

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS**

IAHE Campus,
A-5, Sector-62
Noida-201301 (U.P.)

No. RW-NH- 37011/39/2015/S&R(R)

Dated the 12th October, 2015

To,

1. The Chief Secretaries of all State Governments/Union Territories
2. The Principal Secretaries /Secretaries of all States/U.Ts. Public Works Department dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
3. The Engineers-in-Chief and Chief Engineers of Public Works Departments of States/U.Ts dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
4. The Chairman, National Highways Authority of India (NHAI), G-5&6, Sector-10, Dwarka, New Delhi-110 075.
5. Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110 010.
6. Managing Director, NHIDCL, PTI Building, 4, Parliament Street, New Delhi-110001
7. Director, IAHE, A-5, Sector-62, Noida-201301 (U.P.)

Subject: Introduction of alternative materials/technologies/design in the National Highways projects on EPC/BOT basis

It has been the endeavour of the Ministry to encourage usage of alternative/new materials/technologies/design in the construction of National Highways. In this regard, directions have been issued by the Ministry from time to time.

2. Instances have come to the notice of the Ministry, wherein the Contractors had proposed alternative materials/technologies in the pavement design based on IRC:37-2012 – “Tentative Guidelines for the Design of flexible Pavements” but due to differences of opinion/disagreement at various levels, Authority Engineer/Independent Engineer have been reluctant to adopt alternative pavement design on various grounds, such as DPRs/Cost Estimates for these projects were framed following IRC:37-2001, the typical cross-section given in the Schedule of Contract/Concession Agreement indicated pavement layers/composition as per the conventional bituminous pavement design, non-availability of extensive experience of adoption of alternate design/combination given in IRC:37-2012 in the country, etc.
3. In order to resolve the issue, the matter was referred to Standing Committee on “Introduction of New Technology/Alternative design in the projects on EPC/BOT basis” and the Committee has since made recommendations based on detailed discussions and consultations with all stakeholders. The recommendations made by the Standing Committee have been duly considered in the Ministry and it is observed that the contract documents, both for EPC as well as BOT, provide flexibility for alternate design to be adopted by the Contractor/Concessionaire and

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accordingly, the following clarifications are issued for the adoption of alternative design /materials/technologies in EPC/BOT projects:

(i) IRC:37-2012 is applicable even when DPRs are prepared as per IRC:37-2001 and accordingly, the contractors are free to use any combination permitted in IRC:37-2012, unless specifically denied in the contract agreement.

(ii) Since Contract provides flexibility for alternate design to be adopted by the Contractor, use of cement treated base / sub-base does not come under the ambit of change of scope.

(iii) Correlating the Defect Liability Period with the design life has no relevance. Success of the pavement solely rests with application of provisions of IRC:37 in true spirit during the design stage and the translation of material properties, considered in the design, to site during execution. However, Authority can consider additional comfort in the form of Guarantee and commitment for performance.

4. In view of above, it is imperative that the DPRs for all future projects should duly consider all possible alternative design combinations, including those permitted in IRC:37-2012, that lead to the most suitable and economical proposal. A condition in this regard should, invariably, be included in the Terms of Reference (ToR) for appointment of Consultants.

5. The contents of this Circular may be brought to the notice of all concerned in your organization.

6. This issues with the approval of Secretary (RT&H).

Amiyanshu
12/11/2015
(Amiyanshu)

Asst. Executive Engineer (S, R&T) (Roads)
For Director General (Road Development) & SS

Copy to:

1. All Technical Officers in the Ministry of Road Transport & Highways
2. All ROs and ELOs of the Ministry
3. The Secretary General, Indian Roads Congress
4. Technical circular file of S&R (R) Section
5. NIC-for uploading on Ministry's website under "What's new"

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