

## DESIGN OF FLEXIBLE PAVEMENT OF NATIONAL HIGHWAY 102 IN MANIPUR

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### ABSTRACT

*Indian road congress has specified the design procedures for flexible pavement based on California bearing ratio (CBR) values. The pavement design has accompanied by the code IRC:37-2018 and Ministry of state Transportation(MOST) specification. In this project report, the pavement layers its prescribed limits by the Ministry of state Transportation (MOST) and raw material required for the laying of pavement associated with laying of 4 lanes on national highway 102 between Lilong to Waithou. The roads start from Lilong (330.00km to 333.00km) to Waithou, which has the design length of project road of 3 km. This length is considered as one packing for construction by GRIL Infra purposed on EPC mode basis as per direction of National highway and infrastructure Development Corporation (NHIDCL). The alignment of highway passes through plain terrain for 2.2km and remain land is mountain terrain length is 0.8km is in rolling. The existing carriage width is 7.0m with 1.5m paved shoulder, 1m width with drainage, 1.5m width with median at location of settlement. There are 18 no. of cross drainage structure are present in 3km stretch of project road. These include 1 major bridge, 2 minor bridges and 12 culverts. These project works is being expected to complete within 2 years. These project reports also include collection of traffic data, soil, aggregate and bitumen collection and testing has been carried out.*

**KEYWORDS:** *Site Investigation, Data Analysis, Cbr, Highway Design, Flexible Pavement.*

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