

Technical Note No: 7

Sub: APRRP: Roads: Numbering of CD works-Reg

Ref: Inspection of works by PMC in various Districts.

1. Introduction:

A uniform system of numbering of all the structures is essential for proper asset management. All culverts, minor bridges and major bridges, on road shall be assigned separate numbers. This is a means for their easy identification of location and type of structure for the personnel during the inspection and maintenance.

2. Scope:

Structures shall include

- i) All culverts, including slab, box, Hume pipes etc
- ii) All bridges
- iii) Any other Structures.

3. Numbering of Structures:

3.1 All structures on a road shall be numbered in serial order, in each kilometre separately

3.2 The number shall be in the form of a fraction, the numerator denoting the number of kilometres in which the structure is situated and the denominator the km wise serial number of the structure. For instance, the 3rd structure in the 2nd km (i.e., between km stones 1 and 2) shall be designated as 2/3 and the 4th structure in 3rd km as 3/4.

3.3 If any new culvert, bridge or structures are built subsequently, say between the 3rd and 4th structure in km 2, the same shall be designated as 2/3/1, 2/3/2, etc.

4. Salient Information:

For inspection and maintenance, it is useful to have mention of following salient information about structures:

- a) Year of construction
- b) Name of Channel / River / Crossing
- c) Length
- d) Span arrangement (No of Vents/ dia of Pipe and number of Rows)

- e) HFL
- f) Deck Level
- g) Flow direction
- h) Type of structure [e.g., RCC/PSC, T-Beam and slab, Box girder, RCC/Stone Slab, Box culvert, Arch, HP, Steel].

These shall be provided on separate plate on the right-hand side of the carriageway or the road.

5. INSCRIPTION OF STRUCTURE NUMBER:

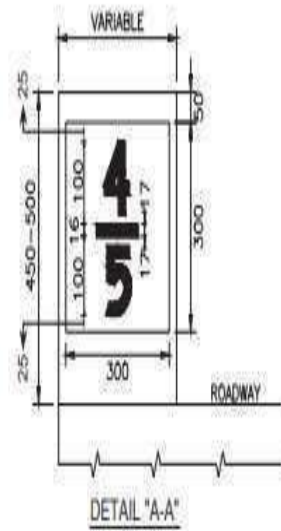
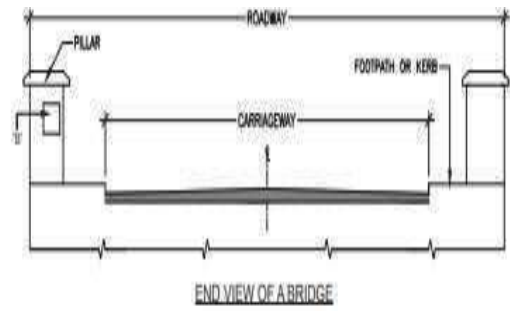
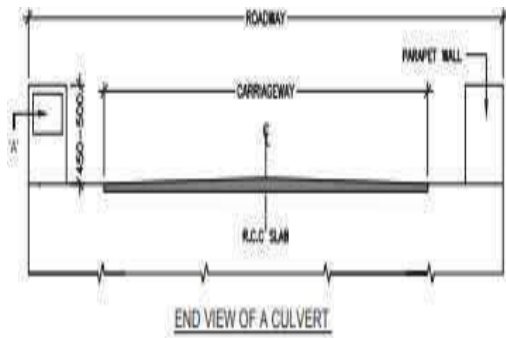
- 5.1 The structure number shall be inscribed near the top left hand side parapet wall as seen by traffic in the end elevation when approaching the structure from each direction. These are illustrated in Figs.1 and 2.

6. INFORMATION PLATE:

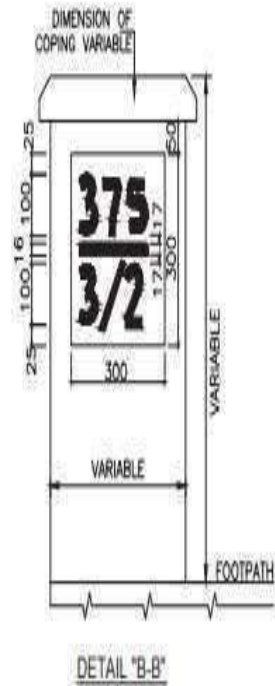
- 6.1 The information of the structure shall be inscribed on two information plates one in each direction and fixed in the end elevation on a plate size near the top right hand side parapet wall / railing parts or end post of crash barrier etc. in the end elevation when approaching the structure. Information plate shall be of size 300 mm x 500 mm (for minor bridge and culverts) and 500 mm X 1000 m (for major bridges and other structures) Illustration is given in Fig. 4. The plate shall be fixed near the top right-hand side

7. NUMERALS AND DETAILS:

- 7.1 The numerals used shall be 100 mm high and of international form conforming to IRC: 30-1968 Standard Letters and Numerals of Different Height for use on Highway Signs. These shall be painted on smooth panels as prescribed. In case of right-hand panel, the height shall be suitably adjusted so that it does not obstruct the visibility. The colour of the background shall be canary yellow, ISI Shade 309.



NOTE:
1. ALL DIMENSIONS ARE IN MM.
Fig. 1 Structure Number



NOTE:
1. ALL DIMENSIONS ARE IN MM.
Fig. 2 Structure Number

500	
<p>YEAR OF OPENING : 1990</p> <p>NAME OF CHANNEL/ CROSSING RIVER : GANGA</p> <p>LENGTH : 5100m</p> <p>SPAN ARRANGEMENT: 10x30m+30x150m+10x30m</p> <p>H.F.L. : 450.00</p> <p>DECK LEVEL : 460.00</p> <p>TYPE OF STRUCTUE : PSC BOX GIRDER CONTINUOUS SPANS</p>	
1000	

Fig. 4 Information Plate for Major Bridges and other Structures

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