Sealing under and around safety barriers

Technical directive

NORTHERN TERRITORY GOVERNMENT

Document title	Sealing under and around safety barriers
Contact details	Department of Infrastructure Planning and Logistics
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1.0	29/11/2019	Andrew Batson	New document – Replaces DoT Sealing Under Guardrails Nov 2014 V1, expanded to include more detail on process

Acronyms	Full form

Contents

1. Background

The Department of Infrastructure Planning and Logistics (DIPL) is responsible for the care, control and management of the road reserve/corridor as described in the Control of Roads Act.

DIPL has an interest in managing and maintaining the appearance of the road reserve while optimising safety for the travelling motorist.

This direction sets out the responsibilities of DIPL to ensure that the full shoulder width is sealed beyond the safety barriers to reduce scouring, prevent weed growth and to ensure good drainage.

This Technical Directive replaces the previous Department of Transport, “Sealing Under Guard Rails” policy dated November 2014 Version 1.0.

2. Introduction

Safety barrier posts are typically hammer driven. Some barrier types have posts and terminals concreted.

In all cases, the installation can be performed before or after the sealing takes place.

3. Installation methodology

3.1. Installation before sealing

Where pavement damage has occurred then the damage is required to be repaired with appropriate materials of similar nature to the existing Base Course. Water will be required to drain freely across the shoulder.

Posts and other materials are to be protected from bituminous materials when sealing occurs.

Sealing is to take place up to and sealed against the posts and other materials so water does not permeate into the pavement.

3.2. Installation after sealing

Where the pavement has been damaged and shows distress, repair and make good, then seal again to waterproof around posts and other damaged areas.

Where there has been heaving, materials need to be tampered back down and sealed again to ensure waterproofing.

3.2.1. Asphalt bunds

Bunds are required to be installed as per drawing number CS3200.

Where installation of the barrier occurs on a standard cross fall then a bund is required.

Where the installation of the barrier is on the top side of a superelevation then the bund is **not** required.

Discharge chutes are required on all bund works.

4. Sealing rates

4.1. New seals

Prime = 100/0/90 @ 1.1 L/m2

7mm = Not to be used

10mm = 2.00 L/m2

14mm = 2.50 L/m3

4.2. Reseal / Enrichment

Emulsion[1] CRS 170/60 = 1.2 L/m2 total spray

7mm = 2.00 L/m2

10mm = 2.50 L/m2

14mm = Not to be used

20mm[2] = Not to be used

[1] Preferred methodology.

[2] Requires approval from Executive Director Civil Services, flood zones only.

Note: New Seals where a 2 coat seal is to be sprayed use the first coat to determine seal size.

Note: New Seals where 20mm is the first coat use the second coat to determine seal size.

Note: Protect post from overspray by covering with appropriate sealing paper or other materials.