

RECONNAISSANCE GEOLOGICAL REPORT OF PROPOSED SITE OF SHRI UPENDER SINGH S/o SHRI CHATAR SINGH FOR THE CONSTRUCTION OF OWNER DRIVEN CONSTRUCTION FOR HOUSING (ODCH) TOK GAIRI, VILLAGE SYALNA, TEHSIL- BARKOT- DISTRICT UTTARKASHI, UTTARAKHAND
KHASARA No. – 279 & AREA – 0.021 ha.

Date of Inspection: 23/12/13

In a 'World Bank' funded programme, Government of Uttarakhand has provided teams of Consultant Geologists and Consultant Associate Geologists to Director, Geology and Mining Unit, Uttarakhand for geological studies in proposed sites for Owner Driven Construction For Housing (ODCH) in disaster affected districts of Uttarakhand.

Director, Geology and Mining Unit, Directorate of Industries, Uttarakhand has issued an Office Order No.1612 Aa. Pra./Bhu.Ni./Bhu.Khani.E./2013-14 dated 10thDecember 2013 regarding geological studies in disaster affected five districts of Uttarakhand, Uttarkashi is one of them. Thus, undersigned have taken geological observation during traverses and collected field geological data under the management of cosignatory departmental 'Assistant Geologist'.

In the above mentioned questioned area, the reconnaissance geological investigation was carried out in the presence and co-operation of Shri. Vidya Nand Semwal, Revenue Sub-Inspector, Kharadi. It is 12Km approx from Tehsil Headquarter Barkot, Uttarkashi, Uttarakhand and the site is 3Km approx from NH-123 (Delhi-Yamunotri National Highway) through Syalna bridle path on the left bank of river Yamuna. It falls on coordinate – N 30^o 50.369 E 78^o 17.524 El. 5444feet. The proposed site is in Gairi Tok of village Syalna which is less populated. Temporary retaining wall at the toe of the proposed site is present.

The proposed site is on colluvial overburden material varying in size range from 5.5-6.5m, which is consolidated and stable. Man-made cultivated terraces are present. The uphill slope at the proposed site is 51^o-56^o and the downhill slope is 23^o-27^o approx sloping in N 200^o direction. A Chauri Ka Khadd Nala is flowing almost 145-150m from the proposed site flowing in N 245^o direction. Around the proposed site location moderate Teak vegetation is present at about 150m approx from the proposed site.



Close view of the proposed site



Hillside view of the proposed site

At the proposed site there was no in-situ rocks exposed but, rock fragments of varying size were present mixed in the soil matrix.

At the proposed site, thick alluvial soil cover is present and angular quartzite & phyllite rock fragments of size 2-4cm are found mixed in the soil matrix. The soil is consolidated but, the rate of infiltration is low making the soil water saturation low. At and around the proposed site location the water seepage is low. The tree above and around the site are standing straight which shows the site is stable.

RECOMMENDATIONS:

1. The temporary retaining wall at the toe of the proposed site should be re-developed with proper inclination and with provision of weep holes, at specific distances.
2. A inclined retaining wall at the backside with sufficient gap of about 2-3feet in between the backside retaining wall and the proposed construction should be constructed.
3. A proper drainage system between the retaining wall and the wall of house should be developed.
4. The foundation depth of the houses must be as per the compactness of the overburden material in the proposed site.
5. Massive plantation of trees, bushes and grasses which can hold the soil mass and retain the debris with dense and long rooted, wide leafed flora must be done to protect the soil erosion and minimize the surface erosion of sub-surface rock..
6. The soak-pits and toilet foundations must be quiet away from the house so that the foundations are not directly affected from subsidence due to excessive seepage.
7. Proper drainage for surface and sub-surface water discharge should be developed in the area as there is no drainage system in the area.
8. Framed structure with light roof must be constructed as the area falls in the earthquake zone IV, so it is essential that the house must be constructed with latest earthquake resistive techniques.

CONCLUSION:

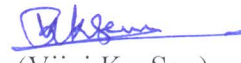
Prima-facie, presently the proposed site of Shri. Upender Singh S/o Shri. Chatar Singh is geologically feasible for the proposed construction, only if, the above mentioned recommendations will be followed strictly, otherwise, in its contravention; geologically suitability will be deemed annulled.


(Shashank Sharma)

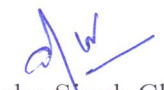
Consultant Associate Geologist

Date:

Place: Camp Uttarkashi


(Vijai Kr. Sen)

Consultant Geologist


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नकल खसरा मौजा ह्यालना मध्ये जेरी तोक, पट्टी वडका
 तहसील बडकोट, जिला उत्तरकाशी जहां पर देवी आपदा प्रभावित परिवार हेतु
 प्रीफेब्रिकेट भवन निर्माण हेतु भूमि प्रस्तावित की जा रही है।

खसरा नम्बर	क्षेत्रफल हे० में	खतौनी संख्या	खाता भूमिधर का नाम/पिता/पति का नाम	विवरण
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279	0.021	13	जयेंद्र सिंह 510 मातवरु उपेन्द्र सिंह 510-चतुर्दश आदि	प्रस्तावित भूमि प्रभावित के एक हिस्से व कब्जे कास्त में है। उपेन्द्र सिंह 510 चतुर्दश 510 (जेरी) ह्यालना
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रा. उप निग
2014

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