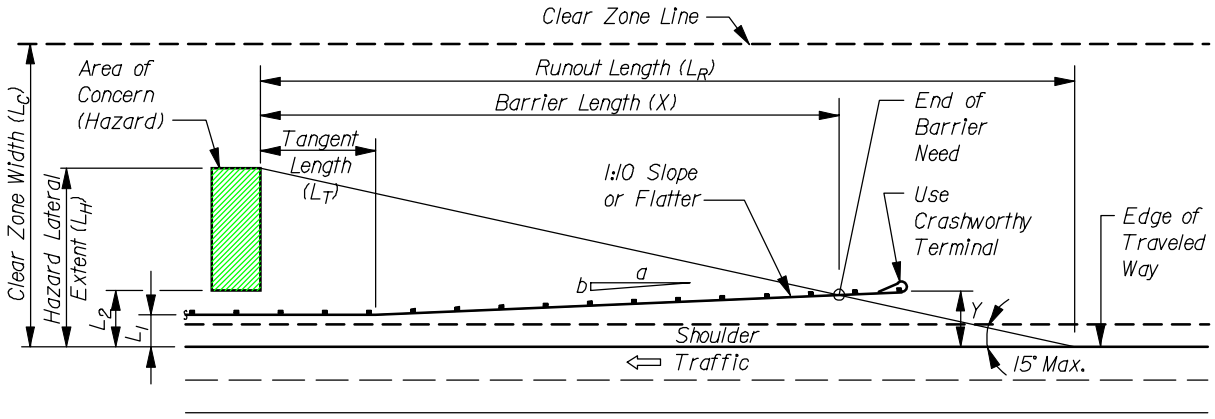

APPROACH BARRIER LAYOUT VARIABLES

LEGEND:

X = Barrier Length
Y = Barrier Lateral Offset at End of Flare
L_R = Runout Length
L_H = Hazard Lateral Extent
L_T = Tangent Length
L_0 = Barrier Lateral Offset Before the Flare
L_1 = Lateral Distance from Edge of Traveled Way to the Barrier.
L_2 = Lateral Distance from the Edge of Traveled Way to the Hazard
a:b = Flare Rate

$$X \text{ (Barrier Length)} = \frac{L_H * \left(\frac{b}{a}\right)\left(L_T\right) - L_2}{\left(\frac{b}{a}\right) * \left(\frac{L_H}{L_R}\right)}$$

$$Y \text{ (Barrier Length)} = L_1 - \left(\frac{L_1}{L_R}\right)(X)$$

RECOMMENDED FLARE RATES		
Design Speed (kph)	Rigid Barrier	Semi-Rigid Barrier
110	20:1	15:1
100	18:1	14:1
90	16:1	12:1
80	14:1	11:1
70	12:1	10:1
60	10:1	8:1
50	8:1	7:1

RECOMMENDED RUNOUT LENGTHS				
Design Speed (kph)	Traffic Volume (ADT)			
	Over 6000	2000–6000	800–2000	Under 800
	L_R (m)	L_R (m)	L_R (m)	L_R (m)
110	145	135	120	110
100	130	120	105	100
90	110	105	95	85
80	100	90	80	75
70	80	75	65	60
60	70	60	55	50
50	50	50	45	40

Figure 300.09
Barrier Layout Diagram