

PERFORMANCE BASED SPECIFICATION FOR RESEALS

1. SCOPE

This specification sets out the performance requirements for:

- single coat reseals using sealing chip with an average dimension greater than 5.5mm;
- multilayer seals using sealing chips in the range of grade 2 to grade 6, as defined in NZTA M6 Specification. This includes both wet and dry locking coats; and
- texturising seals and void fills.

This specification is for use where the chipseal is designed in accordance with the principles of the text book *Chipsealing in New Zealand*¹ and applied to a site acceptable for resealing. Provision is made for the Contractor and Consultant to agree alternative acceptance criteria where site conditions are such that the design life is unlikely to be obtained.

2. TRAFFIC VOLUMES

The traffic volumes given in the schedule to this contract are to be used as the basis of tendering. A distinction is made in the AADT column of Schedule A between reliable estimates based on known data and less accurate data.

3. QUALITY PLAN

The Contractor shall submit to the Engineer for acceptance a Quality Plan detailing the procedures to be followed to ensure compliance. The Contractor shall have available for inspection by the Engineer all documents detailed in the Quality Plan.

The Engineer shall prepare a performance criteria report detailing each site resealed and forward to the Contractor within 20 working days after the final compliance assessment period.

4. SITE ACCEPTANCE

The Contractor shall inspect each site and consider each criteria for site acceptance outlined below and whether all necessary pre-seals repairs have been completed and are satisfactory.

4.1 Confirmation of Treatment

For single and multilayer seals, the Contractor shall satisfy him or herself that the proposed treatment is appropriate for the site conditions and meets the surface hardness, texture variation and traffic stress and contract timing as detailed below. For texturising and void fills the Contractor shall satisfy him or her self that the specified chip size is appropriate.

¹ Transit NZ, RCA, Roding NZ. 2005. *Chipsealing in New Zealand*. Transit New Zealand, Road Controlling Authorities, Roding New Zealand, Wellington, New Zealand

4.2 Surface Hardness

It is the Contractor's responsibility to satisfy him or herself that the hardness of the surface to be sealed is consistent. Where areas are found, that differ from the average of the rest of the site, then either:

If nominal (1 mm):

- an appropriate treatment may be agreed as a variation to the contract; or
- the acceptance criteria (which may not be in compliance with Table 2 of this specification) for the soft areas may be varied by agreement.
- In cases of dispute, the RTA "Ball Penetration Test Method" can be used. When tested by the RTA "Ball Penetration Test Method" T271 hardness test or equivalent, areas that have ball penetration values that are greater than 1 mm from the average of the rest of the site may be handled as follows:

If the average hardness of five randomly located positions over the area to be sealed is greater than 5mm, then the Engineer may:

- allow an alternative sealing system and acceptance criteria; or
- agree to an alternative risk profile and associated performance criteria as detailed in clause 4.8 of this specification.

4.3 Surface Texture

It is the Contractor's responsibility to ensure that the surface texture variation of the site is acceptable for the chip size to be used. If there are any areas where the texture variation is outside the guidelines given in *Chipsealing in New Zealand* the Engineer shall be notified a minimum of seven days before sealing. If it is agreed that the surface texture variations are outside the stated guidelines, then either:

- an appropriate treatment shall be agreed as a variation to the contract; or
- the acceptance criteria (which may not be in compliance with Table 2 of this specification) shall be agreed; or
- agree to an alternative risk profile and associated performance criteria as detailed in clause 4.8 of this specification.

4.4 Traffic Stress

Where the Contractor considers that the traffic stress level renders the specified treatment inappropriate he must notify the Engineer. This notification shall be a minimum of seven days prior to construction. The Engineer shall either:

- agree with the Contractor appropriate acceptance criteria for each section ("section" is defined in clause 9.1 of this specification); or
- allow an alternative sealing system as a variation to the contract with agreed acceptance criteria; or

- agree to an alternative risk profile and associated performance criteria as detailed in clause 4.8 of this specification, with payment for the section made at the tendered square metre rate for the construction reduced by 15%.

4.5 Contract Timing

Where the Contractor considers that the contract has been let for construction, or sites have been added or made available for construction, outside the normal sealing season then he may notify the Engineer. This notification shall be a minimum of seven days prior to construction. The Engineer shall either:

- agree with the Contractor appropriate acceptance criteria for each section (“section” is defined in clause 9.1 of this specification); or
- allow an alternative sealing system as a variation to the contract with agreed acceptance criteria; or
- agree to an alternative risk profile and associated performance criteria as detailed in clause 4.8 of this specification.

4.6 Payment Reduction

If the site does not comply with the hardness criteria or if the texture is outside the limits for the specified chip size, and the Engineer agrees to the construction of a treatment with an alternative risk profile and the associated performance criteria as detailed in clause 4.8 of this specification, then there shall be no reduction in payment.

4.7 Acceptance of Treatment

If the treatment proposed by the Engineer is considered appropriate by the Contractor then the Contractor shall agree the treatment and accept the site.

4.8 Alternative Risk Profile

Where agreed with the Engineer, an alternative risk profile may be used where by there is a transfer of some risk back to the client. This may be the case where the conditions in clause 4.3 to 4.5 are not agreed.

Where this alternative risk profile is agreed, for the site or for a part of the site the Contractor shall construct the resurfacing treatment under the NZTA P17 Specification, but with the following alternative performance criteria:

- The 12-month assessment (as detailed in clause 9) shall not apply,
- The payment provisions within clause 11 relating to texture after 12 months shall not apply,
- It is the Contractors responsibility to maintain the seal in accordance with the requirements of this specification in a safe condition for a period of 1 month following the date of construction, with respect to workmanship, materials, and best practice.

Where a site is to be sealed using the alternative performance criteria as outlined above, the Engineer shall have a representative on site at the commencement of sealing to verify the Contractors workmanship, materials and best practice. No further transfer of risk is to occur.

Where an instance(s) of the failure of the Contractor to use best practice including: poor workmanship, or non-complying materials is identified by the Engineer on site and reported to the Contractor and it is not corrected by the Contractor at the time, then the ensuing remedial works shall be completed in accordance with clause 10 of this specification, and at the discretion of the Engineer may be subject to a further 1 month defects liability period.

5. WORKMANSHIP

The sealing shall be performed in a workman-like manner with clean straight edges and all road furniture protected from spray. All surplus and waste material must be removed before the site is opened to unrestricted traffic. All surplus chips must be uplifted and removed from the works. Unless agreed by the Engineer no chip shall be swept across the shoulder. All surplus chips shall be removed from areas adjacent to the carriageways such as footpaths, accessways, business frontages and side roads.

RPMs shall be protected from spray for voidfills and texurisers, and removed for other seals.

6. TRAFFIC CONTROL

At all times during the construction of the works covered by this specification, the Contractor shall take responsibility to ensure all traffic control is carried out in accordance with the specific contract requirements

Temporary traffic control restrictions shall not exceed a continuous centreline length of 5km at any one time unless approved by the Engineer in writing.

7. PERFORMANCE REQUIREMENTS

7.1 Chip Coverage

Throughout the defects liability period the following criteria shall apply:

- For single coat seals and void fills the whole sealed area shall have a uniform single retained layer of chips.
- For multilayer seals the whole sealed area shall have a uniform double retained layer of chips with the second chip fitting inside the interstices of the chip used for the first layer.
- For texturising seals the whole sealed area shall have a texture uniform enough for applying reseals to, following the principles in Chipsealing in New Zealand.
- Throughout the defects liability period the whole sealed area shall have a texture depth sufficient to achieve the specified design life.

7.2 Defects

There shall be no defects, observable by visual inspection, related to poorly constructed longitudinal or transverse joints, blocked spray nozzles or any other construction fault. The finished sealed surface, when visually inspected, shall not have any flushing, significant chip loss or loose chip.

7.3 Loose and Surplus Chip

Drainage structures such as catchpits and stormwater systems shall be protected during sealing to prevent loose chip entering them.

Before the speed restriction signs are removed all loose chip is to be uplifted and removed from site to the following standard:

- No more than 50 loose chips are left on any 2 m² area of the sealed carriageway for all chip sizes except for grades 5 and 6.
- No more than 100 loose chips are left on any 2 m² area of the sealed carriageway for grades 5 and 6.
- All surplus chip shall be uplifted and removed from the works, and shall also be removed from any roadside drainage structures, channels, grass berms, driveways, pedestrian walkways, accessways, business frontages, side roads, cycleways and any other areas within the road reserve where chips have been tracked.

Unless agreed by the Engineer no surplus chip shall be swept across the shoulder.

The seal shall comply with the requirements of Table 2.

7.4 Maintenance of Surfacing

After the speed restriction signs are removed the surface shall be regularly maintained during the defects liability period to the standard defined in 7.3.

7.5 Same Day Sealing

In addition to the requirements of 7.3 and 7.4, if requested in the tender documents, sites may be required to be sealed, swept, roadmarked and opened to unrestricted traffic flow within one working day. Guidance is provided in Chipsealing in New Zealand Chapter 11: Practice Note 2.

There is an expectation these sites will not require a second sweeping.

7.6 Positive Traffic Control

If at any time, the road user or general public are exposed to the risk of quantities of loose chip in excess of the requirement of the above clause, then positive traffic control shall be implemented by the contractor, to ensure this risk is minimised. This positive control is to be maintained in place until the risk to the road user or general public, has been removed.

8. ACCEPTANCE TESTING

8.1 Accreditation

All material sampling and testing shall be performed by a laboratory which holds either accreditation by International Accreditation New Zealand or registration to ISO Guide 25:1990 for the specified tests, or alternative certification as accepted by the Engineer.

8.2 Aggregate Properties

The Contractor shall demonstrate, through quality records, that the aggregate properties comply with this specification. It is expected that testing frequency shall be in accordance with the Roading New Zealand Guidelines “Quality Assurance of Aggregates for Chipseals and Bituminous Mixes” RNZ 9805 for source properties. The tests to determine the chip size shall be performed on stockpiles of chip that are proposed to be used on this contract. Each stockpile of chip shall be tested at the minimum frequencies stated in Table 1.

TABLE 1

Stockpile Size	Minimum Samples
< 100 m ³	1
100 - 500m ³	2
> 500 m ³	3

For sealing chips with an Average Least Dimension (ALD) greater than 5.5 mm where the mean ALD of different stockpiles varies by more than 0.5 mm, then the Contractor shall control the chip delivery such that there is a clear delineation on the finished seal between chips from different stockpiles. Chips outside the above criteria shall not be used on the same section of seal length.

8.3 Bituminous Binder Properties

The bituminous binder (“the binder”) used shall comply with the following requirements as applicable:

- For the binder, bitumen used shall comply with NZTA M1 Specification and be the grade as detailed in Schedule A. The Contractor shall demonstrate, through quality records that the bitumen penetration value is within the grade tolerances and that there are no added diluents in the bulk supply.
- Where a flux is specified, it shall be Automotive Gas Oil (AGO) complying with NZ Petroleum Products Specifications Regulations (2002), Schedule 3. Assurance of the correct quantity shall be detailed in the quality records. Alternative fluxing materials will be considered by the Engineer upon demonstration that it will remain in the seal for at least the same time as AGO and the quantity proposed results in

equivalent reduction in the 60°C viscosity as the specified quantity of AGO.

- Where a polymer modified binder is used, a minimum softening point shall be specified.
- Where a minimum Softening Point has been specified for a polymer modified binder, then the binder shall have a softening point greater than that specified, when containing 20% of the added diluent, according to ASTM D36.

TABLE 2: Reseal Performance Criteria

Performance Requirement	Criteria	Measurement	Test Method	When Measured*	Value				
Safety	Skid resistance	Aggregate PSV	BS EN 1097-8 NZS 4407, Test 3.14	C	As specified in Schedule A 98% minimum of particles with two or more broken faces				
		Aggregate % crushed		C					
		Texture depth		I**					
	Light reflectance	Texture depth	NZTA T3	I	1.0 mm minimum				
		Chip take	Chip retention	NZTA T3	I	0.6 mm minimum			
	Site safety	—	—	C & I	95% minimum on trafficked areas (wheel interface) 90% minimum on untrafficked areas				
	Loose Chip	—	—	C & I	See contract conditions				
Colour uniformity	Colour change	BS 1006/A02	C	No more than 50 loose chips for all chip sizes except grades 5 and 6 No more than 100 loose chips for grades 5 and 6					
Roadmarking contrast	Texture	NZTA T3	I	Maximum difference from surrounding pavement 0.6 mm minimum					
Environmental	Noise	Texture depth	NZTA T3	I	As specified in Schedule A				
Waterproofness	Impermeable	Chip size	NZS 4407, Test 3.13	C	<table border="0"> <tr> <td rowspan="3">}</td> <td>For single coat seals ALD = 5.5 mm minimum</td> </tr> <tr> <td>For multilayer seals the larger chip ALD = 5.5 mm minimum</td> </tr> <tr> <td>For texturising seals and void fills N/A</td> </tr> </table>	}	For single coat seals ALD = 5.5 mm minimum	For multilayer seals the larger chip ALD = 5.5 mm minimum	For texturising seals and void fills N/A
}	For single coat seals ALD = 5.5 mm minimum								
	For multilayer seals the larger chip ALD = 5.5 mm minimum								
	For texturising seals and void fills N/A								
Economics	Tyre wear	Aggregate PSV	NZTA M6	C	N/A				
		Texture depth	NZTA T3	I	N/A				
Durability	Rolling resistance	Texture depth	NZTA T3	I	N/A				
	Aggregate	Crushing value							
		Weathering resistance							
	Bitumen	Durability		C	Bitumen complies to NZTA M1				
	Flux content		C	As specified in Schedule A					
	Bitumen application rate	Texture depth	NZTA T3	I	Minimum texture depth as specified in Clauses 9.2.1, 9.2.2, 9.2.3 and 9.2.4.				

* C = at time of construction, I = 10-12 months after construction

** where doubt exists this criterion shall be measured at time of construction

9. COMPLIANCE ASSESSMENT

9.1 Assessment Period and Test Sections

For single and multilayer seals the Engineer shall test for compliance with surface texture and chip retention between 10 to 12 months after construction of the chipseal.

For texturing and void fills the timing of the final assessment will be defined in the Schedule to this contract.

For assessment of single coat seals, multilayer seals, texturing seals and void fills the pavement will be divided into sections of up to 200m length.

9.2 Surface Texture

9.2.1 Requirements for Single Coat and Multilayer Seals

Through the use of a random sampling scheme, a longitudinal location shall be selected within each section and surface texture measurements taken either across the width between the pavement edge lines or where edge lines are not present the total sealed width shall be assessed. The measurements shall be taken at the following locations as defined in NZTA T4 Specification:

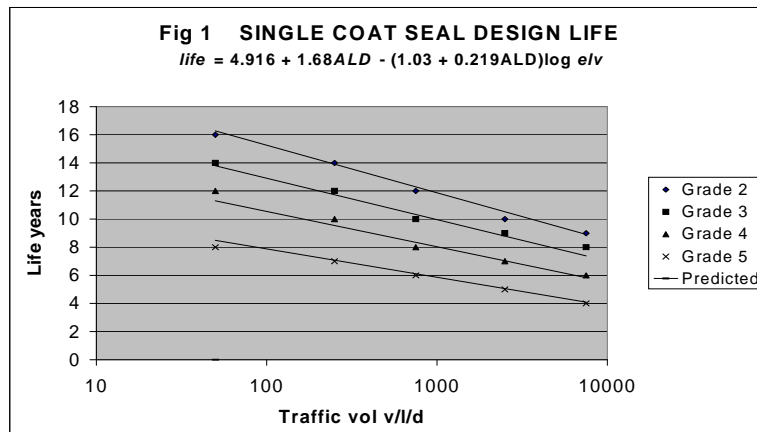
Outer wheel path, between wheel path, centreline, inner wheel path, outer wheel path. Where the site consists of more than one section the inner wheel path and between wheel path measurements shall be performed alternating from one lane to the other for each section.

The surface texture will be accepted if the texture depth is greater than that required to obtain the design life of the seal.

Unless noted in the schedule for the site the design life in years is defined as:

For single coat seals

$$Yd = 4.916 + 1.68 ALD - (1.03 + 0.219 ALD) \log elv \tag{1}$$



For multilayer seals:

$$Yd = 14.87 + ALD - 3.719 \log elv \tag{2}$$

where: Yd = design life in years
 elv = equivalent light vehicles/lane/day
 ALD = average least dimension of the sealing chip in mm used on the section. For multilayer seals the larger ALD is used.

Equivalent light vehicles/lane/day is calculated as:

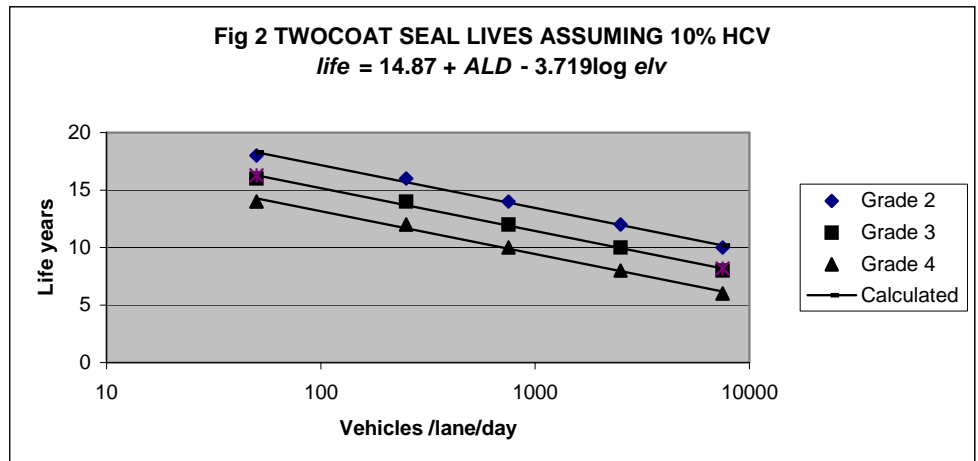
$$elv = \frac{AADT}{No\ of\ lanes} \left(1 + \frac{9(HCV)}{100} \right) \tag{3}$$

where AADT = annual average daily traffic on the road section.
 HCV = percentage heavy commercial vehicles.

The minimum value of the average texture depth calculated from the sand circle test as defined in NZTA T3 Specification shall be:

$$X - 0.519S \geq 0.9 + 0.07 ALD (\log Yd) \tag{4}$$

where S = sample standard deviation calculated from the 5 tests.
 X = average of the texture depth measurements in mm.



9.2.2 Requirements for Texturising Seals

Through the use of a random sampling scheme, a longitudinal location shall be selected within each section and surface texture measurements taken either across the width between the pavement edge lines or where edge lines are not present the total sealed width shall be assessed. The measurements shall be taken at the following locations as defined in NZTA T4 Specification:

Outer wheel path, between wheel path, centreline, inner wheel path, outer wheel path. Where the site consists of more than one section the inner wheel path and between wheel path measurements shall be performed alternating from one lane to the other for each section.

The surface texture of the section will be accepted if the variability in the texture depth of the surface is within the tolerances specified below:

Td(coarse) - Td(ave) shall be $< \text{Min ALD}/16.8$, and

Td(ave) - Td(fine) shall be $< \text{Min ALD}/16.8$

Where:

Td (coarse) = the maximum texture depth in mm

Td (ave) = the average texture depth in mm

Td (fine) = the minimum texture depth in mm

Min ALD = the minimum average least dimension in mm of the proposed reseal chip to follow the texturising seal as detailed in the schedule.

Sections that do not comply with the texture depth requirements will be accepted only if the Contractor can demonstrate through quality records that the residual binder application rate used was between 0.55 l/m² and 0.85 l/m² for a Grade 6 chip and 0.75 l/m² and 1.1 l/m² for a Grade 5 chip. If the binder application rates traditionally used in the contract location differ from these application rates, then approval must be obtained from the Engineer to modify these rates to reflect local practice.

9.2.3 Void Fills

Through the use of a random sampling scheme, a longitudinal location shall be selected within each section and surface texture measurements taken either across the width between the pavement edge lines or where edge lines are not present the total sealed width shall be assessed. The measurements shall be taken at the following locations as defined in NZTA T4 Specification:

Outer wheel path, between wheel path, centreline, inner wheel path, outer wheel path. Where the site consists of more than one section the inner wheel path and between wheel path measurements shall be performed alternating from one lane to the other for each section.

The surface shall have a uniform texture with an average texture depth of greater than 1.0mm and no test with less than 0.75 mm.

9.3 Chip Retention

For single coat seals, multilayer seals and void fills, a visual assessment of the surface shall be performed to assess the level of chip coverage and retention. Chip retention shall be assessed by determining the chip coverage on any 300 mm x 300mm area.

The section shall be rejected if any three locations assessed have less than 95% chip coverage on any trafficked area (wheel interface) or 90% on untrafficked areas (e.g. untrafficked centrelines, shoulder areas).

All areas of chip loss greater than above must be repaired within the timeframes specified in the contract document.

For texturising seals there are no requirements for chip retention.

9.4 Retesting

Where either the Contractor or Engineer considers that the section acceptance or compliance testing for texture does not reflect the true condition of the seal then either party may elect to retest the section using the TRL Mini Texture meter or other agreed method. The mini texture meter shall be operated in accordance with the manufacturer's instructions at a speed of 3 km/h \pm 0.5 km/h.

The texture depth measured with the mini texture meter shall be converted to the equivalent texture depth derived from the sand circle test using the following equation:

$$T_d = 1.64MTM - 0.13 \quad (5)$$

Where T_d is the sand circle derived texture depth
 MTM is the average texture depth from the mini texture meter.

The average texture for each wheelpath shall be measured for the full length of the section. The decision to either accept the section or apply proportional payment shall be based on consideration of each section. The wheeltrack with the lowest average texture depth will be used to assess compliance.

The section will be accepted if the mean texture depth of the wheelpath is greater than the value calculated from equation (4), where S (the standard deviation) is taken as zero.

10. MAINTENANCE

It is the Contractor's responsibility to maintain the seal in accordance with the requirements of this specification in a safe condition from the construction date until the final acceptance by the Engineer.

The contractor shall include with each monthly report, records that clearly demonstrate that all sealed sites are maintained in compliance with Clause 7 of this specification.

10.1 Repairs

For seals that have chips that are in the range of grade 2 to 6 any repairs shall be performed using a chip with an ALD not exceeding 0.5 mm smaller than that of the original chip used for construction.

If at any time during the defects liability period repairs are required over an area greater than 10% of the area of the section then the proposed repair technique and acceptance criteria shall be agreed with the Engineer.

Any areas repaired during the defects liability period more than nine months after construction will, at the discretion of the Engineer, be subjected to a further 12 months defects liability period. If the area of repairs at the end of 12 months are greater than 10% of the section and revised acceptance criteria has not been agreed with the Engineer, then the section will be subject to a further 12 month defects liability period.

For texturising seals and void fills the defects liability period is defined in the schedule.

The contractor shall design all repairs to ensure that the risk of a reduced seal design life is minimised.

10.2 Contractor's Response Time for Intervening

If at any time during the defects liability period intervention by the Contractor is required due to loose or lost chip (as defined in clause 7.3) or loss of skid resistance or surface texture below the values in Table 2 (assessed visually, e.g. flushing), in accordance with SOMAC clause 10.2 (Resealing) the Contractor shall:

- Respond, within two hours of becoming aware of the need for intervention, with the installation of temporary warning signs.
- respond within 48 hours with positive action to mitigate and control the risk to the road users (signs and sweeping alone may not be considered as appropriate positive action in every event).
- undertake corrective repairs when conditions permit the most appropriate repair to be successfully completed. These repairs must ensure the expected design life of the seal is not compromised. If necessary these corrective repairs may be undertaken later in the defects liability period.

11. PAYMENT

Payment will be made between two and four weeks after construction subject to:

- The Contractor supplying texture depth test results used for the design for single coat and multilayer seals.
- Evidence of compliance with this specification.

11.1 Single Coat Seals

Payment will be made in accordance with the tendered square metre rate for completed seal in the schedule of prices, plus additional payment for residual binder based on the surface texture depth of the existing pavement. The quantity of binder for which additional payment will be made shall be determined from:

$$\text{Binder rate (l/m}^2\text{)} = 0.2 * Td \quad (6)$$

Where Td = average texture depth in mm of the pavement before resealing as determined by NZTA T3 Specification
 Td = $57,300/d^2$
 d = sandcircle diameter as determined by NZTA T3

If after the 12 month assessment the texture depth is below the specified minimum, payment for the section shall be reduced as follows:

- For areas where $\frac{Y_f}{Y_d} \geq 0.75$ equation (7) shall be used to calculate the reduction in payment.

$$PR = 100 \left(1 - \frac{1.1^{Y_f} - 1}{1.1^{Y_d} - 1} \times 1.1^{Y_d - Y_f} \right) \quad (7)$$

where PR = percentage payment reduction
 Y_d = design life as calculated from equation (1) in Clause 9.2.1 of this specification.
 Y_f = expected life before flushing, calculated as follows

Note: The discount rate is 10% therefore a factor of 1.1 is used in formula (7).

$$Y_f = \text{anti log} \left[\frac{Td - 0.9}{0.07 ALD} \right] \quad (8)$$

where elv = equivalent light vehicles/lane/day from equation (3)
 ALD = average least dimension of the sealing chip in mm used on the section.
 Td = the average texture depth for the section X - 0.519S as defined in Clause 9.2.1 of this specification.

- For areas where $\frac{Y_f}{Y_d} < 0.75$ but ≥ 0.4 equation (9) shall be used to calculate the reduction in payment.

$$PR = \frac{L - 25}{35} (100 - PR_{25}) + PR_{25} \quad (9)$$

where: L = percentage loss of the design life 100

PR₂₅ = payment reduction calculated from equation (7) for a 25% reduction in design life.

- For areas where $\frac{Y_f}{Y_d} < 0.4$ no payment shall be made.

11.2 Multilayer Seals

Payment will be made in accordance with the tendered square metre rates plus additional payment for residual binder based on the surface texture depth of the existing pavement and calculated as specified in Clause 11.1 above.

If after the 12 month assessment the texture depth is below the specified minimum, payment for the section shall be reduced as specified in Clause 11.1 above.

11.3 Texturising Seals and Void Fills

Payment will be made in accordance with the tendered square metre rate for sections complying with this specification.

Payment will not be made for sections that do not comply with the requirements of this specification.

However for texturising seals if the Contractor can demonstrate through quality records that the binder application rate used was in accordance with the tolerances specified in clause 9.2.2 of this specification, then full payment will be made.

RESEALS AND SECOND COAT SEALING CONTRACT:

SCHEDULE A

SINGLE AND MULTILAYER SEALS

Road	RP Start	RP Finish	Width (m)	Area (m ²)	AADT (note 2)	% HCV	Design Life (note 1)	Existing Surface	Last Year Sealed	Chip PSV Minimum	1st Chip ALD Minimum	2nd Chip Grade	Bitumen Grade	Flux Content pph of Bitumen	Expected Life	Same Day Sealing Y/N	Reason for Sealing

Note 1: Only if different from that given in equation (1) of Clause 9.2.1 of this specification.

Note2: A distinction is made in the AADT column between reliable estimates based on known data (C) and less accurate data (E).

VOID FILLS AND TEXTURISING

Road	RP Start	RP Finish	Width (m)	Area (m ²)	AADT (note 2)	% HCV	Proposed reseal chip ALD min (note 1)	Existing Surface	Last Year Sealed	Chip PSV Minimum	Chip Grade	Bitumen Grade	Flux Content pph of Bitumen	Maintenance Period	Expected Life	Same Day Sealing Y/N	Reason for Sealing

Note 1: Only for texturising seals.

Note2: A distinction is made in the AADT column between reliable estimates based on known data (C) and less accurate data (E).