

**RECONNAISSANCE GEOLOGICAL REPORT OF PROPOSED SITE OF SHRI
RAJMOHAN SINGH S/o SHRI BAIJRAM FOR THE CONSTRUCTION OF OWNER
DRIVEN CONSTRUCTION FOR HOUSING (ODCH)
VILLAGE KHANNA, TEHSIL- MORI- DISTRICT UTTARKASHI,
UTTARAKHAND
KHASARA No. – 367 & AREA – 0.020 ha.**

Date of Inspection: 16/01/14

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 Jaipal Singh, Homeguard. It is 30Km approx from Tehsil Headquarter Mori, Uttarkashi, Uttarakhand and the site is 6Km approx from Naitwad-Doni motar marg through Dhaula-Khanna bridle path. It falls on coordinate – N 31^o 09 35.7 E 78^o 06 01.3 El. 1894m. The site is in village Khanna, which is moderately populated, in the left bank of Rupin river which is flowing in north to south direction at 500m approx horizontal distance and 300-400m approx vertical distance. A perennial flow 'Kharpatti Khadd' is flowing north to south direction from the eastern side of the site at 350-400m approx vertical distance and 400m approx horizontal distance.

The proposed site is on colluvial overburden material varying in thickness range from 1-2m approx at places, man-made cultivated terraces are present, is a ridge top. The downhill slope is 50^o-55^o sloping in NE direction. Around the proposed site location least mix vegetation of Banjh, Chulu, etc., is present.



Close view of the proposed site

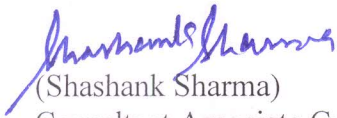
The proposed site is on colluvial overburden material thus no insitu rock is found but a few boulders of gneiss varying in size range from 0.5m to 1.5m approx are found embedded in the blackish brown clayey soil matrix with fragments of quartz and gneiss of size 3cm to 5cm approx. The soil is consolidated; the rate of infiltration is low making the soil water saturation low. At the proposed site location the water seepage is low. The trees at the uphill slopes are standing straight. Retaining walls at the north side and east side toe boundary of the proposed site is already present with a old house.


RECOMMENDATIONS:

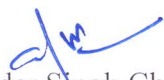
1. Retaining wall at the north side and east side toe boundary should be re-developed with proper inclination and provisions of weep holes with greater depth of foundation.
2. The surface drainage should be properly planned through lined drain/pipe, so both rain water as well as waste water from the existing houses to be release safe place in east direction along a channel.
3. The foundation depth of the houses must be as per the compactness of the overburden material at the proposed site.
4. Framed structure with deep column and 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.
5. The soak pits and toilet foundations must be quiet away in NE side from the house so that the foundations are not directly affected from subsidence due to excessive seepage.
6. The premises of house must be made 'pukka' in order to avoid excessive seepage of the surface water.

CONCLUSION:

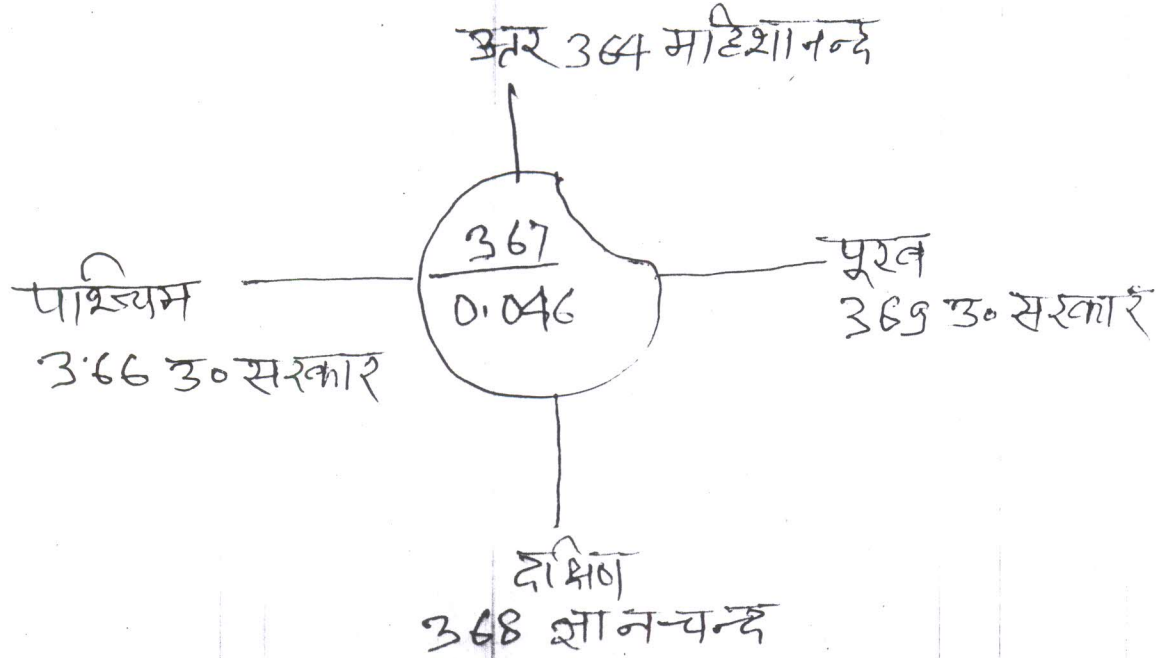
Prima-facie, presently, the proposed site of Shri Rajmohan Singh S/o Shri Baijram is geologically feasible for the proposed construction, only if, the above mentioned recommendations will be followed strictly, otherwise, in their contravention; geologically suitability will be deemed annulled.


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Consultant Associate Geologist
Place: Camp Uttarkashi


(Vijai Kr. Sen)
Consultant Geologist

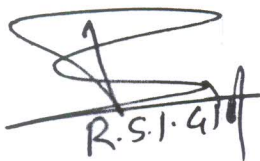

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तहसील मेरी के ग्राम खन्ना में देवी भाषदा के कारण पूर्ण रूप से क्षतिग्रस्त भवन के कारण अपने निजी भूमि पर बनाये जाने वाले प्रभक्ति व्यक्ति राजमोहन S1-श्री बीजराम के भवन का नजरी नक्शा व खसरा 367 है।
0.046 है।



खसरा नं० 367 की चौहदा निम्न प्रकार है

- 1- पूरव में खसरा नं० 369 उत्तरखंड सरकार,
- 2- पश्चिम में खसरा नं० 366 उत्तरखंड सरकार,
- 3- उत्तर में खसरा नं० 364 माहेशानन्द,
- 4- दक्षिण में खसरा नं० 368 ज्ञानचन्द के नाफ खेत है,


R.S. दाहि

खसरा		
खसरा	कुल क्व	प्रवाकित क्व
367 म.	0.046	0.020