

GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
(RAILWAY BOARD)

No. 2017/CE-IV/LX/Misc./244(LCs)Pt.

New Delhi, Dt. 22.05.2024

Principal Chief Engineers,  
All Zonal Railways

**Sub: Checking feasibility of providing Subway/RUB/ROB for elimination of LC Gates and preparing Detailed Project Report.**

Ref: (i) Railway Board Policy letter No. 2017//CE-IV/LX/Misc./244(LCs) Pt. dated 02.03.2023.  
(ii) RDSO Guidelines BS-112, May-2014.  
(iii) Railway Board letter No 2024/10/CE-III/BR/Prof. Of Practice (E-3454464 dated 05-03-2024)

Large number of proposals are being initiated by Zonal Railways for construction of Subway/RUB/ROB for elimination of LC Gates. Limited height subways are also being proposed at trespass locations for which separate umbrella has been sanctioned under PH-16.

2.0 The nature of DPR work is such that, it involves surveying the topography alongwith the alignment for proposing the Subway/RUB at the appropriate location to cater the issues related to drainage. Geo-technical Investigation is required to select the appropriate scheme of execution depending upon the type of soil or rock upto the base of RCC box.

3.0 The height of Subway/RUB is to be decided keeping in view the type of road on approaches and the availability of embankment height. The requirement of vertical clearance is generally 5.5 m for State Highway. Longitudinal drains along the track are to be planned in case the floor level of Subway/RUB is kept at level lower than that of natural ground level.

4.0 Longitudinal section from the location of Subway/RUB to outfall drain should be planned by considering the highest water level (HFL) of the outfall drain and it is to be ensured that sufficient water surface gradient (Minimum 1 in 1000) is available for quick drainage.

5.0 In case, sufficient gradient is not available, other drainage improvement measures such as covering of approaches, sump & pump arrangements etc. are to be provided with provision of maintenance.

Speed post

6.0 If the construction of Subway/RUB is still considered not feasible, the proposal should be modified to construct ROB at appropriate location. The location should be selected based on following guiding principles-

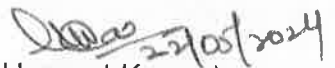
- i. A limited height subway of minimum height of 2.4 m is provided for light vehicles, bi-cycles, two wheelers etc. as per the feasibility at site, with raised pathway of 1 m for the convenience of pedestrians. This will be part of the proposal to ensure that LC gets closed after execution of work without any difficulty.
- ii. To ease the execution, the alignment should be such that the approaches shall not require acquisition of private land and if inevitable, it should not be difficult to acquire.
- iii. While planning, the interaction with the local bodies shall also be made to accommodate their requirements as far as possible.

7.0 In case of ROB, the span arrangement of girders over the railway portion should be decided keeping in view of the RDSO Guidelines [Ref- (ii)]. Smaller spans with composite girders should be preferred for ease of launching and subsequent maintenance. The geotechnical investigations should be conducted to decide type of foundations at initial stage itself.

8.0 The work needs to be assigned to professionally reputed agencies to ensure that the delays associated with execution are taken care of at the stage of planning itself. Services of Professor of Practice (POP) at IITs/Engg. Colleges or Independent Consultants may be taken to get the feasibility report & DPRs peer reviewed for ensuring quality work.

9.0 Zonal Railways may also plan section wise elimination of LC Gates, so that combined work of conducting feasibility studies and preparing detailed project Reports (DPRs) may be awarded to reputed consultants.

This has the approval of PED/Bridges.

  
(Hemant Kumar)  
Director(B&S)-II  
Railway Board

Copy to:

- (i) All CAO/Cs for information and necessary action
- (ii) All CE/RSW for information and necessary action\
- ✓ (iii) PED(Infra)-II, RDSO/LKO for information.
- ✓ (iv) DG/IRICEN, Pune, for information.

