notes to the Specification for Maintenance of Guardrails and Median Barriers
HM19 Potholes	TNZ C3 Specification for Repair of Potholes
HM20 Detritus and Slip Removal	TNZ C15 Specification for Removal of Surface Detritus
HM21 Drainage Systems	TNZ C16 Specification for Maintenance of Stormwater Structures
HM23 Unsealed Pavements	TNZ C11 Specification for Unsealed Pavements: Repair of Potholes
	TNZ C12 Specification for Unsealed Pavements: Surface and Shape Restoration
	TNZ C13 Specification for Unsealed Pavements: Digout Repairs
	TNZ C14 Specification for Unsealed Pavements: Supply and Place Maintenance Aggregate

HM24 Drainage Improvements	TNZ C16 Specification for Maintenance of Stormwater Structures
MR09 Pre-surfacing Repairs (OR09 Pre-surfacing Repairs is identical)	TNZ C4 Specification for Digout Repairs in Flexible Pavements
	TNZ C5 Specification for Repair of Surface Openings and Minor Surface Levelling
	TNZ C6 Specification for Repair of Surface Defects
	TNZ C7 Specification for Repair of Edge Break
	TNZ C8 Specification for Adjusting Service Covers

The “specification” column on the following pages is relevant to the specifications listed above. The other columns on the following pages refer to other sections of the SM032 State Highway Maintenance Contract Proforma Manual (SOMAC), which can be downloaded from the Transit New Zealand website.

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SOMAC Section	C-Spec Numbers	Section Name (old and new if relevant)	Specification	Basis of Payment (BOP), Schedule of Prices (SOP)	Sections 1 to 7.	Appendix
HM 9	C9	Incident Response	<p>90% unchanged. Sections 9.1 and 9.5 changed/new wording, however no change to level of service.</p> <p><b>Previously:</b> Emergency patrols in response to Engineer's request. <b>Now:</b> Contractor is deciding for themselves when the patrol is necessary</p>			Refers to Operational Requirements, however no Appendix or form required for an incident attendance vehicle
HM 10	C22	<p><b>Old:</b> Gritting and Snow Clearance <b>New:</b> Winter Maintenance</p>	<p>100% changed.</p> <p>This is a new section based on the new Winter Maintenance Specification, which has been signed off the Best Practice Group.</p> <p>Improved level of service.</p>	New BOP and SOP due to new section being created - Based on new C22	Added Table 4.2 "Organisations to be Notified".	<p>Table 10.1 expanded to include column: "Areas of Potential Frost &amp; Snow".</p> <p>Added reference to Appendix 3.5 "Grit Stockpiles".</p> <p>No example needed for "CMA Requirements"</p>
HM 11	C6	Surface Defects	<p>No change to level of service.</p> <p>Pavement Gritting and</p>	Flushing and Repairs added as a heading under Flushing and Bleeding.		Refers to Operational Requirements, however no Appendix or Form required for specific "Surface Defect

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			Weather Observation added.  "Cold" Milling added and defined	Pavement Gritting and Weather Observation added		Repairs" and for "Other Treatments".
HM 12	C4	Digouts	No change to level of service.			Refers to Operational Requirements, however supporting Table or Appendix not needed.
HM 13	C5	Depressions	There are some cosmetic changes to the section but this does not have any impact on cost or level of service			Refers to Operational Requirements, however supporting Table or Appendix not needed.
HM 14	C7	Edge Break	Extensive rewording that does not change significantly the scope of works or expected costs. No price increase expected.			Does not refer to Operational Requirements therefore no Appendix or Form required.
HM 15	C8	Service Covers	No change to level of service.			
HM 16	C10	<b>Old:</b> Unsealed Shoulders <b>New:</b> Shoulder Maintenance	There are significant changes to clarify inconsistencies between C10 and SOMAC. No cost implication as the work is			Does not refer to Operational Requirements therefore no Appendix or Form required.

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			being carried out regardless.			
HM 17	C19	<b>Old:</b> Guardrail and Barrier Repairs <b>New:</b> Barrier Repairs	Possible change to Level of Service in some regions, as have clarified inspections. More inspections could lead to more work being picked up.  Deleted item "Paint BCT".			
HM 18		Abandoned Vehicles	Wording clarified however no change to level of service			Does not refer to Operational Requirements therefore no Appendix or Form required.
HM 19	C3	Potholes	Cosmetic translation changes only, no impact to level of service expected.			Does not refer to Operational Requirements therefore no Appendix or Form required.
HM 20	C15	<b>Old:</b> Surface Detritus <b>New:</b> Detritus and Slip Removal	Changed level of service. Changes made to include slips, so expected change in price.	Changed payment for establishment of plant at each slip site or group of slips less than 100 m apart.		New Appendix: Table 20.1 added "Detritus Removal"
HM 21	C16	Drainage Systems	Theoretically no change to level of service. Definition of when culverts should be cleaned has been added however will not affect price or scope.			Reference to Operational Requirement Appendix 21.11 "Schedule for Specific Maintenance"

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HM 22		Bridge and other structure routine maintenance	No change. Section to be reviewed by Bridging Team and National Bridge Consultant			Reference to Operational Requirement Appdx. 22.3 "Schedule of Maintenance"
HM 23	C11, C13, C14	Unsealed Pavements	HM23 Unsealed Pavements completely revised			
HM 24	C16	Drainage Improvements	New optional section based on Transit Napier's Drainage Improvement clauses.			
All				BOP: Added clause to Pre-Amble IV(d), to only pay for completed tasks as per e.g. first coat sealing of edge break repairs if the construction method requires this.		
All					New clause 3.9 "Damage". Deleted all other damage clauses in the specifications, e.g.	

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					in Winter Maintenance.	
All					Reinstatement of Pavement of Pavement Markings & Raised Pavement Markers moved to section 3 "General Requirements" to cover all specifications.	
SOMAC Hybrid		Conditions of Contract – Twelfth Schedule Cost Fluctuations	Cost Fluctuations – Rewording to make clauses 4 & 5 clearer. Reviewed by CTSY and Transit Procurement Team.			
All		Management of TMP		BoP 6.2 deleted, now included in Unit Rates		
All		Additional Traffic Control		SoP 6.4 Change to establishment cost plus rate per hour		
HM12,		New Clause – Mix	Inlay material shall be Mix			

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13, 19		10 to TNZ M/10	10 Asphaltic Concrete to TNZ M/10 or any other approved mix approved by Transit's Engineering Policy Manager			
MR OR HM		Method Resurfacing Output Resurfacing		Added an over-rate for high PSV (copied from Output Resurfacing). Covering a deficiency where we could currently end up with sub-standard MSSC on the surface of repairs.  Pre-reseal repair – PSV not required.		
Tser HM		Traffic Services Highway Maintenance	Clause 4.3.7 Monthly Report: Location reference and date to be included in Tser & HM Specs for inspection (Cl. 5.4.3) cyclic inspections			
Tser		Removal and/or Recycling of Damaged	Clause 4.3.7: Clause added to ensure that Contractor does not dispose of material			



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		Components	on site & to encourage recycling to align with Transits Waste & Mgt Policy (SP/M/023). To go into all proformas & suitable disclaimers “where it does not compromise standards”.			
All		Conditions of Contract 1.2 Part B First Schedule.	“Working Day” redefined. Working hours to ensure that Incident Response falls outside the definition of Working Day. Change now allows work on the day before a Public Holiday			
All		Maintenance during Capital Construction	The Contractor will continue to maintain the Network through lengths affected by other construction projects, unless directed by the Engineer to stop specific activities.			
Active Docs		Conditions of Contract	PI Insurance to be included P/17 contracts			

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		8.4.1 First Schedule				
All		Conditions of Contract 8.3 First Schedule	Increased minimum PL Insurance requirement from \$2M to \$5M			
O.R.		Operational Requirements Clause 4 Contract Management Board	Contract Management Board has been included			
HM		Clause 4.11.2 Partial Programme Submissions			Allows for staged submission of monthly programmes	
HM		Public Complaints			Response time added to ensure efficient remedy of public complaints.	

SOMAC Output Resurfacing and Method Resurfacing Proforma Changes March 2006

<b>SOMAC Section</b>	<b>C-Spec Numbers</b>	<b>Section Name (old and new if relevant)</b>	<b>Section</b>	<b>Notes</b>	<b>Change of Level of Service</b>	<b>Comments 6th December 2005 up to 9.5 13 December 2005 from 9.5.1</b>
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	Table 9.2	New Table 9.2 for Roadmarking Reinstatement. Included Loose Chip Column. Other Sections (11, 12) with same tables	Yes	
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.1 Scope	Tidied scope and added lichen removal	Yes	
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.3 Response Times	Table 9.1 Deleted requirement for Temporary seal at end of day. Changed to within 48 hours of completion of the final basecourse surface.	Yes	Taken out 2nd Coat
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	Section 9.3 Response Times	Added words for "possession of site" when Contractor takes over pre-reseal repairs from HM contractor to sections. Also added to 10.4.1.3	Yes	
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.4.7.2 Second Coat Seals	Deleted 2nd coat seal requirements: "the sealed carriageway surface has a consistent texture 3 months after the construction of the second coat seal"	Yes	
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.4.11. Lichen Removal	New Clause - Increase in Level of Service (added to SoP and BoP)	Change in Level of Service	
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.5.3.1 Depth of Materials	Added the following: "Where a thin asphaltic concrete layer is required, the basecourse shall terminate a nominal 2.5	No Change	Change to match HM - Done

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SOMAC Section	C-Spec Numbers	Section Name (old and new if relevant)	Section	Notes	Change of Level of Service	Comments 6th December 2005 up to 9.5 13 December 2005 from 9.5.1
				times the maximum size of aggregate used in the mix, below the finished surface".		
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.5.1	Digouts	No Change	Worried about single rate for all depths of digout. Research shows that not much difference in rates for different depths: Compromise by giving indicative quantities. Mention average size in schedule. Agreed to give indicative quantities of less than and greater than 300mm, in same place as where we give average repair size - Done
OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.5.6.1. Surface Water Channels	Added the following: "If required, existing surface water channels must be either regraded and trimmed or new surface water channels constructed for a length up to 5m either side of the digout. The batter slopes must be generally according to Diagram 3.1.	Yes but minor.	Check in all "Accordance to Diagram 3.1." In reference to slope - call them "Target Gradient" - Done
OR 9 OR 9 MR 9	C4, C5, C6, C7, C8	9 Pre-Surfacing Repairs	9.6.5. Asphaltic Concrete	Inserted new words: "Thin asphaltic concrete shall comply with TNZ Specification TNZ M/10 or any other mix approved by Transit's Engineering Policy Manager." Also changed in 9.7.7	Discuss - DB approval needed	"A waterproofing membrane seal" replaces "grade 5 chipseal" - done See Clause 9.6.5. for new Membrane seal clause - Done

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OR11		11 Resealing	11.4.1.1 Accessways	Added: "The accessways must be sealed to a nominal 2.5m from the edge of the highway. Added requirement that same grade of chip be used as on the adjacent highway.	Clarification	
OR12	C8	12 Thin Asphalt Surfacing	12.4.5 Cold Milling	Cold Milling removed from Construction now refers to pre surfacing treatment Added: Cold milling of the existing pavement, where required prior to constructing a thin asphaltic surfacing, shall be considered to be a pre-surfacing treatment.	No Change	
OR12	C8	12 Thin Asphalt Surfacing	Table 12.2	Include loose Chip Column?  Other Sections (9, 11) with same tables	Yes	Agreed to take out Loose Chip column- Done
OR12	C8	12 Thin Asphalt Surfacing	12.4.2	Temperature & Grading Ranges inserted	Yes	Industry OK with this - Done
OR12	C8	12 Thin Asphalt Surfacing	12.4.2	Lay Down trials – do we want to see anything on this – include to read “Contractor may choose lay down trial...Agreed	Yes	Industry OK with this - Done
OR12	C8	12 Thin Asphalt Surfacing	12.4.2	Skid Resistance and mix requirements– Mix integrity not to be compromised by PSV requirements	Yes	Industry OK with this - Done
OR12	C8	12 Thin Asphalt Surfacing	12.4.6.4	Roughness – see P9 but nowhere does it say sudden change of shape not mentioned	Yes	Industry OK with this - Done

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				Agreed– include, match to P/18 Roughness Requirements		
OR12	C8	12 Thin Asphalt Surfacing	12.4.2	Membrane vs TAC (minimum binder) put down on top of a waterproof surface so mix will stick state what we want in membrane seal - agreed,	Yes	Easier if TNZ states what they want for membrane Seals vs tack coat Done
OR12	C8	12 Thin Asphalt Surfacing	12.4.2	Preparation of surface and suitability of Pavement being waterproof, no loose chip, no stripping – New heading Agreed	Yes	Industry OK with this - Done
OR12	C8	12 Thin Asphalt Surfacing	12.5 Performance Criteria	Added new Clause	Discuss	
OR13		13 Traffic Services - Output	Table 13.1	Replaced with HM formatted tables to include "loose chip"	Discuss	Remove Loose chip from Section 12 but kept in Section 13 table - Done
All				If this document is a 3-year contract, when do the re-reseal repairs become the responsibility of the resurfacing Contractor? A nasty contractor could argue they want to do all the pre-reseal repairs in year 1, for the entire 3 year contract. Need a clause saying there will be a handover date.	Discuss	Done. September date for hand over for that year's reseal repairs. Option which is changeable by consultant.
SOP		Schedule of Prices		Page SP1, clause 3.1 Forward Work Programme Field Inspection: Deleted as don't need this in a resurfacing contract.	Change is not relevant	Change is not relevant

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				Also deleted 3.14 Forward Work Programme for Field Inspections in PS		
SOP		Schedule of Prices		Page SP1, clause 5.1 Monthly Reports. Deleted small words in italics regarding min and max rate, changed to ea. (per each), changed quantity to 9.	Change of Level of Service (3 or 9 or 36 months)	Agreed that maximum should be stated - Done
SOP		Schedule of Prices		Page SP1, clause 6.2 Management of TMP, delete and include in unit rates? Note if it's not there, there's no stick. Actioned and deleted, but the topic is up for debate. Also changed BoP 6.2 Management of TMP - copied from HM	Discuss with Mark Change of Level of Service	Industry Agreed - Done
SOP		Schedule of Prices		Page SP3 Did not add 9.1.1.1 Over-rate for two coat first coat sealing and 9.1.1.2 Over-rate for pre-mix sealing (as did for HM doc changes). Instead added "The contractor will select his sealing technique to address the traffic stresses and price accordingly" to Page BP 7, clause 9.1.1 First Coat Sealing . Page SP3, deleted clause 9.1.2 Second Coat Sealing	Change of Level of Service	Change of risk profile. No need for 2nd coat seal on a pre-reseal repair. - Done
SOP		Schedule of Prices		Page SP6 Clause 11.3.8.2 and 11.3.8.3, need to discuss if over-rate for high PSV aggregate is a "provisional" item or not.	Discuss	unit is m2 - cross out "provisional item" - Done

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SOP		Schedule of Prices		Page SP7 Clause 11.5 Accessways, deleted as should be included in rates. Also added words to Page BP13, clauses 11.3.1 to 11.3.7 "including accessways".	No Change	Done No comment
BOP		Basis of Payment		Page BP9, Clause 9.2.3 Digouts in AC Pavements. Do we want the pavement markings back? Depends on how long to reseal.	Discuss	Escalate if is an important area. Keep requirements in for markings and RRPM's but make optional (add "if required" to RRPM's).
BOP		Basis of Payment		ADDED: to include Pavement Markings as follows: BP 17 Clause 12.5 "The tendered unit rate must fully compensate for completely adjusting each service cover including constructing the surfacing and reinstating all pavement markings as specified."	Change of Level of Service	Keep clause 3.10 (roadmarking reinstatement ex HM) for Section 9 Pre-reseal repairs. Keep Section 13 for roadmarking reinstatement following Resurfacing
CC		Conditions of Contract		Page CC8, Definition of Cyclic Maintenance.	Yes	Remove from "and do not require...." - Done
Operational Requirements		Operational Requirements	Contract Management Board	Page OR2, "CMB in terms of this State Highway Maintenance Contract" Change to "this contract", or should OR and MR contracts not include a CMB?	Discuss	Agreed to take out HM contract - Done
Sections 1-7		1.3.1 Contractor's Obligations.		Weather clause added	Yes	Done
Sections 1-7		3 General Requirements	Section 3	3.2.1, 3.6.1, 3.6.3 The Contractor must complete routine inspections, including, if	Yes	Removed "Routine Inspections" kept "joint



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				required, night inspections, at intervals so all faults are identified, programmed and repaired according to the Contract Documents.		Inspections" Change Table 3.1 - remove table as removing Final Joint Inspections - Done
Sections 1-7		4.4 Preparation of Programme	Possession of Site	New addition to Clause 4.5.2: "Possession of site is when the Contractor becomes responsible for any outstanding work which has appeared, and any pre-reseal repairs which the maintenance contractor has not completed and all repairs up until sealing. For this contract possession of site is 30th September, or 10 Working Days following Contract award, whichever is later".	Discuss	Definition - When taken over by the Contractor, but date needs to be stated as a guide... "site includes all sections scheduled for resealing that year", - Done
Sections 1-7		Various	Section 1 & 4 & 10	Added words for "possession of site" when Contractor takes over pre-reseal repairs from HM contractor to sections: 1.2, 4.4.3, 4.5.2, 10.4.1.3.	Yes	Agreed - Done