

How to build on unstable terrain and avoid landslides?



1. Keep vegetation

Try to keep vegetation above the new structure. Although it's easiest to remove vegetation before the works started to get additional space for works execution, storage, and temporary use. Try to keep vegetation which increases slope stability.

2. Rainfall drainage

Perform the rainfall drainage system above the building and direct it downhill beyond the affected area. The system will serve to drain rainwater and reduce terrain infiltration. If possible, protect the system, to be absorbent as possible and enable water redirection outside the affected area.

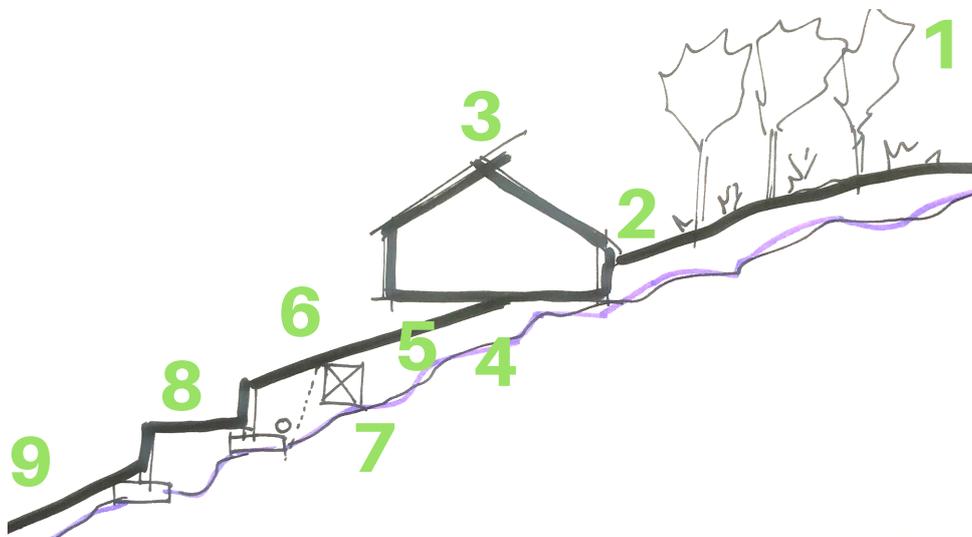
3. Roof drainage

Make sure the roof drainage is directed outside the affected area, do not discharge it around the building. Check if the system is in function, not blocked or does not discharge water into terrain around the building.

4. Building foundation

If necessary execute the building foundation on rock mass or inside a favorable geotechnical unit. Piles or micropiles are sometimes more expensive, but only at the start. Believe, repairing the damage is much more expensive, and sometimes impossible. Today, there are many types of micropiles, and the cost of this kind of foundation is getting more and more profitable.

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5. Slope drain

If necessary, drain the slope with drainage systems and take the water out of the affected area.

6. Take excavated material from slope

Avoid the "mass equalization" method, it is not necessary to install excavated material into the embankment. In some places, you add more weight to the slope and increase the possibility of instability.

7. Emptied septic tank

Septic tanks should be emptied regularly and made properly to avoid leakage. Do not empty the septic tanks in terrain.

8. Retaining structures

Retaining structures must be properly designed with an accent on drainage of groundwater and rainwater.

9. Keep vegetation

Keep the existing vegetation below the construction (downhill)

For any information be free to contact us!



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Geotech d.o.o. is a company specialized in designing, supervision and consulting in geotechnical engineering (foundation structure, landslide mitigation, retaining structures, slope protection etc.). We are present in Croatia and internationally for over 10 years.

Through information, education, participation in teaching activities and professional and scientific congresses, we try to raise awareness of geotechnical engineering.