EAST COAST RAILWAY

CE'S CIRCULAR (P. WAY) NO: 09

No. W.7/CE's Circulars/09 dated 10 June 2004

Sub: Standard Drawings for Manned & Unmanned Level Crossings

Safety at Level Crossing has become a major area of concern. This is particularly so because quite often they result in casualties involving loss of human life. Even when no casualties are involved, each such accident has the potential of major disaster. Besides, Railway operation also severely suffers as train services get disrupted.

The basic infrastructure required to be provided in various categories of level crossings are already standardized in Chapter-IX of the Indian Railway Permanent Way Manual. A need has been felt that all these were incorporated in standard drawings for ready reference of field officers and supervisors for provision as a part of planned drives, or during upgradations as and when a level crossing qualifies based on periodic census.

Over the years there has been massive increase in movement of road vehicles. The road width of our level crossings needs to recognize this fact. Wider road surfaces at level crossings are the call of the hour. To this end, we should not hesitate to provide additional road width even in excess of the Manual provisions.

Two sets of Drawings for manned and unmanned level crossings bearing CE's Drawing No. 91/04 & 92/04 respectively are enclosed as Annexures to this Circular for general guidance and adoption in the field.

Encl: Annexures A & B

(Bhola Singh)
Chief Track Engineer

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(Bhola Singh)
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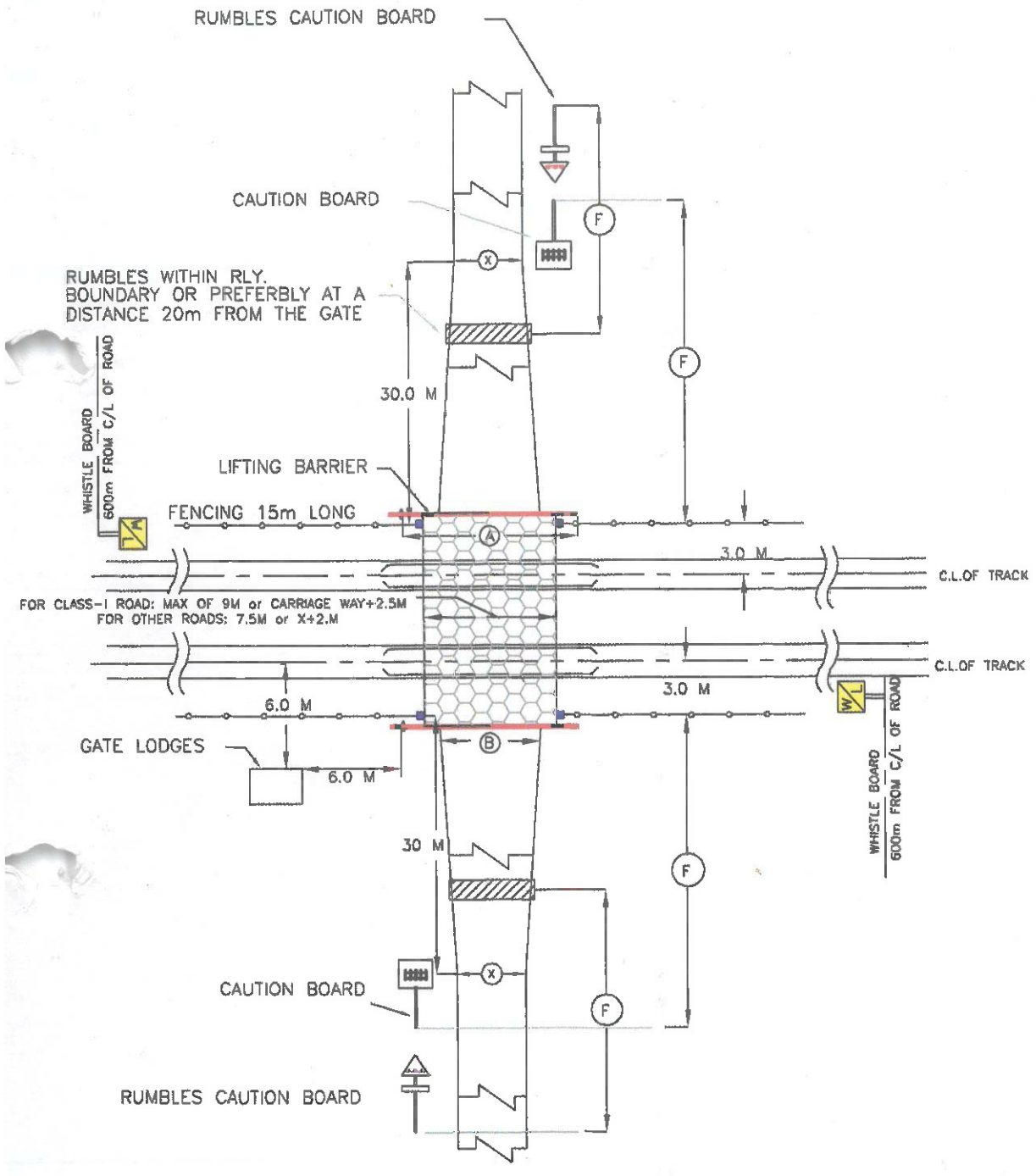
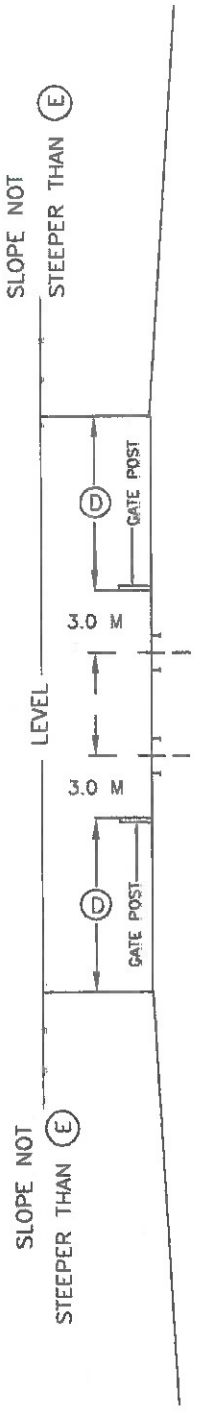
ANNEXURE– A



TYPICAL PLAN FOR MANNED LEVEL CROSSING



LONG SECTION OF ROAD

SL. NO.	LEGEND	DESCRIPTION	CLASS I ROADS	DESIRABLE FOR OTHER ROADS
1.	(A)	LENGTH OF LIFTING BARRIER	MAX OF (10M OR CARRIAGE WAY + 2.5 M)	10 M (DWG NO. SA 8843)
2.	(B)	WIDTH OF METALLING OUTSIDE GATES	MAX OF (7M OR WIDTH OF ROAD)	MAX OF (5.5M OR WIDTH OF ROAD)
3.	(C)	GRADIENT BETWEEN GATES	LEVEL	LEVEL
4.	(D)	LEVEL DIST. AFTER GATE	15M	8M
5.	(E)	GRADIENT AFTER LEVEL PORTION	1 IN 40	1 IN 30
6.		MIN SIGHT DIST OF GATE a) FROM ROAD (PLAINS) b) FROM ROAD (HILLY)	 120M 60 M	 60 TO 90 M 40 TO 50 M
7.		STRAIGHT LENGTH a) DESIRABLE b) MIN	 30 M 15 M	 22.5 M 9 M
8.	(F)	WARNING TO RD. TRAFFIC a) PLAINS b) HILLY	 120M 60 M	 90 M 50 M
9.	(X)	CARRIAGE WAY	EXISTING WIDTH OF ROAD	

AT ALL IMPORTANT LC GATE WHERE ELECTRIC POWER SUPPLY IS AVAILABLE FLASHING LIGHT WITH BUZZER/HOOTER TO GIVE INDICATION TO THE ROAD USERS.

MINIMUM WIDTH OF ROAD FORMATION SHOULD BE METTALED WIDTH + 5 M.

LENGTH OF CHECK RAILS SHOULD BE 2M MORE THAN THAN THE WIDTH OF METALLING.

WHERE THE L-XING IS ON A CURVE THE GATE GOOMTY SHOULD BE BUILT ON THE OUTER SIDE OF THE CURVE.

WICKET GATES TO BE PROVIDED AT PLACES WHERE THERE IS NO FOB.

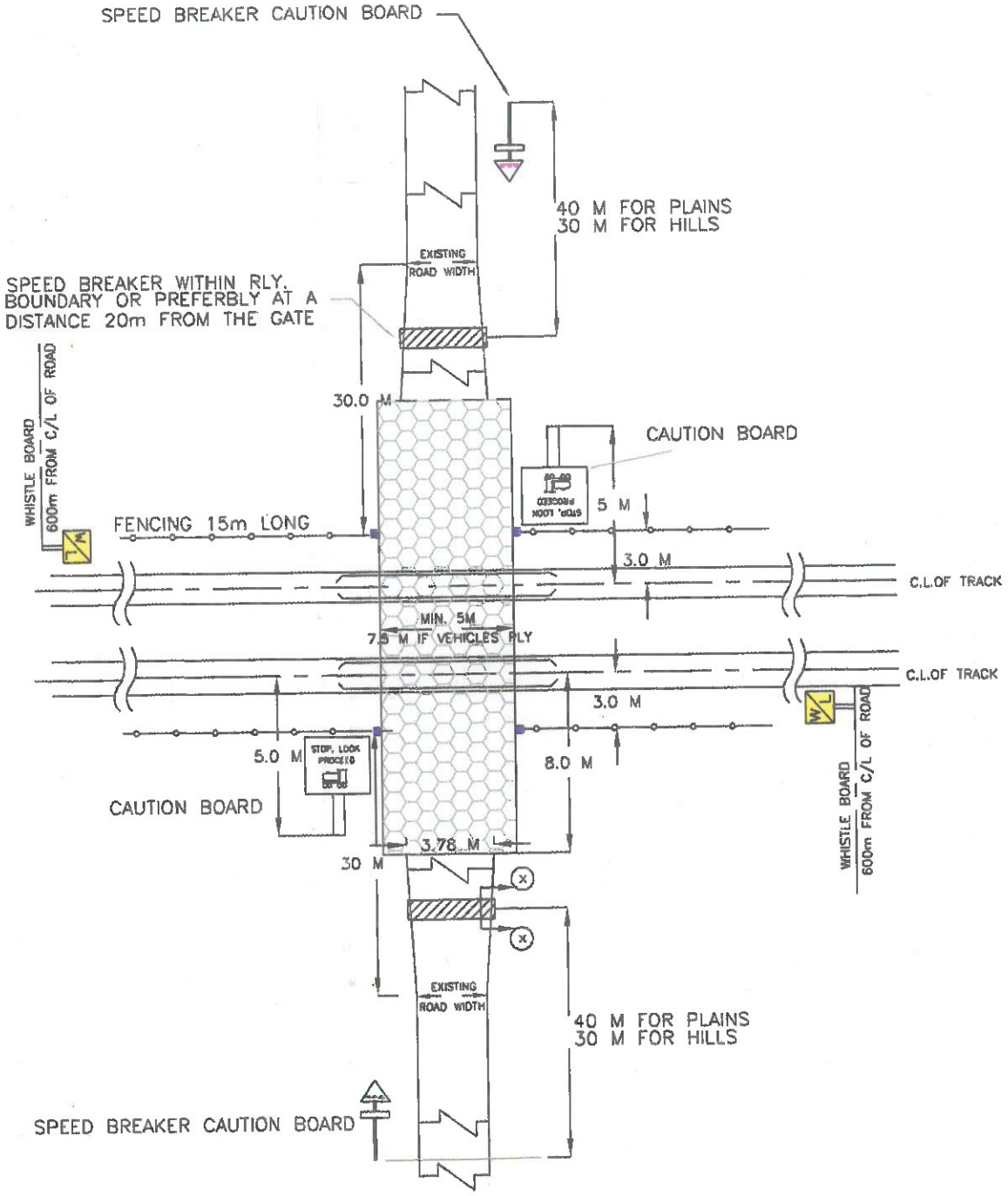
STANDARD LENGTHS GIVEN IN MIN. DESIRABLE COLUMN SHALL BE FOLLOWED WHERE THE L-XING UNDER MANNING IS ON OTHER THAN CLASS I ROAD

CE DRAWING NO. 91/04

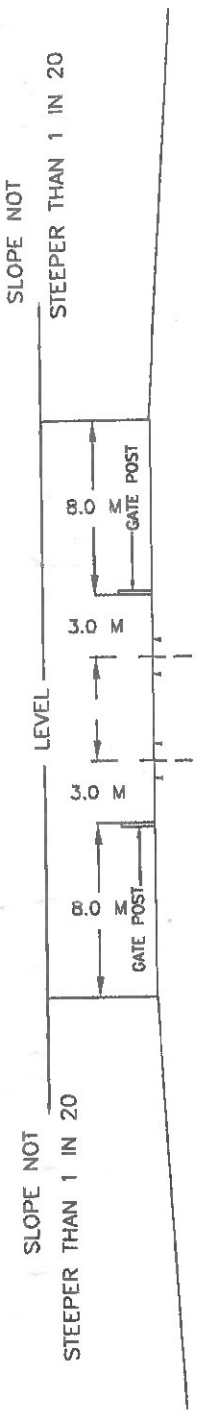
EAST COAST RAILWAY

CHIEF ENGINEER

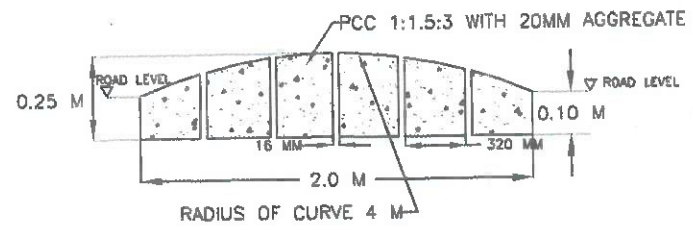
TITLE	STANDARD PLAN FOR MANNING OF UN-MANNED L-XING
DRAWN BY	
CHECKED BY	CHIEF ENGINEER



TYPICAL PLAN FOR UN MANNED LEVEL CROSSING



LONG SECTION OF ROAD



SECTION X–X

(FOR DETAILS REFER SER DWG NO. 24498/01)

NOTES

1. CAUTION BOARD WILL BE IN ENGLISH, HINDI AND VERNACULAR LANGUAGES
2. MINIMUM WIDTH OF ROAD FORMATION SHOULD BE METTALED WIDTH +2.5 m.
3. LENGTH OF CHECK RAILS SHOULD BE 2M MORE THAN THAN THE WIDTH OF METALLING.
4. MINIMUM SIGHT DISTANCE OF GATE IS 40 M FOR PLAINS AND 30 M FOR HILLY
5. DESIRABLE STRAIGHT LENGTH AFTER GATE POST IS 15 M AND MINIMUM IS 4.5 M

CE DRAWING NO. 92/04

EAST COAST RAILWAY	
CHIEF ENGINEER	
TITLE	STANDARD PLAN FOR UN MANNED L-XING
DRAWN BY	
CHECKED BY	CHIEF ENGINEER

(46)