

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2010/Proj./Bangalore/Misc.

New Delhi, date 5 .09.2013

Executive Director/UTHS,
RDSO,
Manak Nagar,
Lucknow.

Sub: Design Basis Report for JMRCL and BMRCL.

Ref: (i) RDSO's Letter No. CBS/Metro dated 26.07.2013.
(ii) RDSO's Letter No. CBS/Metro/JMRCL dated 30.07.2013.

The Competent Authority has approved Design Basis Reports of JMRCL and BMRCL subject to conditions mentioned against each item:-

(i) Value of Modular Ratio (m):

Approval for taking value of modular ration (m) as 10 is granted as a special case for Ph-I of Jaipur Metro subject to the following:

- This approval is being granted as a special case for Ph-I only as the structures have already been designed & constructed and should not be taken as precedence in future.
- One span per km will be kept under watch under advice to Ministry of Railways. Quarterly measurements of the span should be taken and in case of any adverse development in the structure, immediate safety measure as deemed fit shall be taken by Metro Railway administration. RDSO may advise the items to be kept under watch for such spans.
- An annual report (more frequent if warranted) should be prepared by Metro Railway for such monitoring and the same should be submitted to Ministry of Railways alongwith comments of Metro Railway on the report.

(ii) Consideration of parapet and plinth beams as D.L. in place of SIDL:

Considering plinth beam and parapet towards dead load in place of superimposed dead load is approved as a special case for Ph- I of JMRCL and Ph- I of BMRCL with following conditions:

- This approval is being granted as a special case for Ph-I of Jaipur Metro and Ph-I of BMRCL only as the structures have already been designed and constructed and should not be taken as precedence in future.
- One span per km will be kept under watch under advice to Ministry of Railways. Quarterly measurements of the span should be taken and in case of any adverse development in the structure, immediate safety measure as deemed fit shall be taken by Metro Railway. RDSO may advise the items to be kept under watch for such spans.

- An annual report (more frequent if warranted) should be prepared by Metro Railway for such monitoring and the same should be submitted to RDSO and Railway Board alongwith comments of Metro Railway on the report.
- Metro Railway will ensure that weight of parapet and track plinth will remain same as assumed in design throughout the life of structure and same shall be incorporated in the maintenance manual,
- The variation in remaining SIDL will not be more than 20% of what has been assumed in design.

(iii) Vertical Derailment Load:

Approval of reduction in vertical derailment load proportionate to axle load is conveyed as a special case as the structures have already been constructed in JMRCL. Stipulation of following conditions is proposed while approving such relaxation:

- This approval is being granted as a special case only for Ph-I of JMRCL as the structures have already been designed and constructed and should not be taken as precedence in future.
- In case of any derailment, the affected as well as adjacent spans shall be immediately checked for any damages. Detailed measurements should be taken as soon as possible and advised to Ministry of Railways with comments from concerned Metro Railway.

Keeping above condonations in view, RDSO may send six copies of agreed DBRs to Railway Board for issue.

Member Engineering has desired RDSO to explore need for revision in Indian Railway Codal provision and Bridge Rules on above three issues in view of technical details and opinion of experts in the field submitted by Metro Railways. A report may be submitted in this regard.

Mohit Lila
(Mohit Lila)

Director/Works Planning
Railway Board

Copy to the following for information and necessary action-

1. Executive Director/Bridges, RDSO, Manak Nagar, Lucknow.
2. Executive Director/Structures, RDSO, Manak Nagar, Lucknow.

PT. Issue

