

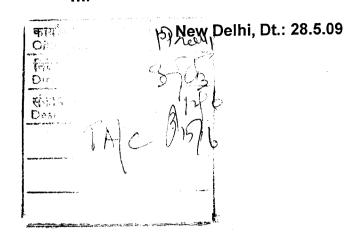
GOVERNMENT OF INDIA MINISTRY OF RAILWAYS RAIL MANTRALAYA

No.2005/CE-I/BR-II/8

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Sub: Adoption of steel super structure of bridges for spans

more than 24.4m

1.0 Over the years a number of PSC girders for longer spans have been provided on Indian Railways. There are no detailed guidelines for inspection and defects identification of PSC bridges. Further in case of any eventuality on such bridges, particularly long spans, we do not have any immediate temporary restoration measures available other than upto 80 ft. temporary span arrangements. At the same time, steel bridges are known to have longer life than others and on IR we have any number of examples. Thus, even the cost of steel bridges would be comparative particularly when viewed on life cycle basis. Besides this, fractures in concrete bridges are sudden and can be disastrous. For the sake of ballasted deck, if the composite decks are required, say for LWR, these too can be provided. For such like factors on J&K project, it was decided to go for steel construction.

2.0 In view of features brought out in para 1.0, it has been decided by Board (ME) that henceforth on all new bridge works being planned for spans more than 24.4m, steel girders should be used. For any deviations, approval of Railway Board may be taken. However, this would not apply to ongoing projects where planning has already been finalized for use of PSC girders.

(S.K. Malik

Adviser (Civil Engg.) Railway Board

Copy for information and necessary action to:

- i. ED/B&S, Research Design and Standards Organisation, Lucknow.
- ii. ED/Structures, Research Design and Standards Organisation, Lucknow.