

# CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES

## FLEXIBLE PAVEMENTS

C242

# CONSTRUCTION SPECIFICATION



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### **Keeping the Capricorn Municipal Development Guidelines up-to-date**

The Capricorn Municipal Development Guidelines are living documents which reflect progress of municipal works in the Capricorn Region. To maintain a high level of currency that reflects the current municipal environment, all guidelines are periodically reviewed with new editions published and the possibility of some editions to be removed. Between the publishing of these editions, amendments may be issued. It is important that readers assure themselves they are using current guideline, which should include any amendments which may have been published since the guideline was printed. A guideline will be deemed current at the date of development approval for construction works.

## GENERAL

### C242.01 SCOPE

1. The work to be executed under this Specification consists of the supply, spreading, compaction and trimming of base and subbase courses of flexible and semi-rigid (bound) pavements to the specified levels and thicknesses as shown on the Drawings.
2. Requirements for quality control and testing, including maximum lot sizes and minimum test frequencies, are cited in Annexure C242A.

**Quality**

### C242.02 TERMINOLOGY

- (a) Materials designated as 'base' require the provision of a wearing surface comprising either a sprayed bituminous seal or asphalt up to 50mm thick.
- (b) Materials designated as 'subbase' require a covering course of 'base'. The subbase may consist of one or more layers.
- (c) A flexible pavement consists of a base and a subbase constructed of unbound materials. For the purpose of this Specification it also includes "semi-rigid" pavements.
- (d) A semi-rigid pavement is one where the base and/or the subbase are constructed of bound materials.
- (e) Bound material incorporates a binder to produce structural stiffness.
- (f) Modified material incorporates small amounts of stabilising binder to improve the properties of the material without significantly affecting structural stiffness.

**Definitions**

### C242.03 REFERENCE DOCUMENTS

1. Documents referenced in this Specification are listed in full below whilst being cited in the text in the abbreviated form or code indicated.

**Documents  
Standards Test  
Methods**

#### (a) Council Specifications

- |      |   |                              |
|------|---|------------------------------|
| C241 | - | Stabilisation                |
| C244 | - | Sprayed Bituminous Surfacing |

#### (b) Australian Standards

- |               |   |  |
|---------------|---|--|
| AS 1141.14    | - | Particle shape, by proportional calliper.  |
| AS 1141.22    | - | Wet/dry strength variation.  |
| AS 1289.3.1.1 | - | Determination of the liquid limit of a soil - Four point Casagrande method.                                      |
| AS 1289.3.3.1 | - | Calculation of the plasticity index of a soil.   |
| AS 1289.3.6.1 | - | Determination of the particle size distribution of a soil - Standard method of analysis by sieving.              |
| AS 1289.3.6.3 | - | Determination of the particle size distribution of a soil - Standard method of fine analysis using a hydrometer. |
| AS 1289.5.1.1 | - | Determination of the dry density/moisture content relation of a soil using standard compaction effort.           |

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- AS 1289.5.3.1 - Determination of the field density of a soil - Sand replacement method using a sand-cone pouring apparatus.
- AS 1289.5.4.1 - Compaction control test - Dry density ratio, moisture variation and moisture ratio.
- AS 1289.5.8.1 - Determination of field density and field moisture content of a soil using a nuclear surface moisture - density gauge - Direct transmission mode.
- AS 1289.6.1.1 - Determination of the California bearing ratio of a soil - Standard laboratory method for a remoulded specimen.

### (c) QLD DMR Test Methods

- Q110C - Dry Density - Moisture Relationship of Cement Treated Material (standard compaction).
- Q115 - Unconfined Compressive Strength.
- Q701 - Benkelman Beam Deflection.

### (d) NSW RTA Test Methods

- T114 - Maximum Dry Compressive Strength of Road Materials
- T171 - Modified Texas Triaxial Compression Test

## C242.04 PAVEMENT STRUCTURES

1. Flexible or semi-rigid pavement material types and layer thicknesses shall be as shown on the Drawings.

***Material Types  
and Layer  
Thickness***

## C242.05 INSPECTION, SAMPLING AND TESTING

1. Inspection, sampling and testing of the pavement shall be undertaken by the Contractor in accordance with the requirements of this Specification before, during and after the construction of the pavement. Testing shall be carried out by a NATA registered laboratory with appropriate accreditation and suitably qualified personnel.
2. Field density tests shall be carried out in accordance with the relevant test methods contained in AS1289.

***Contractor's  
Responsibility***

***Density Tests***

**MATERIALS**

**C242.06 PAVEMENT MATERIAL**

1. The following materials shall be the material used for pavement construction in the Capricorn Municipal area unless otherwise approved by the relevant Local Government.

**Table C242.06.1 – Pavement materials and grading**

<b>Pavement Material</b>	<b>Type of Material Permissible</b>	<b>Grading</b>	<b>CBR (Minimum)</b>
Subgrade Replacement	Type 2.5	B,C or D	15
Sub-base (for Access Places and Access Streets)	Type 2.4	B,C or D	35
Sub-base (for all roads of higher than Access Streets in the hierarchy)	Type 2.3	B, C or D	45
Base (for all roads)	Type 2.1	B or C	80

In areas where supply of CBR 80 material is unavailable CBR 60 material may be used on streets with traffic volumes < 1x10<sup>6</sup> (Minor and Major Collector Roads) subject to a satisfactory revised pavement design.

All references to material type in the above table refer to the Main Roads Standard Specification MRS11.05 "Unbound Pavements".

All materials shall be sourced from a Quality Assured material supplier and the results of the manufacturer's testing to assure the quality of the product shall be incorporated with the Contractor's Quality records.

2. Ongoing testing of materials during delivery and construction shall be undertaken on samples taken from the site.

***Sampling on-site***

**DELIVERY, STOCKPILING AND PROCESSING OF PAVEMENT MATERIAL**

**C242.07 DELIVERY TO SITE**

1. Materials shall be supplied sufficiently damp to avoid segregation and loss of fines during transit.

***Damp Condition***

**C242.08 STOCKPILING OF UNBOUND MATERIALS**

1. Stockpile sites, which shall be cleared of all vegetation and extraneous matter, shall be shaped to form a crown so as to be free draining and compacted over the whole area to provide a relative compaction, determined by AS 1289.5.4.1 for standard compaction effort, of not less than 95 per cent.

***Compacted and Free Draining***

2. Stockpiles and stockpile sites shall be maintained so as to prevent the stockpiled materials from becoming intermixed or contaminated with foreign material.

***Stockpile Requirements***

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- |    |   |                           |
|----|---|---------------------------|
| 3. | The total height of any stockpile shall not exceed 3m.  | <b>Height</b>             |
| 4. | Stockpiles shall be of uniform shape with side slopes neither steeper than 1.5 to 1 nor flatter than 3 to 1.  | <b>Shape</b>              |
| 5. | The worked face of any stockpile shall be the full face of the stockpile. The stockpiled material shall be maintained at a moisture content sufficiently damp to avoid loss of fines. | <b>Maintained Damp</b>    |
| 6. | At the completion of the works, stockpile sites shall be cleared of all surplus material and left in a clean and tidy condition.  | <b>Completion of Work</b> |

### **C242.09 DELIVERY OF MODIFIED OR BOUND MATERIALS**

- |    |   |                           |
|----|---|---------------------------|
| 1. | Modified or bound materials shall be delivered in vehicles fitted with covers of canvas or other suitable material to prevent loss of moisture during transport.  | <b>Vehicle Deliveries</b> |
| 2. | The time between mixing and conveyance by delivery trucks to the site, shall be such as to allow incorporation into the works including trimming and compaction within the nominated field working period as specified in Annexure 241A of Construction Specification C241. | <b>Time Limit</b>         |
| 3. | Each truck load of bound material shall be identified by delivery dockets, indicating the time and date of mixing and registration or fleet number of the delivery truck, and such dockets shall be incorporated into the contractor's quality records.                     | <b>Delivery Dockets</b>   |
| 4. | Bound materials shall comply with the requirements of the Specification for STABILISATION C241.   |                           |

## **SPREADING OF PAVEMENT MATERIAL**

### **C242.10 SPREADING PAVEMENT MATERIALS**

- |    |   |                                 |
|----|---|---------------------------------|
| 1. | Unbound materials shall not be spread upon an underlying pavement layer which has a moisture content exceeding 90 per cent of the laboratory optimum moisture content as determined by AS 1289.5.1.1 or which has become rutted or mixed with foreign matter. The underlying layer shall be corrected to comply with this Specification before spreading of the next layer of pavement.                   | <b>Underlying Layer Quality</b> |
| 3. | Each layer of material shall be deposited and spread in a concurrent operation and, after compaction, the finished surface levels on the base and subbase courses shall be within the permitted tolerances stated in this Specification without subsequent addition of material. The thickness of each compacted layer shall be neither less than 100mm nor more than 200mm for all pavement layer types. | <b>Tolerances</b>               |
| 5. | When spread for compaction processes the moisture content of the base or subbase materials shall be in the range of 60-90 per cent of laboratory optimum moisture content in accordance with AS 1289.5.1.1.   |                                 |
| 6. | Bound materials shall not be spread when the ambient air temperature in shade is either below 5°C or above 35°C.  |                                 |



## TRIMMING AND COMPACTION

### C242.11 GENERAL REQUIREMENTS

- |  |  |
|--|--|
| <p>1. Each layer of the base and subbase courses shall be uniformly compacted over its entire area and depth to satisfy the requirements of relative compaction set out in this Specification.</p>   | <p><b>Uniform<br/>Compaction</b></p>                       |
| <p>2. On sections of pavement with one-way crossfall, compaction shall begin at the low side of the pavement and progress to the high side. On crowned sections, compaction shall begin at the sides of the pavement and progress towards the crown. Each pass of the rollers shall be parallel with the centreline of the roadway and uniformly overlap each preceding pass. The outer metre of both sides of the pavement shall receive at least two more passes by the compaction plant than the remainder of the pavement.</p> | <p><b>Compaction<br/>Procedure</b></p>                     |
| <p>3. At locations where it would be impracticable to use self propelled compaction plant, the pavement material shall be compacted by alternative hand-operated plant.</p>  | <p><b>Hand Operated<br/>Plant</b></p>                      |
| <p>4. Watering and compaction plant shall not be allowed to stand on the pavement being compacted.</p>   | <p><b>Plant<br/>Movement<br/>Restrictions</b></p>          |
| <p>5. If any unstable areas develop during rolling, the unstable material shall be rejected. The rejected material shall be removed for the full depth of the layer, disposed of and replaced with fresh material in accordance with Clause C242.20. This operation will be at cost to the Contractor.</p>   | <p><b>Unstable<br/>Areas<br/>Contractor's<br/>Cost</b></p> |
| <p>6. The placement of subsequent layers shall not be allowed until the requisite testing has been completed and the test results for each layer are acceptable.</p>   | <p><b>Placing<br/>Subsequent<br/>Layers</b></p>            |
| <p>7. Any unbound material in a layer that has attained the specified relative compaction but subsequently becomes wetted up shall be dried out and, if necessary, uniformly re-compacted and trimmed to meet the specified density requirements and level tolerances.</p>   | <p><b>Excessive<br/>Moisture<br/>Content</b></p>           |

### C242.12 CURING OF BOUND MATERIALS

- |  |                                       |
|--|---------------------------------------|
| <p>1. The curing of the surface layer of a lot shall commence after compaction is completed.</p>   | <p><b>Commence-<br/>ment Time</b></p> |
| <p>2. The stabilised work shall be protected against rapid drying out by keeping it continuously wet or damp during the period prior to the provision of a subsequent layer or the application of a prime or primer-seal.</p>          | <p><b>Water Curing</b></p>            |
| <p>3. Water curing shall consist of frequent light uniform spraying that will not produce significant run off or flooding on sections of the area. Slurrying of the surface or leaching of the stabilising agent shall be avoided.</p> | <p><b>Caution</b></p>                 |

## ACCEPTANCE OF COMPACTED LAYERS

### C242.13 LOTS FOR ACCEPTANCE

1. Acceptance of work, as far as compaction is concerned, shall be based on density testing of the work in lots. A lot shall be nominated by the Contractor, but shall conform to the following: **Lot Requirements**
- (a) cover only a single layer of work which has been constructed under uniform conditions in a continuous operation and not crossing any transverse construction joints;
  - (b) for unbound materials it may equal a day's output using the same material.

### C242.14 COMPACTION ASSESSMENT

1. The Superintendent shall assess compaction for each lot based on random sampling of test locations for in-situ dry density testing. **Density Testing**
2. The Contractor shall arrange for testing to assess compaction on the basis of one test per 500 sq m with a minimum of three (3) tests per lot. **Sampling**
3. Alternatively, when agreed by the Local Government, acceptance of lots may be determined according to the elastic rebound deflection. The elastic rebound deflection shall be taken as the maximum deflection in accordance with Test Method Q701 utilising the Benkelman Beam or equivalent. The average maximum deflection for any lot shall not exceed 1.0mm, and the co-efficient of variation (CV) in recorded deflections shall not exceed 30 per cent. Measurements shall be taken at the rate of 4 per 1000 square metres, with a minimum of ten measurements per lot. **Benkelman Beam Testing**

### C242.15 RELATIVE COMPACTION

1. The relative compaction of pavement material at each location tested for in-situ dry density shall be calculated in accordance with AS 1289.5.4.1 as follows: **Calculation**

$$\text{Relative Compaction (per cent)} = \frac{\text{In-situ dry density}}{\text{Comparative dry density}} \times 100$$

2. The Local Government may approve some or all of the in-situ dry density testing to be carried out with a single probe Nuclear Density Meter in the direct transmission mode in accordance with AS 1289.5.8.1. **In-Situ Dry Density Testing**
3. Each day that material is produced for placement in a layer or layers, a sample of the material shall be taken by the Contractor for maximum dry density testing to represent that day's production. **Daily Samples**
4. For unbound layers, the sample shall be tested in accordance with AS 1289.5.1.1 to determine the maximum dry density (standard compaction effort) for the material. **Maximum Dry Density**
5. For bound layers the sample shall be tested within two hours after the addition of stabilising agent to the mix in accordance with Test Method Q110C to determine the maximum dry density (standard compaction effort) for the material. This test method shall also be used to determine the standard optimum moisture content. **Time for Testing**

6. The maximum dry density so determined shall be used as the comparative dry density in relative compaction calculations for all like material from that lot or day's production placed in a single layer of work whichever is the lesser. **Comparative Dry Density**

**C242.16 COMPACTION REQUIREMENTS AND ACCEPTANCE**

1. A lot shall be accepted for compaction if:  
 The minimum value of all calculated relative compaction for standard compaction effort is not less than 100 per cent within the lot or the area of pavement being assessed.
2. Lots or areas of pavement not achieving these specified values shall be rejected. Unbound layers may be reworked but the bound materials in rejected layers/courses shall be removed and replaced with fresh materials. **Rejection of Lots**

**C242.17 REWORKING OF REJECTED UNBOUND LAYERS**

1. Lots or areas of pavement that have been rejected in regard to compaction shall be reworked before resubmission for compaction assessment. **Reworking**
2. Material that has become degraded, segregated or otherwise reduced in quality by reworking shall be rejected. The rejected material shall be removed, disposed of and replaced with fresh material complying with this Specification. **Rejected Material**

**C242.18 TOLERANCES**

**a) Width**

1. At any cross section without kerb and/or guttering, and for pavement layers extending under the kerb and/or guttering, the horizontal dimension measured from the design centre line to the edge of the constructed pavement surface shall be neither less than 50mm less than the dimension nor more than 300 mm greater than the dimension shown on the Drawings. **Horizontal Dimensions**
2. The average width of the layer determined from measurements at three sites selected at random by the Superintendent over any 200 metre road length, or part thereof, shall be not less than the specified width. **Average Width**

**b) Levels and Surface Trim**

1. The levels of the finished surface of the top of the unbound subbase course shall not vary from the design levels by more than  $\pm 10$ mm. **Subbase Surface Level**
2. Level tolerances at the top of the unbound base course shall not exceed those stated above for subbase. In addition, where kerb and gutter exists or is being constructed, the level of the top of the base course adjacent to the kerb and gutter shall not vary by more than  $\pm 5$ mm from the lip level of the gutter minus the design thickness of the wearing surface. **Base Surface Level**
3. The design level of the top of the subbase course shall be determined from the design level of the finished road surface less the thickness of the base course and the wearing course. **Subbase Design Level**

4. The pavement surface after trimming and immediately prior to sealing shall be of a quality such that the deviation under a 3 metre straight edge placed in any direction does not exceed 12mm. Measurements with the 3 metre straight edge shall be taken at a minimum of 10 randomly selected stations so as to represent a 200 metre length or part thereof proposed as a lot.

***Straight Edge  
Deviation***

#### **C242.19 ACTION ON REJECTION**

##### **(a) Unbound Materials**

1. A lot that has not complied with the requirements for width or level tolerance shall be rejected except as otherwise provided in this Clause. Rejected lots shall be removed, disposed of and replaced with fresh material in accordance with this specification.

***Rejection  
Criteria***

2. Notwithstanding the above, where the rejected lot can be corrected by further trimming, the Superintendent may allow the surface to be corrected without complete removal and replacement with fresh material. Such trimming shall be undertaken in a manner that produces a uniform, hard surface and shall be achieved by cutting only without filling. After any such cutting, the level tolerances shall be rechecked.

***Corrective  
Action***

##### **(b) Bound Materials**

1. An area of bound material that has not complied with the requirements for width or level tolerance shall be rejected except as otherwise provided for in this Clause. Rejected areas shall be removed, disposed of and replaced with fresh material in accordance with this Specification.

***Rejection  
Criteria***

2. Notwithstanding the above, the Superintendent may allow the Contractor to rectify the area in the following cases:

***Corrective  
Action  
Circumstances***

(i) Where the cause for rejection is a subbase course and rejection is due to departures from constructed level being too far below the design level, the Contractor may increase the thickness of the base course to make up such deficiency in thickness.

(ii) Where the cause for rejection is a subbase course and rejection is due to departures from constructed level being too far above the design level, the Contractor may propose a regrading of the design level of the base course, to allow for its design thickness to be laid, up to a maximum of 20mm above the original design level. Approval by the Superintendent shall be subject to the following requirements:

- The rate of change of grade from the original finished design surface level shall be less than 3 mm per metre.
- The regrading shall not interfere with the proper design functioning of the drainage system.
- The regrading shall not interfere with levels at the property boundary, or increase or decrease footpath or footpath crossover levels or grades beyond Local Government's allowable design limits.
- The regrading shall not interfere with clearances.

(iii) Where the cause for rejection is a base course and rejection is due to departures from constructed level being too far above the design level, the Contractor may propose a regrading of the design level of the base course. Approval by the Superintendent shall be subject to the requirements of this Clause in (ii) above.

**C242.20 REMOVAL AND REPLACEMENT OF REJECTED COURSES**

- |  |  |
|--|--|
| <p>1. Sections of the work that have been rejected due to non-compliance with material specifications shall be removed from the work and replaced with fresh material. Rejected material shall be removed from site.</p>   | <p><b><i>Rejected<br/>Material</i></b></p>                 |
| <p>2. In rejected sections the material shall be removed over the full length of the rejected lot, except that a minimum length of 50 m of pavement layer shall be removed and replaced. Any damage to underlying or abutting layers or structures shall be made good by the Contractor.</p>                                   | <p><b><i>Length to be<br/>Removed</i></b></p>              |
| <p>3. The Superintendent may approve removal for less than the full width as constructed if the cause of the rejection of the work can be isolated transversely to the Superintendent's satisfaction. In this case, the new longitudinal cold joint shall be formed and located along the centreline of the road pavement.</p> | <p><b><i>Superinten-<br/>dent's<br/>Discretion</i></b></p> |
| <p>4. After removal of rejected base or subbase course material, the section shall be presented for inspection by the Superintendent before replacement work is commenced.</p>   | <p><b><i>Inspection<br/>Before<br/>Replacement</i></b></p> |
| <p>5. Materials used as replacement materials, and the subsequent spreading, compaction, trimming, curing and testing of the replacement materials, shall comply with the requirements of this Specification.</p>  | <p><b><i>Replacement<br/>Material</i></b></p>              |

**C242.21 MAINTENANCE BEFORE COMPLETION OF WEARING SURFACE**

- |   |                                  |
|---|----------------------------------|
| <p>1. Following acceptance of any section of the work, the Contractor shall maintain the prepared surface of the base in the condition specified for acceptance until the wearing surface is completed. The base course of sections of the accepted work shall be covered with a primer-seal over the full width of pavement in accordance with the Specification for SPRAYED BITUMINOUS SURFACING C244 within seven days of the date of the acceptance of such sections.</p> | <p><b><i>Primer-seal</i></b></p> |
|---|----------------------------------|

**OPENING PAVEMENT TO TRAFFIC**

**C242.22 GENERAL REQUIREMENTS**

- |   |   |
|---|---|
| <p>1. For unbound pavements, construction plant and vehicles not involved in the current construction or testing of the work shall not be permitted to use the pavement until the primer-seal has been applied.</p>   | <p><b><i>Restrictions<br/>on Movement</i></b></p>                                   |
| <p>2. For bound pavements, construction plant and vehicles not involved in the current construction or testing of the work shall not be permitted to use the pavement until the primer-seal has been applied and seven days have elapsed since placement of the base. In any case only vehicles registered for legal road usage and loaded within legal limits will be allowed to use the pavement.</p> | <p><b><i>Restrictions<br/>on Movement<br/>of Construc-<br/>tion Traffic</i></b></p> |
| <p>3. For bound pavements, traffic shall not be allowed to use the constructed pavement until a minimum of seven days after completion of the full pavement depth and the primer-seal.</p>  | <p><b><i>Open to Traffic<br/>Bound<br/>Pavement</i></b></p>                         |

LIMITS AND TOLERANCES

C242.23 SUMMARY OF LIMITS AND TOLERANCES

The limits and tolerances applicable to the various clauses in this Specification are summarised in Table C242.23.1 below:

Table C242.23.1 - Summary of Limits and Tolerances

Item	Activity	Limits/Tolerances	Spec Clause
1.	<b>Stockpile Sites</b>	(i) Relative Compaction >95% (ii) Stockpile height <3m (iii) Stockpile batter <1.5:1 and >3:1	C242.12 C242.12
2.	<b>Spreading Pavement Materials</b>		
	(i) Compacted Layer Thickness	≥100mm, ≤200mm	C242.14
3.	<b>Compaction Acceptance</b>		
	Minimum value of all calculated relative compaction results	≥100 per cent (standard compaction effort)	C242.20
4.	<b>Width of Pavement</b>		
	(i) Design centre-line to edge of constructed pavement	-50mm to +300mm of dimensions on Drawings	C242.22(b)
	(ii) Average Width	The average width determined from 3 random sites over any 200m road length, or part thereof, shall be not less than the specified width.	C242.22(b)
5.	<b>Surface Level</b>		
	(i) Subbase levels	<±10mm from design level	C242.22(c)
	(ii) Base levels	<±10mm from design level	C242.22(c)
	(iii) Base levels adjacent to Kerb and Gutter	<±5mm from the lip levels of adjacent gutter minus design thickness of wearing surface.	C242.22(c)
	(iv) Shape	Deviation from a 3m long straightedge on base surface immediately prior to sealing shall be less than 12mm	C242.22(c)

ANNEXURE

C242A FLEXIBLE PAVEMENTS

ACTIVITY	KEY QUALITY VERIFICATION REQUIREMENTS	MAXIMUM LOT SIZE	MINIMUM TEST FREQUENCY	TEST METHOD
<b>MANDATORY TESTING</b>				
Base and Subbase Supply	Material Quality - Supplier's documentary evidence and certification	1 contract		
	- Particle Size Distribution		1 per 1,000t	AS1289.3.6.1
	- Fine Particle Size Distribution Ratio		1 per 1,000t	AS1289.3.6.3
	- Liquid Limit		1 per 1,000t	AS1289.3.1.1
	- Plastic Limit		1 per 1,000t	AS1289.3.3.1
	- Plasticity Index		1 per 1,000t	AS1289.3.3.1
	- Maximum Dry Compressive Strength		1 per 5,000t	T114
	- California Bearing Ratio		1 per 5,000t	Q113
	- Unconfined Compressive Strength (Modified)		1 per 5,000t	Q115
- Unconfined Compressive Strength (Bound)	1 contract	1 per mix design	Q115	
Placement	Subgrade Level		1 cross section per 20m	Survey
	Geometry: Finished Surface Alignment & Level	One layer 2,000m <sup>2</sup> or	1 Cross Section per 20m	Survey
	Width & Surface Trim	max 1 day's placement	10 per selected 200 line m*	Measure & 3m Straight Edge
	Compaction/Moisture Content/	One layer 5,000m <sup>2</sup> or max 1 day's placement	1 per 500m <sup>2</sup> layer or	AS1289.5.2.1, Q110C,
	Dry Density Testing	1 test per 75 lineal metres per layer	3 per lot if less	AS1289.5.4.1 AS1289.5.8.1
<b>AUDIT TESTING – IF ORDERED BY COUNCIL</b>				
Base and Subbase Supply	- Particle Shape		1 per 1,000t	AS1141.14
	- Aggregate Wet Strength		1 per 5,000t	AS1141.22
	- Wet/Dry Strength Variation		1 per 5,000t	AS1141.22

**FLEXIBLE PAVEMENTS**

ACTIVITY	KEY QUALITY VERIFICATION REQUIREMENTS	MAXIMUM LOT SIZE	MINIMUM TEST FREQUENCY	TEST METHOD
Placement	Deflection Control - Benkelman Beam where directed	One layer 5,000m <sup>2</sup> or max 1 day's placement	4 per 1,000m <sup>2</sup> minimum 10 per lot	Q701

\* Note: or part thereof, per lot.