

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

28. Kajimha
10.02.15
D/O/ CTS
Plan upload website
9/2/15

No.2014/CE-III/BR/Bridge Policy

New Delhi dated, 04-02-2015

The PCE/CAO,
All Indian Railways.

Sub: Calculation of water ways, foundation design etc.

1. Complete Structural Testing System (CSTS) has been supplied to 8 Zonal Railways viz. Northern, North Eastern, Central, Eastern, Northeast Frontier, Southern, South Eastern and South Central Railway. These equipments are capable of measuring strains, acceleration, deflection, temperature etc. on all types of bridges. Southern Railway is effectively using these equipments on a few distressed bridges, both steel girder as well as PSC girder bridges. They are able to measure deflection and strain which is enabling them to rehabilitate the weakened structures effectively. The other Zonal Railways are requested to start making effective use of these equipments. RDSO has already trained a few personnel from the Railways. Hence, the utilisation of these equipments should not be a problem and in case any further technical assistance is required, then RDSO may be consulted. The monthly PCDO by CBE to Railway Board should include the progress achieved during the month so that Board(ME) can be apprised.
2. Provision of adequate water way is very important parameter in the design of new bridges. It is important to consider all the relevant parameters like run off coefficient, catchment area, topography etc. prevalent during the time of bridge construction. The general tendency to maintain the status quo during doubling/gauge conversion works needs to be discouraged. The relevant field parameters should be considered meticulously so that economy in design is achieved/adequate provision of water way is provided wherever essential.
3. In the gauge conversion works, old sub-structures should not be abandoned without proper design check. It should be our endeavour to utilise the existing infrastructure to the extent possible by carrying out suitable strengthening/modification to the existing structures.

27/3/12
2/4/12

4. Despite Railway Board instructions, pile foundations are still being used without critically evaluating the option of open foundations. It is once again reiterated that Railway Board's instructions on these issues should be strictly followed.

N.K. Sinha
(N.K. Sinha) 3.2.15
Adviser(Bridge)

Copy to:

- ✓ 1. EDCE(B&S)I, Railway Board.
2. ED(B&S)/RDSO/Lucknow.