

SPECIFICATION FOR MAINTENANCE OF UNSEALED SHOULDERS

1. SCOPE

This specification sets out the requirements and maintenance standard for unsealed shoulders, both gravel and grassed, including feather edges, tapers and surface water channels where the adjacent pavement is sealed.

The scope of this specification does not include mowing of grassed shoulders or chemical spraying.

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

- (a) The Contractor shall inspect all road shoulders within the contract, prepare schedules of maintenance including location and priority work in order to meet the response times and submit the schedule to the Engineer.
- (b) The Contractor shall carry out maintenance work in accordance with this specification and the maintenance schedule.

2. PRIORITY WORK

Priority work shall include all areas that do not meet any of the requirements of Clauses 6.1-6.4 inclusive or any area that does not receive maintenance grading within the cycle scheduled by the Engineer.

3. RESPONSE TIMES

The response times to carry out work in Clause 1 of this specification shall be as scheduled by the Engineer in the Contract documents.

4. WORK SCHEDULE

All work scheduled by the Contractor shall be in terms of Transit New Zealand State Highway Route Positions and shall list priority work for particular road groups.

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

The Contractor shall reinstate, 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 reinstate 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, with all costs being recovered from payments owing to the Contractor.

6. MAINTENANCE OF UNSEALED SHOULDERS, FEATHER EDGES AND TAPERS

The Contractor shall maintain all gravel and grassed shoulders within the scheduled lengths including feather edges, tapers and unsurfaced water channels and ensure that they are maintained in an even and compacted condition.

The Contractor shall remove all large segregated material from the shoulder and road surface covered by maintenance grading, and shall supply make-up material to maintain the shoulder and avoid drops adjacent to the sealed surface.

Removal of high grass shoulders, improvements to shoulders and surface water channels are not included in this contract. Where ponding of water is due to a high grass shoulder a positive drainage channel shall be provided.

6.1 Widths and Crossfalls

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

6.2 Shoulder Maintenance

- (a) All shoulder material used whether aggregate or topsoil, shall conform to the nominated specification in the contract documents or shall be an equivalent material.
- (b) Shoulder material shall be maintained in an even and compacted condition. Depth of loose material shall not exceed 20 mm loose depth.
- (c) Shoulder material shall not encroach onto the sealed pavement at any time except during maintenance operations. Shoulder material shall be

maintained level with the edge of the adjacent sealed carriageway at all times with the tolerances specified in clause 6.3 (Edge Rutting).

- (d) For grassed shoulders an even vegetation cover shall be maintained.

6.3 Edge Rutting

Edge rutting shall not be permitted to exceed a cumulative length of 100 m by 30 mm deep per 1 kilometre. Edge rutting is defined as the difference in the level of the top surface of shoulder aggregate or topsoil, and the edge of the adjacent sealed carriageway.

Isolated rutting at any location shall not exceed a depth of 50 mm.

6.4 Ponding of Water

All shoulders shall be maintained so that no water ponds on the sealed carriageway, shoulder or taper edge.

7. 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.

8. PERFORMANCE CRITERIA

The performance of the Contractor during the contract period will be measured by the following criteria.

- (a) That the shoulders remain compacted, and shed water from the adjacent sealed carriageway without ponding or edge rutting.
- (b) That all work is carried out in accordance with this specification and that any defective work is repaired within the response times stated.
- (c) That the feather edges, tapers and surface water channels retain their widths and crossfalls.

| 9. BASIS OF PAYMENT

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

The km measurement for payment shall be the total length of road scheduled for shoulder maintenance without deduction for sections of lined water channel and means both sides of the highway.