

SPECIFICATION FOR UNSEALED PAVEMENTS: SURFACE AND SHAPE RESTORATION

1. SCOPE

This specification sets out the requirements and standards of work to maintain the maintenance aggregate of an unsealed road carriageway including running surface, shoulders, feather edges and surface water channels.

The contract also includes the preparation of the carriageway for the application of maintenance aggregate by others when scheduled.

To achieve the long term maintenance objectives of Transit New Zealand, the following principles shall be followed:

- (a) The Contractor shall regularly undertake an inspection of the road and submit his proposed programme for any work required to the Engineer.
- (b) The Engineer shall review the Contractor's programme, adjust for technical restraints (if any) and return to the Contractor.
- (c) The Contractor shall carry out the work in accordance with the programme and any adjustments required by the Engineer.

2. RESPONSE TIMES

No specified response times are given in this specification. However the Contractor shall submit monthly to the Engineer his proposed programme of maintenance activities for the following month. This programme does not relieve the Contractor of his responsibilities to carry out work not programmed that may be necessary during the month.

3. REINSTATEMENT OR REPLACEMENT OF EDGE MARKER POSTS, MARKER PEGS AND SIGNS

The Contractor shall re-instate, or replace, all removed, disturbed, or damaged edge marker posts including route position pegs, culvert marker pegs, bridge and hazard

markers and signs to their original location at the commencement of the Contract and to the appropriate Transit New Zealand Standards.

The Contractor's failure to re-instate or replace edge marker posts, bridge end and hazard markers and signs as specified, will result in the Engineer arranging for this work to be carried out by others, with all costs being recovered from payments owing to the Contractor.

4. MAINTENANCE OF RUNNING SURFACE

The Contractor shall maintain the running surface, feather edges, tapers and surface water channels and shall ensure that the maintenance aggregate is maintained in a smooth and compacted condition and that the surface water channels are maintained in no less than their existing condition to prevent ponding of water.

4.1 Widths and Crossfalls

The existing widths and crossfalls of the running surface, feather edges, tapers and surface water channels shall be maintained.

4.2 Surface Condition

(a) Corrugations

Corrugations shall not be permitted to exceed a maximum of 25 mm from crest to trough. Corrugations are defined as a series of bumps and hollows at right angles to the line of travel approximately 0.5 to 1.0 m apart, varying in height.

(b) Rutting

Shallow surface ruts up to 50 mm deep, shall be removed and the surface restored to the general crossfall of the road.

(c) Loose Surface

Depth of loose maintenance gravel on the running surface shall not exceed 30 mm loose depth.

(d) Potholes

Potholes in the road surface shall be repaired as specified in TNZ C11.

(e) Additional Maintenance Aggregate

Should additional maintenance aggregate be required on the road surface the Engineer will determine the requirement in accordance with TNZ C14.

4.3 Transition from Unsealed to Sealed Carriageway

Where the unsealed carriageway changes to a sealed carriageway, a smooth transition shall be maintained between the two surfaces over a 20 m section within the unsealed carriageway. The sealed carriageway shall be kept free of all maintenance aggregate during surface and shape restoration.

4.4 Maintenance Operation

During any maintenance of the running surface the following requirements shall be adhered to:

- (a) The length of road where the running surface is being disturbed by grading or other means, and which produces a windrow of loose material, shall not exceed 1.0 km.
- (b) The height of the windrow of loose material shall not exceed that which will allow an average vehicle to negotiate and cross over without bottoming.

5. PREPARATION OF CARRIAGEWAY PRIOR TO PLACEMENT OF MAINTENANCE AGGREGATE

Sections of State Highway scheduled to have maintenance aggregate placed shall be prepared by removing all corrugations, rutting and potholes and by restoring the road widths and crossfalls, all in accordance with this specification. The areas involved are specified in the contract documents.

Preparation shall include the running surface, feather edges, tapers and surface water channels. Prior to placing of maintenance aggregate, loose depth of existing maintenance aggregate on the surface shall not exceed 20 mm. Compaction may be required to achieve this.

Placing of maintenance aggregate shall be carried out as soon as possible following preparation of the road surface but no later than 24 hours following preparation.

In the event that separate Contractors are awarded the different contracts, the two Contractors shall at all times co-ordinate and co-operate with each other to ensure standards are met.

6. PONDING OF WATER

The running surface, shoulders, feather edges and un-surfaced water channels shall be maintained so that no water ponds.

7. WEATHER CONDITIONS

Suitable weather conditions shall prevail during surface and shape restoration work. Under no circumstances shall work be carried out during heavy rain, dry windy conditions, or snow.

8. TRAFFIC CONTROL

At all times during the work or activities included in this specification the Contractor shall take responsibility to ensure all traffic control is carried out in accordance with the Specification for Temporary Traffic Control, TNZ G/1.

9. PERFORMANCE CRITERIA

The Contractor's performance shall be judged on the following basis:

- (a) That the requirements of this specification are met.
- (b) That the running surface of the road remains smooth with a safe and acceptable shape, true to grade.
- (c) That roadside furniture damaged by the Contractor is either replaced or repaired promptly.
- (d) That no reasonable complaints are received by the Engineer on the Contractor's operation or condition of the road during and after grading.
- (e) The Contractor's ability to co-ordinate and co-operate with the Contractor engaged to supply and place maintenance aggregate.

10. BASIS OF PAYMENT

The basis of payment shall be an all inclusive rate per km of road per month.