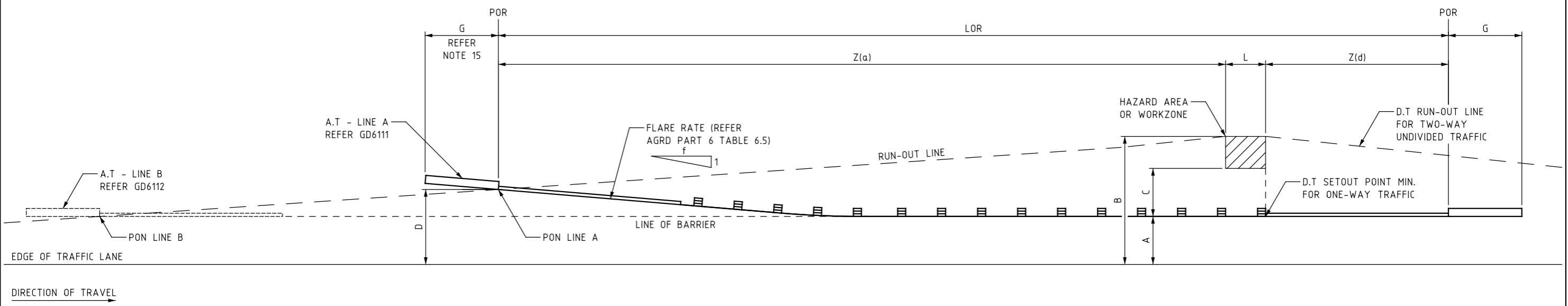


ISSUE	APPROVED BY	DATE	AMENDMENT
-	M-SSE	07/2020	SUPERSEDES SD3500



TERMINOLOGY NOTES:

- "LINE A" - BARRIER SETOUT LINE A: IS A SETOUT METHODOLOGY WITH A CURVED OR FLARED LINE TO REDUCE LENGTH OF NEED. REFER GD6111.
- "LINE B" - BARRIER SETOUT LINE B: IS A SETOUT METHODOLOGY PARALLEL TO THE EDGE OF TRAFFIC LANE. REFER GD6112
- "PON" - POINT OF NEED: IS CALCULATED USING THE RUN-OUT LENGTH METHOD SPECIFIED IN AGRD PART 6. IT DERIVES THE CLOSEST POINT TO A HAZARD REQUIRED TO SHIELD 85% OF ERRANT VEHICLES FROM IMPACTING THAT HAZARD. THE DISTANCE BETWEEN A LEADING PON AND OPPOSING TRAFFIC PON IS THE MINIMUM LENGTH REQUIRED TO PROTECT DRIVERS FROM THE HAZARD.
- "POR" - POINT OF REDIRECTION: IS THE POINT AT WHICH A BARRIER BECOMES REDIRECTIVE AND CONTAINS A CRASH TESTED VEHICLE. THE LOCATION OF THE BARRIER POR IS DIFFERENT FOR EACH BARRIER TERMINAL AND MAY BE ACHIEVED WITHIN THE LENGTH OF TERMINAL (REFER GD6211). MATCHING THE BARRIER POR WITH THE REQUIRED POINT OF NEED ENSURES THAT 85% OF ERRANT VEHICLES ARE ADEQUATELY SHIELDED FROM IMPACTING THE HAZARD.
- "LOR" - LENGTH OF REDIRECTION: IS THE LENGTH OF BARRIER DESIGNED TO CONTAIN AND REDIRECT AN ERRANT VEHICLE UP TO THE ACCEPTED TEST LEVEL. E.G. MASH TEST LEVEL 3 IS A 2,270KG PICKUP TRUCK IMPACTING AT 100km/h AND 25 DEGREES. THE BARRIER "LOR" SHALL EXTEND BETWEEN THE REQUIRED POINTS OF NEED TO SHIELD 85% OF VEHICLES. MINIMUM BARRIER LOR SHALL BE IN ACCORDANCE WITH PRODUCT-SPECIFIC MANUALS, DRAWINGS & SPECIFICATIONS. REFER VRS TO AGRD PART 6, SECTION 6.3.20 AND RDN 06-08, SECTION 5.7.
- "Z" - LENGTH OF NEED IS MEASURED FROM THE REQUIRED POINT OF NEED TO HAZARD AND DOES NOT INCLUDE THE GATING SECTION OR DEVELOPMENT LENGTH PRIOR TO THE POINT OF REDIRECTION. REFER GD6211 AND GD6221, AND SPECIFIC PRODUCT MANUALS, DRAWINGS AND SPECIFICATIONS FOR LOCATION OF BARRIER POINT OF REDIRECTION. "Z" VALUES SHALL BE ON BOTH SIDES OF THE HAZARD (Z(a) AND Z(d)) WHERE THE HAZARD IS UNPROTECTED FOR OPPOSING TRAFFIC.
- "A" - BARRIER OFFSET TO TRAFFIC LANE IS THE DISTANCE FROM THE TRAFFIC LANE TO THE FACE OF BARRIER. OFFSET REQUIREMENTS SHALL BE IN ACCORDANCE WITH VICROADS SUPPLEMENTS (VRS) TO AUSTRROADS GUIDE TO ROAD DESIGN (AGRD) PART 6. BARRIER OFFSETS LESS THAN MINIMUM REQUIRE RELEVANT AUTHORISATION. REFER VRS TO AGRD PART 6, SECTION V6.3.5.1.

- "B" - PROTECTED WIDTH IS THE DISTANCE FROM THE TRAFFIC LANE TO THE OUTERMOST POINT OF THE HAZARD.
- "C" - BARRIER OFFSET TO HAZARD THE DISTANCE BETWEEN THE HAZARD AND THE FACE OF BARRIER SHALL BE AT LEAST EQUAL TO THE BARRIER WORKING WIDTH (SEE NOTE 11). REFER AGRD PART 6, AND SPECIFIC PRODUCT MANUALS, DRAWINGS AND SPECIFICATIONS FOR BARRIER PERFORMANCE DATA.
- "f" - FLARE RATE: IS THE RATIO OF THE LENGTH OF THE FLARED SECTION OF BARRIER TO THE BARRIER OFFSET (MEASURED PARALLEL TO THE ROAD). FLARE RATE SHALL BE IN ACCORDANCE WITH AGRD PART 6.
- "W" - FLARE OFFSET AT THE END OF TERMINAL: THE DISTANCE BETWEEN THE LINE OF BARRIER AND THE END OF TERMINAL, PERPENDICULAR TO THE LINE OF BARRIER.
- "D" - PON OFFSET TO TRAFFIC LANE: THE DISTANCE BETWEEN THE FLARED POR AND THE EDGE OF TRAFFIC LANE.
- "Lr" - RUN-OUT LENGTH IS THE LENGTH OF CLEAR RUN-OUT AREA THAT SHOULD BE MADE AVAILABLE AS A PASSAGEWAY FOR DECELERATION BETWEEN THE START OF THE BARRIER AND A NON-BYPASSABLE HAZARD. REFER VRS TO AGRD PART 6 SECTION 6.3.19.
- WORKING WIDTH: IS THE SUM OF THE DYNAMIC DEFLECTION AND VEHICLE ROLL ALLOWANCE (OR SYSTEM WIDTH IF IT IS LARGER THAN THE VEHICLE ROLL ALLOWANCE).
- GATING SECTION: IS THE LENGTH OF TERMINAL DESIGNED TO ALLOW AN IMPACTING VEHICLE TO PASS THROUGH AND BEHIND THE BARRIER. GATING SECTION LENGTH IS PRODUCT-SPECIFIC. A RUN-OUT AREA SHOULD BE PROVIDED BEHIND AND BEYOND THE GATING SECTION FOR ERRANT VEHICLES THAT SHALL BE CLEARED OF HAZARDS IN ACCORDANCE WITH GD6211 AND GD6221.
- TRANSITIONS BETWEEN ACCEPTED BARRIER SYSTEMS SHALL BE IN ACCORDANCE WITH VICROADS SUPPLEMENTS, TECHNICAL DRAWINGS AND PRODUCT-SPECIFIC MANUALS, DRAWINGS AND SPECIFICATIONS.

SAFETY BARRIER SHORTHAND:

ALL SAFETY BARRIER DESIGNS SHALL HAVE AT LEAST MINIMUM BARRIER INFORMATION. SHORTHAND MAY BE USED.

LONGITUDINAL BARRIER:	RECOMMENDED EXAMPLE:
GF - GUARD FENCE	TYPE - GF
WRSB - WIRE ROPE SAFETY BARRIER	LINE - A
CONC - PERMANENT CONCRETE BARRIER	A - 3.0 m
TEMP - TEMPORARY BARRIER	B - 8.0 m
	C - 3.0 m
	f - 12:1
A - OFFSET TO TRAFFIC LANE (m)	Z(a) - 42.8 m
B - PROTECTED WIDTH (m)	D - 4.6 m
C - BARRIER OFFSET TO HAZARD (m)	Z(d) - 0.0 m
D - FLARED POR OFFSET TO TRAFFIC LANE (m)	A.T - G.R.E.A.T
L - LENGTH OF HAZARDS (m)	D.T - G.R.E.A.T
Z(a) - BARRIER APPROACH LENGTH OF NEED (m)	TYPE - GF
Z(d) - BARRIER DEPARTURE LENGTH OF NEED (m)	LINE - B
f - FLARE RATE (f:1)	A - 3.0 m
W - FLARE OFFSET (m)	B - 8.0 m
	C - 3.0 m
	Z(a) - 57.1 m
	Z(d) - 0.0 m
TERMINAL:	A.T - G.R.E.A.T
G - GATING SECTION LENGTH (m)	D.T - G.R.E.A.T
A.T - APPROACH TERMINAL	
D.T - DEPARTURE TERMINAL	
G.R.E.A.T - GATING REDIRECTIVE ENERGY ABSORBING TERMINAL	
T.T - TRAILING TERMINAL	
S.T - STRAIGHT WRSB TERMINAL	
FL.X - FLARED WRSB TERMINAL WITH X _m OFFSET	
e.g FL.1.5 OR FL.2.0	
C.C - CRASH CUSHION	

VicRoads Drawing No. 720423

- NOTES:
- ALL DIMENSIONS ARE IN METRES UNLESS SHOWN OTHERWISE
 - THIS DRAWING FORMS PART OF THE VRS TO AGRD PART 6 AND SHOULD BE READ IN CONJUNCTION WITH THOSE REFERENCES
 - THIS DRAWING SHOULD BE USED DURING THE DESIGN PROCESS AND MAY REQUIRE SITE SPECIFIC CUSTOMISATION

- REFERENCES:
- RDN 06-02 USE OF WIRE ROPE SAFETY BARRIERS
 - RDN 06-04 ACCEPTED SAFETY BARRIER PRODUCTS
 - RDN 06-08 USE OF STEEL GUARD FENCE
 - VICROADS GUIDELINE DRAWINGS - AGRD PART 6
 - VICROADS STANDARD DRAWINGS - ROAD SAFETY BARRIERS



AGRD PART 6
SAFETY BARRIER TERMINOLOGY
SHORTHAND AND GENERAL REQUIREMENTS

NOT TO SCALE	APPROVED M-SSE	07/2020	GD NO. GD6000	ISSUE
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