

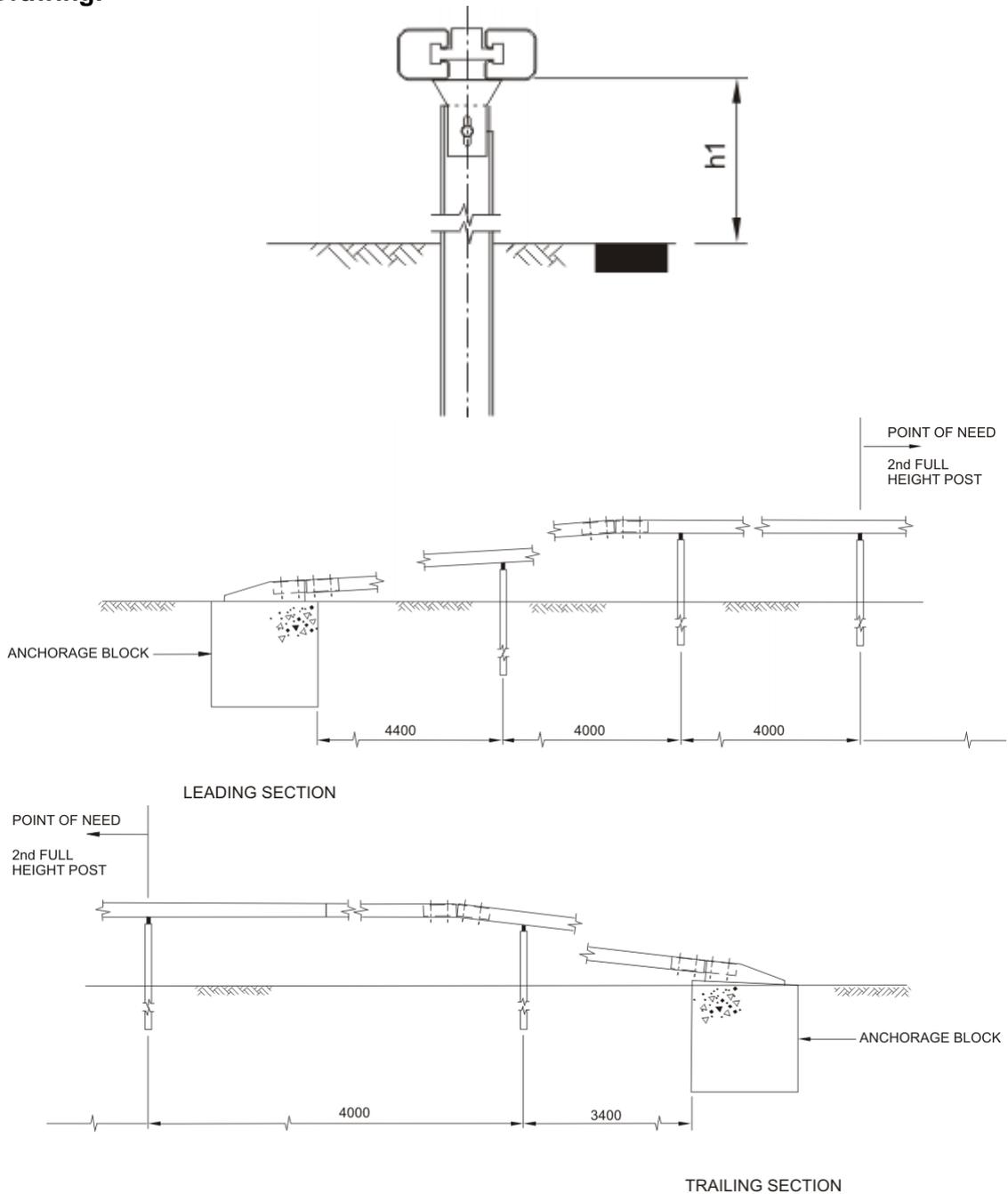
# DOUBLE SIDED RAIL BARRIER

## REVISION REGISTER

Revision	Description	Date
1	Issued for use.	11/05/2009

Double side rail barrier is a semi-rigid barrier system that is not longer used for new installations

### Drawing:



### Ownership:

N/A

### Supplier:

N/A

## **DOUBLE SIDED RAIL BARRIER**

### **Test Level:**

Deemed to comply with NCHRP TL 3 based on finite element analysis work undertaken by DVExperts International Pty Ltd. As part of this analysis it was found that the barrier could re-direct both the 820 kg and 2000 kg test vehicles providing it was in the height range of 550 to 750 mm to the point shown as h1 on drawing 0030-0001.

The point of need of the barrier commences at the second full height post.

### **Design Considerations:**

#### **Deflection:**

0.95 m under TL 3 conditions.

#### **Minimum Length:**

100 m at full height.

#### **Offset from Kerbing:**

Kerbing is should not be placed in front of the barrier.

#### **Approach to barrier:**

The approach to the barrier should be a trafficable running surface at a slope of 1 in 10 or flatter clear of objects and grade changes to allow an errant vehicle to hit the barrier at an appropriate height.

#### **Vehicle Roll:**

Where the hazard being protected by a rigid barrier extends above the height of the barrier the Designer should ensure that adequate separation from the face of the barrier to the hazard is provided to allow for the roll of high vehicles (such as trucks) hitting the hazard. Refer to Table 4.5 of the Assessment of Roadside Hazards.

#### **End Treatments:**

The double sided barrier has a sloping end treatment which is only acceptable for use if located outside of the clear zone. It can be used on the departure providing it is outside of the clear zone for traffic in the reverse direction. Other options to protect the end of the barrier is by overlapping with another barrier or by use of a suitable end treatment.

#### **Limitations:**

The barrier should only be used when it is consistent with existing adjacent / adjoining barriers

#### **References:**

DVExperts International Pty Ltd on results of finite element analysis (refer to trim document D08#176129).

#### **Drawings:**

Main Roads drawings 9130-0346, 0030-0001 and 0030-0002 shows details of the Double sided rail barrier.