604.12

Dated the 3rd November, 1989

## No. RW/NH-33022/3/89-DO.II (C)

То

The Chief Engineers of State PWDs/UTs dealing with National Highways & Centrally Aided Road Projects and State Roads; Director General, Border Roads; Director General (Works), CPWD.

Subject: Safety precautions to be taken on causeways along National Highways.

The need for providing suitable warning signs near and on causeways along National Highways, with a view to caution the approaching traffic for avoiding accident hazards, is already well recognised. The safety measures to be taken in this regard were circulated to all the State Chief Engineers vide this Ministry's letter No. PL-30 (128)/69 dated the 9th April, 1971.

2. In a recent accident in one of the States, a bus carrying passengers was swept away in the swollen river while passing over a causeway resulting in some casualties. In the light of the investigations in this accident, the National Transportation Safety Board in Cabinet Secretariat has made some recommendations in respect of causeways and circulated these to all Transport/PWD Secretaries of States and Union Territories vide their letter No. 3/5/TS/RT/NTSB/88/446 dated the 26th April, 1989. These recommendations, generally in line with Ministry's earlier guidelines in this regard, are:

- (a) Precautionary road signs depicting "Dangerous Dip" should be fixed ahead of all Causeways as per para 15.28 and Plate II at page 47 of IRC: 67-1977 "Code of Practice for Road Signs".
- (b) "Flood Gauges" must be fixed prominently at the start of the Causeway on either side of the road at both ends, to indicate to the road users the height of the water above the road level. The design of the flood Gauge should conform to para 16.7 and Plate III at page 65 of IRC: 67-1977 "Code of Practice for Road Signs".
- (c) Flood Gauges may be given a fluorescent painting so that they are visible at night.
- (d) The Flood Gauges should be well-maintained and repainted every year specially before the monsoon season.

- (e) "Guard Stones" must be fixed on both sides of the road along the Causeway as a guidance to vehicles and for their partial protection.
- (f) These Guard Stones may be around 0.5 meters long (along the road) and 0.3-0.4 meters high.
- (g) The spacing between individual Guard Stones may be approximately 1 metre.

3. It has been decided that the above safety measures should be implemented on all causeways along National Highways by 30th June, 1990.

4. It is, therefore, requested that the existing safety features on all causeways along National Highways may please be reviewed immediately and proposals for augmentation thereof in terms of signing, flood gauges, guard stones etc. in conformity with the above recommendations furnished to this Ministry at the earliest so that these are implemented by the target date.

5. As regards State roads, the State P.W.Ds are requested to take similar action from their own resources.