

Government of India
Ministry of Road Transport & Highways
(S&R Zone)

No.1, Parliament Street, Transport Bhavan, New Delhi-110001

File No: RW/NH-33044/10/2021-S&R(P&B)(192344)

Dated: 06th February, 2023

To,

1. The Chief Secretaries of all State Governments/UTs
2. The Principal Secretaries/ Secretaries of all States/ UTs PWD dealing with National Highways, other centrally sponsored schemes and state schemes
3. The Chairman, National Highways Authority of India (NHAI), G-5&6, Sector-10, Dwarka, New Dethi-110075.
4. The Managing Director, National Highway Infrastructure Development Corporation Ltd., 3 floor, PTI Building, Parliament Street, New Dethi-110001.
5. Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110010.
6. Secretary General, IRC, IRC Bhawan, Kama Koti Marg, Sector-6, R.K.Puram, New Delhi-110022
7. Director, IAHE, Industrial Area, A-5, Sector-62, Noida-201309
8. NIC for uploading on Ministry's websites

Subject: Deck width of bridges for National Highways.

Madam/Sir,

The Two Laning Manual stipulates 2.5m wide paved shoulder and 1.5m wide earthen shoulder on either side of 7m wide carriageway. Accordingly, width of 2 lane bridge deck with footpath is 18m i.e., 7m (carriageway) + 2 x [2.5m (paved shoulder) + 0.5m (shyness) + 0.5m (steel crash barrier) + 1.5m (footpath) + 0.5m (New Jersey Crash Barrier)]. Ministry vide circular No. RW/NH-33044/22/2020-S&R(P&B) dated 17.07.2020. revised the width of paved shoulder and earthen shoulder in open country with isolated built-up area to 1.5m and 1.0m respectively. However, it is seen that in different 2 laning NH projects different deck width of bridges both with/without footpath are being adopted, which is not desirable.

2. Different deck widths would be required in different site conditions. For example, where service roads are provided across the river/stream, the deck should accommodate the service road in some manner. Therefore, sticking to some discrete values of deck width results in excessive width of deck slab leading to wastage in some cases and inadequate deck width in some other cases thereby compromising functional value/safety. Hence sticking to fixed principles in adopting appropriate deck width would result in optimum provisions.

3.1 Keeping in view, requirement of seamless travel and safety of vehicles, following has been decided with regards to deck width of bridges and structures.

3.2 Footpath shall be provided on all major bridges and RoBs. Footpath shall be provided on minor bridges in built up areas only.

3.3 Outer to outer deck width of bridges, where no footpaths are provided, shall be matched with outer to outer of approach road including earthen shoulders.

3.4 In case footpath is provided on the bridge, carriageway and paved shoulders shall be carried on the bridge deck placing footpath (1.5m clear) on the outer edge of paved shoulder with crash barrier (0.45m) on inner side and railing (0.375m) on outer side.

3.5 Lines and grades of paved shoulder, median edges, carriageway on bridges and approaches shall be matched for safety and efficient traffic movement.

4. This issues with the approval of Competent Authority.

Yours faithfully,



(A.K. Kushwaha)
SE, S&R (Roads)
For DG (RD) & SS

Copy to:

1. All ROs/ ELOs of MoRTH and all Technical Officers at MoRTH Headquarter;
2. PPS to Secretary (RTH), PPS to DG (RD) &SS, PS to AS&FA, PS to all ADGs;
3. Technical circular file of S&R (P&B) Section.