परियोजना का नाम:--

राज्य योजना के अन्तर्गत मा० मुख्यमंत्री घोषणा में जनपद चमोली के पिछी विधान सभा क्षेत्र कर्णप्रयाग में बौला से श्रीकोट मोटर मार्ग के निर्माण हेतु ।

भू—वैज्ञानिक की आख्या

भू-वैज्ञानिक की आख्या संलग्न है।

A Bing

कनिष्ठ अभियन्ता अस्थाई खण्ड लो०नि०वि०

गौचर

सहायक अभियन्ता अस्थाई खण्ड लो०नि०वि०

गौचर

अधिशासी अभियन्ता अस्थाई खण्ड लो०नि०वि०

गौचर

कार्यालय प्रमुख अभियन्ता एवं विभागाध्यक्ष उत्तराखण्ड लोक निर्माण विभाग, देहरादून।

भू – गर्भीय निरीक्षण आख्या एस०जी०– 594 / सड़क / पुल समरेखण / गढ़वाल / 2014

Geological Assessment of the alignment corridor proposed for Baula to Srikot motor road, Distt. Chamoli.

27-अक्टूबर-2014

Geological Assessment of the alignment corridor proposed for Baula to Srikot motor road, Distt. Chamoli.

Vijay Dangwal 27.10.2014

- 1-Introduction:- The Temporary Division, Public Works Department, Gauchar has proposed the new construction of 0.875 km long motor road namely Baula-Srikot motor road under the Chief Minister's notification. On the request made by Er. Manoj Bhatt, Executive Engineer, I carried out the geological assessment of the proposed alignment corridor of the proposed road on 11.10.2014 in presence of Er. Amit Kumar Patel, Astt. Engineer and Er. Usha Bhandari, Jr. Engineer, Temporary, PWD, Gauchar.
- **2-Location:** Located in Karanprayag Block, the proposed alignment corridor of the above said road originates from km 7.00 of Gauchar Sidholi motor road. It passes across its upslopes for 875 length and with the provision of 2 numbers HP Bend it ends at Srikot.
- 3-Geological Assessment:- Geologically Gauchar-Sidoli-Baula-Srikot and its environs lies in the inner belt of Garhwal Lesser Himalayan Belt. The entire gamut is comprised of the quartzites, dolomites and spillites belonging to Garhwal Group of rocks. The cross slopes of the present alignment are inclined at an angle about 45⁰ oriented in N 090 direction. No in-situ rock is exposed in the entire section of the proposed road, otherwise these are enveloped by the thick cover of overburden material comprised of composite material containing angular rock fragments of various sizes embedded in the silty clay matrix. This slope forming material is naturally well compacted and dense and it do not contain any soft or dispersive soils. According to the assessment made at the site the "Undrained Shear Strength" of this alignment bearing slope forming material has been found ranging between 350 K Pa to 450 K Pa and according to these values it falls under the "Stiff Soil" category of soil classification.

By and large the slopes bearing the proposed alignment are stable and free form any mass wasting activities i.e landslide etc.

The slope forming soils are stiff and they do not contain any soft/dispersive soils.

On the basis of the geological / geotechnical studies carried at the site and the facts mentioned above the following recommendations are being made for the construction of the proposed road, failing to these this report will be automatically treated as cancelled.

4-Reccomendations:-

- 1. Construct the road by full benching on the hill slope and seal the entire roadway by cement concrete. This is so as to check the water infiltration into the sub surface material.
- 2. The hill side slopes of the entire road must be protected suitably designed retaining walls/ breast walls.
- 3. Construct extra large lined drain all along the hill side of the road and make adequate cross drainage arrangements.
- 4. The drained water must be disposed on the safe/ stable ground and for this gabion channels (inside plastered) be made along the alignment slopes.
- 5. Do not dispose the excavated waste on the down hill slopes.
- 6. Protect the slopes of the road by bio-engineering methods especially by vetiver grass planted by expert agencies only.
- 7. All the construction activity must be carried out as per the standard codes of practice laid by the BIS and MORTH.

5- Conclusion: On the basis of the geological / geotechnical studies carried at the site and with the above recommendations, the site was found geologically suitable for the construction of 0.875 km long motor road namely Baula-Srikot motor road under the notification of the Chief Minister, Distt. Chamoli.

(Vijay Dangwal)

Sr. Geologist

Office of the Engineer in Chief, / PWD, Dehradun.