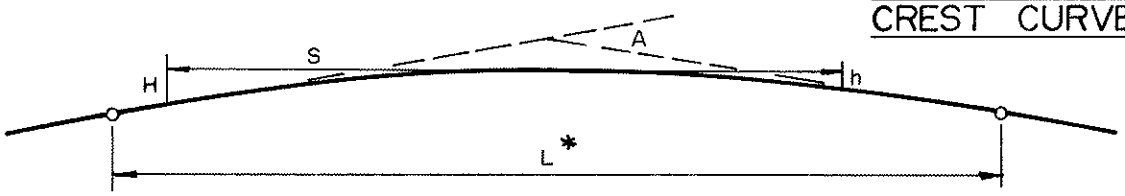
CREST CURVES



DESIGN SPEED (km/h)	STOPPING SIGHT DISTANCE (m)		CREST, K (m)	
	(a) MINIMUM	(b) DESIRABLE	(c) COLLECTOR AND MAJOR ROADS	(d) RESIDENTIAL ROADS
50	65	65	7	10
60	85	90	15	20
70	110	120	22	35

* L IN METERS SHOULD BE NOT LESS THAN DESIGN SPEED IN KM/H.

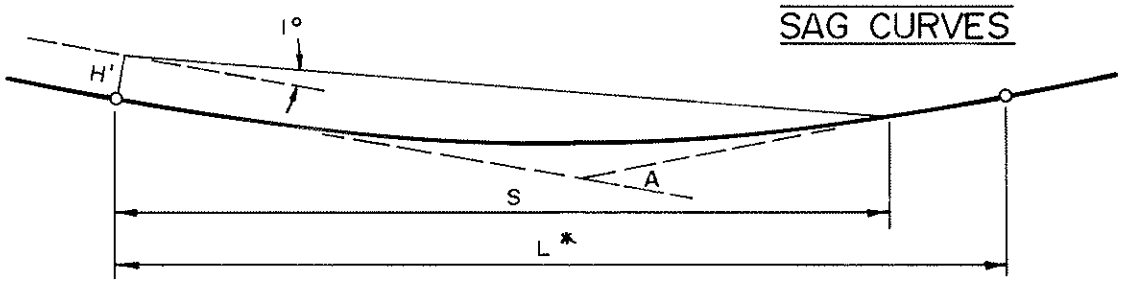
(a) BASED ON FIXED PERCEPTION REACTION TIME OF 2.5s.
(b) BASED ON VARIABLE PERCEPTION REACTION TIME OF 2.5s AT 40km/h TO 3.5s AT 140km/h.
(c) BASED ON FIXED PERCEPTION REACTION TIME AND TAIL LIGHT HEIGHT OF 380mm.
(d) BASED ON VARIABLE PERCEPTION REACTION TIME AND OBJECT HEIGHT OF 150mm.

LEGEND

L – LENGTH OF VERTICAL CURVE IN METERS.
A – ALGEBRAIC DIFFERENCE IN GRADE PERCENT.
S – MINIMUM STOPPING SIGHT DISTANCE IN METERS.
H – HEIGHT OF DRIVERS EYE 1.05m
H' – HEIGHT OF HEAD LAMPS 0.6m
h – HEIGHT OF OBJECT
1° – ANGLE OF LIGHT BEAM UPWARD FROM PLANE OF VEHICLE.

$$L = KA$$

SAG CURVES



DESIGN SPEED (km h)	STOPPING SIGHT DISTANCE (m)	SAG, K (m) MIN'M	
		WITHOUT STREET LIGHTING	WITH STREET LIGHTING
50	65	11	6
60	85	20	10
70	110	25	15

* L IN METERS SHOULD BE NOT LESS THAN DESIGN SPEED IN KM/H
CENTRIPETAL ACCELERATION 0.3 m/s²

MUNICIPALITY OF CENTRAL SAANICH

TITLE: **VERTICAL CURVES**

STD.DWG.No. 501

Approved; | Date; JUNE 1986 | Scale; N.T.S. | Rev.