Annexure MRTS05.1 (July 2022) Unbound Pavements

Specific Contract Requirements

Contract Number

T2324.20

Note: Clause references within brackets in this Annexure refer to Clauses in the parent Technical Specification MRTS05 unless otherwise noted.

1 Material compliance testing locations (Clause 9.2)

For the following locations and/or material subtypes, material compliance testing shall be undertaken on samples taken from the pavement.

If no locations or material subtypes are given, all samples shall be taken from the stockpile.

Test samples are to be sourced from quarry stockpiles and identified for reference. Samples shall be collected by an entity accredited by NATA to undertake sampling, in accordance with the relevant Australian or TMR method for which the entity is accredited.

2 Material requirements

2.1 Pavement material locations (Clauses 7.1.1, 7.2.1, 7.3.1 and 8.1)

The following pavement material subtypes shall be used in the locations stated.

Location	Material Subtype
Project Specific	Type 2.1, 2.2, 2.3, 2.5
Project Specific	Type 3.1, 3.2, 3.3
Project Specific	Min CBR15 Council Mix Gravel– of a standard to meet the below requirements and Clause 4 (Supplementary requirements)
Project Specific	CBR40 Council Mix Gravel – of a standard to meet the below requirements and Clause 4 (Supplementary requirements)

All Council Mix Gravel is to conform to the ARRB standards for unsealed roads with the following:

Grading Envelope:

Sieve Size(mm)	Percent Passing (%)
37.5	100 – 100
26.5	90 - 100
19.0	80 - 100
2.36	35 - 65
0.425	15 - 50
0.075	10 - 40

Shrinkage Product: 100-365 (calculated: Linear Shrinkage x Percent Passing 0.425mm sieve)

Grading Coefficient: 16-34 (calculated: { [Percent Passing 26.5mm sieve – Percent Passing 2.36mm sieve] x Percent Passing 4.75mm sieve} /100)

2.2 Design Traffic (Clause 7.2.1)

Location	Average Daily Traffic in the Design Lane in Year of Opening – Equivalent Standard Axles (ESA)
Not Applicable	

If no indication is given for a particular location, the Administrator shall confirm the average daily traffic in the design lane in year of opening based on advice from the project's pavement designer.

2.3 Type 4 material requirements

2.3.1 Additional requirements for Type 4 material (Clause 7.4)

The following additional requirements shall apply to Type 4 materials.

Not Applicable

To utilise a Type 4 material, the Designer must develop the standards and requirements relevant to the particular material and include these in this Clause. As a minimum this would typically include a particle size distribution and linear shrinkage requirement.

2.3.2 CBR moisture content for Type 4 material (Clauses 4.1.2 and 7.4)

The relative moisture content for reporting CBR test results for Type 4 material is given below.

Material Subtype	Relative Moisture Content

If no indication is given for a particular material subtype, the CBR shall be reported at the Optimum Moisture Content (OMC).

2.4 Material stockpiles (Clause 7.7)

Stockpiles of pavement material shall be located as stated below.

If no indication is given, material stockpiles shall be located as stated in Clause 7.7.

Quarry stockpiles sites are as identified by the Quarry Operator. Delivery stockpile sites are project specific and will be advised when purchase orders are confirmed

3 Construction requirements

3.1 Construction equipment

3.1.1 Paving equipment – Type 2, 3 or 4 materials (Clause 8.3.1.1.3)

For pavement constructed using Type 2, 3 and 4 materials, the following paving equipment shall be used.

If no indication is given, the paving equipment to be used shall be nominated by the Contractor in their Unbound Pavement Construction Procedure.

Note Applicable

The above requirements are not applicable to Type 1 (HSG) materials.

3.1.2 Intelligent Construction Rollers (Clause 8.3.1.3)

Intelligent Construction (IC) rollers shall be used to compact unbound pavement material **Yes** ☐ **No** ☐

If no indication is given, the rollers to be used shall be nominated by the Contractor in their Unbound Pavement Construction Procedure.

Where IC equipped rollers are not available locally, existing roller may need to be retrofitted with IC equipment.

3.2 Geometrics

3.2.1 Vertical tolerances – Types 2, 3, and 4 materials only (Clause 8.4.4.3)

The vertical tolerance on any layer shall be alternative **A (10/15 mm)** ☐ **B (25 mm)** ☐

If no indication is given, the vertical tolerance shall be Alternative A.

3.2.2 Deviation from a straight-edge – Types 2, 3 and 4 materials only (Clause 8.4.5)

The maximum deviation from a straight-edge shall be alternative **C (5 mm)** ☐ **D (8 mm)** ☐

If no indication is given, the maximum deviation from a straight-edge shall be Alternative C.

3.2.3 Crossfall and straight-edge tolerances applicable on layers other than the final layer (Clauses 8.4.4.4 and 8.4.5)

In addition to the final layer of unbound pavement, the specified requirement for crossfall and deviation from a straight-edge shall also apply to the following layers.

If no indication is given, the requirements for crossfall and deviation from a straight-edge shall apply to the final (uppermost) layer of unbound pavement only.

3.2.4 Road roughness (Clause 8.4.6)

The maximum road roughness shall be (R_s) ☐ **m/km**

If no indication is given, the requirement shall be 2.31.

4 Supplementary requirements (Clauses 8.4.6 and 10)

The following supplementary requirements shall apply.

Supplementary requirements for Council Mix Gravel as referred to in Clause 2.1 above.

CBR Value:

Min CBR15 Council Mix – Minimum Soaked CBR value of greater than or equal to 15

CBR40 Council Mix - Minimum Soaked CBR value of greater than or equal to 40

Shrinkage and Grading Coefficient Chart:

The parameters are to intersect in the “E” zone (Good) in the chart below