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Government of India  
Ministry of Road Transport & Highways

Transport Bhavan  
1, Parliament Street  
New Delhi

No. RW/NH-330/4/35/2012/S&R(R)

Dated the 31st Oct., 2012

To,

1. The Principal Secretaries/Secretaries of all States/U.T.s Public Works Department dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
2. The Engineers-in-Chief and Chief Engineers of Public Works Departments of States/U.T.s 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 Delhi-110075.
4. Director General (Border Roads), Seema Sadak Bhavan, Ring Road, New Delhi-110010.
5. Secretary General, India Roads Congress, New Delhi.

Sub: Grade separated roads along existing alignments as an option for bypassing built up areas on National Highways

Sir,

Owing to economic, industrial and overall development in the country, vehicle movement is increasing on National Highways and particularly on sections passing through built up areas. It is obvious that such increase in volume of traffic and speed of vehicles poses safety hazard in built up areas. When speeds are low, traffic may pass safely but at high speeds on NHs risk of accidents increase. As per current practice, bypasses are planned at all built up areas for safe and efficient movement of traffic.

2. Normally, two or three alternatives are considered laterally for finalizing the alignment of a bypass apart from the option of widening the road passing through the built up area itself. Acquisition of land and making available encumbrance free site for constructing these bypasses is becoming increasingly difficult. **As such construction of elevated bypasses along existing alignment through the towns and cities, but with improved geometrics, can be an option in some cases and shall be considered in the**



**feasibility stage. In the feasibility analysis for the various options, total project cost for each proposal should include cost of Land acquisition, Rehabilitation and Resettlement of inhabitant and shifting of utilities, if any.**

3. (a) Planning of such elevated bypasses, while preparing detailed project report/feasibility study, shall essentially be guided by socio-economic analysis, space constraints and environmental considerations. Traffic surveys would be necessary to ascertain quantitative information on traffic volume and composition of traffic.
  - (b) The geometric design standards shall be as per IRC:SP:90 "Manual for Grade separators and elevated structures".
  - (c) Foundation and substructure shall be designed as per IRC:78 "Standard Specifications and Code of Practice for Road Bridges, Section : VII Foundation and Sub Structure".
  - (d) Effective drainage shall essentially be ensured by providing drainage spouts connected with horizontal and vertical pipes so that the water is discharged into outfall considered in the drainage system.
4. The contents of this Circular may please be brought to the notice of all concerned in your organization. Feedback on these guidelines is solicited.
  5. This issues with the approval of competent authority in the Ministry.

**(Arun Kumar Sharma)**  
**Chief Engineer SR&T(Roads)**  
**For Director General (RD) & SS**  
**011-23719850**