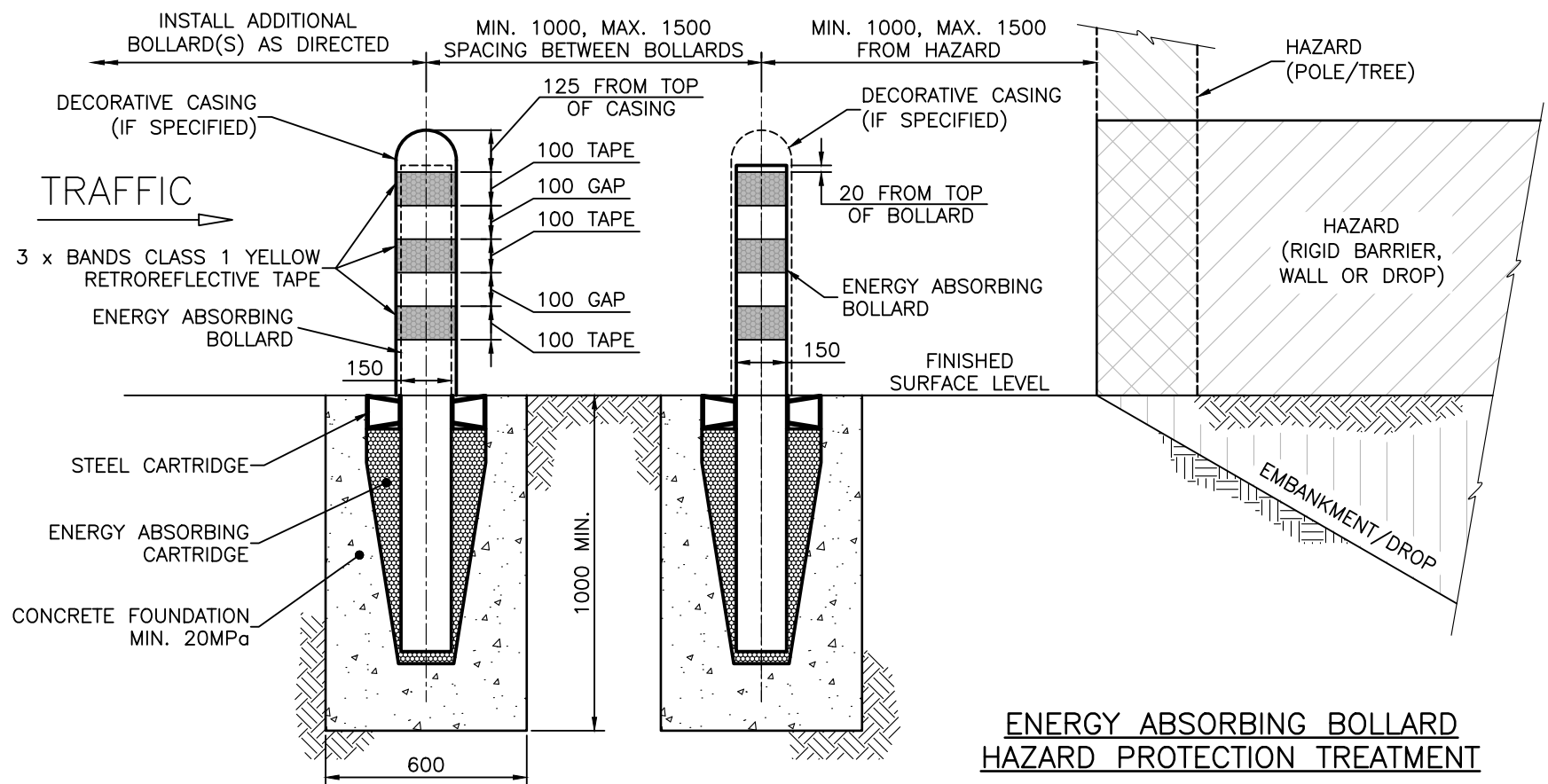


NOTES:

1. THE GUARDRAIL END TERMINAL SHALL BE (OR APPROVED EQUIVALENT):
- OMNISTOP GUARDRAIL END TREATMENT, SOLD AND DISTRIBUTED BY SAFEROADS (1800 060 672, www.saferoads.com.au)
2. HAZARD PROTECTION ENERGY ABSORBING BOLLARD SHALL BE (OR APPROVED EQUIVALENT):
- OMNISTOP BOLLARD, SOLD AND DISTRIBUTED BY SAFEROADS (1800 060 672, www.saferoads.com.au)
3. NONFLARED TERMINAL SHALL INCLUDE ALL POST, RAIL AND HARDWARE ITEMS REQUIRED FOR A COMPLETE UNIT. THE END TREATMENT SHALL BE INSTALLED TO MANUFACTURERS AND/OR DISTRIBUTORS REQUIREMENTS.
4. DESIGN TO BE IN ACCORDANCE WITH DESIGN MANUALS AS PROVIDED BY MANUFACTURER/DISTRIBUTOR.
5. FOR URBAN SITUATIONS, BOLLARDS TO BE RATED TO 60kph. APPROPRIATE DOCUMENTATION SHOWING LEVEL OF TESTING TO BE PROVIDED BEFORE BOLLARD/SYSTEM INSTALLATION.
6. SYSTEM TO BE INSTALLED PARALLEL TO TRAVEL WAY.
7. DELINEATOR ON GUARDRAIL END TREATMENT END BUFFER TO HAVE CLASS 1 RETROREFLECTIVE BACKGROUND WITH BLACK NONREFLECTIVE PATTERN. DELINEATOR TO MATCH QUEENSLAND MANUAL OF TRAFFIC CONTROL DEVICES (MUTCD) SIGN D4-Q02.
8. ENERGY ABSORBING BOLLARD FOR HAZARD PROTECTION EITHER TO BE LEFT PLAIN (GALVANISED FINISHED), PAINTED OR POWDERCOATED, OR INSTALLED WITH SECURED DECORATIVE COVER AS SUPPLIED BY MANUFACTURER.
9. WHERE BOLLARD INSTALLED WITH PAINTED OR POWDERCOATED FINISH OR WITH DECORATIVE COVER, COLOUR IS TO COMPLEMENT SURROUNDING STREETScape. COLOUR SELECTION IN ACCORDANCE WITH STANDARD BCC CORPORATE COLOUR PALETTE - REFER UMS 113 FOR DETAILS.
10. ENERGY ABSORBING BOLLARDS FOR HAZARD PROTECTION TO HAVE THREE (3) 100mm WIDE BANDS OF CLASS 1 YELLOW RETROREFLECTIVE TAPE AT 100mm SPACING.
11. ALL DIMENSIONS IN MILLIMETRES (U.N.O.).



B	Reflective Tape Details Amend (Note10/Detail), Note 8 Mod.	DL 05/10	IC 06/10	PC 06/10
A	ORIGINAL ISSUE	Feb '05	Nov '05	Mar '06
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DESIGN AUTHORISED FOR ISSUE PAUL COTTON SIGNATURE ON ORIGINAL DATED 21/03/06 MANAGER CITY ASSETS, R.P.E.Q. 2546	DESIGN Saferoads	DATE ---
DESIGN APPROVED B. HANSEN SIGNATURE ON ORIGINAL DATED 13/03/06 PRINCIPAL ENGINEER STRATEGIC ASSET MANAGEMENT	DRAWN CA (DJL)	DATE Feb '05
	CHECKED CA (Gmc)	DATE Nov '05
	DRAWING FILENAME UMS 133.dwg	
	ASSOCIATED PLANS UMS 132, UMS 134	



BRISBANE CITY COUNCIL STANDARD DRAWING

**ENERGY ABSORBING BOLLARD
GUARDRAIL END TERMINAL
& HAZARD PROTECTION**

SCALE: NOT TO SCALE
DWG No. UMS 133
ORIGINAL SIZE: A3
REVISION: B