Background

The ET2000 Plus or ET-Plus is a gating extruder end treatment which has been tested to Test Levels 2 and 3 under NCHRP Report 350 (the same as the test levels adopted in AS/NZS 3845). However, one of the versions of this end treatment supplied by INGAL Civil Products requires clarification on certain aspects of the post installation and for the conforming post types.

The ET-Plus with ‘Nokout’ posts has not been tested to TL3 and is deemed non-compliant for use by MRWA. Alternative compliant posts are now available in Australia.

Action

The compliant ET-Plus end treatment shall have the following configuration:

Post 1 will be a steel hinged breakaway post (HBA)
Posts 2 to 8 will be Steel Yielding Terminal Posts (SYTP)

For the TL 3 version, the overall length for posts 1 to 8 will be 15.24 metres as shown on Ingal Civil Products drawing CAB-STD-61 (Sketch 1).

The optimum plan layout is to install the end terminal at the recommended flare of 25:1 to reduce nuisance impacts. The flare will be over the end terminal, as shown in Sketch 1, and not in the guardrail. However, in locations with constrained width or for high embankments where the cost to provide additional width would be unwarranted, then the terminal may be installed parallel to the road. Note that in the attached drawing the edge of road should be interpreted as the edge of shoulder, or if there is no shoulder, edge line.

On the ‘departure’ end of the terminal, the posts and guardrail associated with the end treatment are to be arranged for an impact on the (departure end) extruder head, that is, against the traffic flow. The terminal guardrail is to be lapped against the traffic as shown on Sketch 2. The posts typically have a designed failure mechanism and the correct orientation is required to facilitate the intended failure mode.

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