

Short Narrative

National Highway No-07 (Old NH-58) Rishikesh- Joshimath/Mana Road is a very important road connecting hilly and remote areas of Uttarakhand to mainland. It serves as lifeline for Pauri, Rudraprayag, Chamoli and part of Tehri district of the State. The road is also important from religious and tourism point of view because it connects the famous shrines of Badrinath, Kedarnath, Hemkund Sahib and winter sports destination of Auli besides many other religious and tourist destinations in the Dev Bhoomi of Uttarakhand. Above all, this road is also very important from strategic point of view because it caters to the need of our defence forces deployed along line of actual control (LAC) in INDO CHINA Border. Because of its defence implication, the construction and maintenance work of the road in question was assigned to the Border Road Organization (BRO) since inception. Lakhs of pilgrims and tourists visit the holy shrines of Badrinath, Kedarnath and Hemkund Sahib and many other places of religious and tourist importance every year besides local residents of Tehri, Pauri, Rudraprayag and Chamoli districts who are the regular commuters. Since, the entire length of the Project Highway passes through hostile/inhospitable hilly terrains hence, many incidents of accident are experienced every year resulting in loss of human life and property.

Keeping in view the safety of pilgrims, tourists, local commuters and the defence personnel, the Ministry of Road Transport and Highways, Govt . of India has embarked in to a mission to provide safe connectivity to the Badrinath, Kedarnath, Hemkund Sahib, LAC along Indo- China Border and other places of religious and tourist importance.

Accordingly, it has been decided by the MoRTH, Govt. of India to go for widening, up-gradation, geometric improvement to 2 lane with paved shoulder configuration and land slide treatment of chronic land slide zones along NH-07 (Old NH-58). This project is part of Chardham All Weather Road Project which is an ambitious project of the Government of India intensively monitored by PMO because of its immense strategic and pilgrimage importance for the Nation. The task for widening the Project Highway NH 07 from km. 368.00 (Lameri in district Rudraprayag) to km. 468.00 (Helang) has been assigned to NHIDCL.

Instant proposal has been prepared for widening, up-gradation and geometric improvement of existing highway to 2-lane with paved shoulder specification in the segment Km. 399.00 to Km. 460.00 situated in Forest Division.

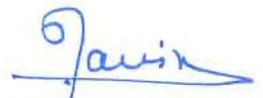
Since, the Project Highway is passing through Himalayan fragile region where the hills are not of very stable nature and, at various locations. Most of the unstable part of the road is due to high cut slope fragile rock strata and loose debris/old alluvium deposit and the road alignment parallel to bedding strike.

During the period of widening, existing naturally stable hills slopes would become unstable due to huge excavation which shall require suitable stabilization measures as per site conditions. The broad treatment measures required to stabilize hill slopes shall inter-alia include:

- Grading of the slopes suitably in the crown region of the hills for adding stability to the hill slopes at its own depending upon site condition and location topography.
- Strengthening of toe by provision of a toe wall.
- Slope cut on the loose soil shall be stabilized using simple bio-engineering techniques with combination of Civil engineering structures.
- Slope protection by shotcreting and grouting as well as rock bolting/soil nailing etc.
- Provision of surface drainage with a view to minimize the ingress of water into sub surface.

The above protection measures would be essential for providing stability to the slopes in order to avoid a landslide, occurring of which is likely to endanger the safety of road users and the people living in the project influence area.

Thus, for the practical feasibility and the stability of the hill slope, which depend upon the nature of soil, the additional RoW proposed for widening the Project Highway has a variable additional width varying from 7.93 m to 19.85 m as detailed in attached Land Schedules and 35.00 m to 110 mts. at various landslide zones in this segment.



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