

परियोजना का नाम:-जनपद चमोली में प्रधानमंत्री ग्राम सड़क योजना के अन्तर्गत श्रीगढ़-हनोली मोटर मार्ग निर्माण हेतु वन भूमि हस्तान्तरण प्रस्ताव :-

भू-वैज्ञानिक की आख्या

प्रस्तावित स्थल की भू-वैज्ञानिक आख्या संलग्न है।

  
J. B.

  
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# GEO TECHNICAL REPORT



## Geological Assessment of the Proposed Alignment Corridor of Hanauli to Shrigadh Motor Road, Distt. Chamoli

### Introduction:

The Hi-Tec Engineers & Consultants, request the undersigned to carryout the Geological Assessment of 4.1 km long alignment-Corridor of the proposed Hanauli to Shrigadh Motor road under PMGSY CD PWD Pokhri Distt. Chamoli.

### General Geology and Geomorphology of the Hanauli to Shrigadh road alignment:-

The proposed road alignment falls in Survey of India toposheet No. 53 N/3 in Chamoli district of Uttarakhand. The area forms a part of Lesser Himalayan Terrain. In this part the ground elevation vary generally between 1636 to 1845 m above mean sea level. Geomorphologically the area is formed of strike ridges and deeply incised valleys besides local perennial and seasonal streams. Main drainage in the area is through a perennial nala namely Hagol gad, flowing in southerly direction in this part.

Various perennial and seasonal nalas join the main drainage nala and are encountered along the proposed road alignment.

The area is prone to landslides due to high relief, high precipitation and presence to overburden. The overburden is mainly boulders of quartzite and chlorite phyllites. Colluvial and flurioglacial deposits generally cover middle and lower valley slopes. Upper slopes are mostly rocky, barren and steep with less overburden.

The region experiences a moderate cold climate. It has a comparatively snowy winter, mild summer followed by rainy season. Montane sub tropical and montane temperate type of vegetation are found in the area. Thick forests and scrubs are seen in the area.

### Geology of the project area:-

The study area is located in lesser Himalayan geotectonic block limited by Main Central Thrust in the North and North Almora Thrust in the South. The area is very close to Main Central Thrust to its north.

### Tectonic Succession in Pokhari Area

Central Crystalline	North dipping Main Central Thrust
Garhwal Group	Calcareous formation quartzite formation
Almora-Dudatoli crystalline	South dipping North Almora Thrust

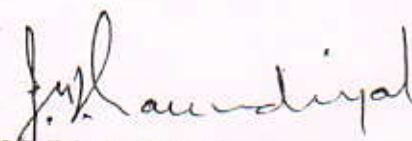




Along the road alignment on hill slope outcrops of rocks as well as overburden is observed. The rocks in this area belong to the Petroli Formation of Garhwal Groups and include quartzite and chlorite phyllite and biotite schist. Major part of the road alignment is covered by quartzite and the later part by chlorite phyllite. The rocks have a general NW-SE strike and dipping  $30^{\circ} - 40^{\circ}$  in North easterly direction.

**Conclusion and Recommendation:**

On the basis of the geological/geotechnical studies, slope in the area is moderate to steep. The slope appears to be stable along the proposed Hanauli to Shrigadh motor road alignment. Both in the rocks as well as in overburden. Quartzite are pretty hard as compared to chlorite phyllite and schists.

  
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