

**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
RAILWAY BOARD**

No. 2007/CE-I/BR-III/3

New Delhi, dtd. 7.6.2010

**Principal Chief Engineers,  
All Zonal Railways**

**Chief Administrative Officers/Con,  
All Zonal Railways**

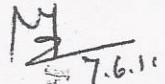
**Sub.: Para 4.2 of IRS - Bridge Sub-Structure and Foundation Code - regarding  
Estimation of Design Discharge (Q)**

10 Your attention is drawn towards Para 4.2.2 of IRS Bridge Sub-Structures and Foundations Code regarding Estimation of Design Discharge (Q) which lays down as below:

"All bridges shall be designed with adequate waterway for design discharge (Q). This shall normally be the computed flood with a probable recurrence interval of 50 years. However, at the discretion of Chief Engineer/Chief Bridge Engineer, bridges, damage to which is likely to have severe consequence may be designed for floods with a probable recurrence interval of more than 50 years, while bridges on less important lines or sidings may be designed for floods with a probable recurrence interval of less than 50 years."

Board (ME) has directed that the above para be reiterated to PCEs/ CBEs/ CAOs who are expected to give a thought regarding design discharge (Q) before proposing a bridge project. Infact virtually each bridge has a uniqueness which must be appreciated by field engineers.

10 Board (ME) has further directed that CBE/CAO/C should satisfy himself for the discharge calculations and flood periodicity for major bridges. This certificate must be given to them on the final survey reports.

  
7.6.10

**(M. K. Jain)  
Director Civil Engineer/B&S  
Railway Board**

**Copy to:**

**Chief Bridge Engineers, All Indian Railways - for information and necessary action**

**Copy to:**

**ED/Structures, RDSO, Lucknow - To propose a correction slip for incorporation of  
directions given in para 2.0 above.**