



Test pits at Alpine Crescent, Grindlewald

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Three test pits were dug on a property at 33 Alpine Crescent, Grindlewald (fig. 1). The area where the test pits were dug has a moderate even slope whereas a little to the east and towards the valley the slope angle steepens and the surface is hummocky. These hummocks are likely to represent old landslide movements. The general area is underlain by coarse grained basalt with varying depths of soil, clay and boulders overlying the unweathered rock.

If a house is built on the proposed new lot it should be sited within the area of the test pits. It should be relatively safe to develop this area as *in situ* rock will probably occur at shallow depth. If deeper soil than was encountered in the pits occurs, then any deep excavations should be supported by strong retaining structures. Septic tank effluent and sullage water should be discharged to the east of the house site rather than directly downslope. If other sites on the lot are considered for development, then further investigations would probably be necessary.

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Test pit logs

Pit 1

- 0 – 0.4 m Brown clayey soil with roots, fragmental, moist.
- 0.4 – 1.3 m Brown clay and basalt boulders interspersed, boulders increasing with depth, some grey clay at base, little igneous texture in clay.
Too difficult to dig further. No free water.

Pit 2

- 0 – 0.25 m Dark brown clay soil, fragmental.
- 0.25 – 0.8 m Lighter grey clay, fragmental with basalt boulders. Base has hard basalt over whole floor (large boulder or outcrop?).
Too hard to dig further.

Pit 3

- 0 – 0.3 m Dark brown clay soil, roots moist.
- 0.3 – 0.5 m Clayey material with basalt boulders. Some seepage coming into hole.
- 0.5 – 0.7 m Grey brown plastic clay, variable thickness, moderately stiff (1.25–1.75 kg/cm³ — unconfined strength, pocket penetrometer.
- 0.7 – 1.3 m Fragmental light grey clayey material with igneous texture, appears to be *in situ* weathered basalt.
Too hard to dig further with ease.

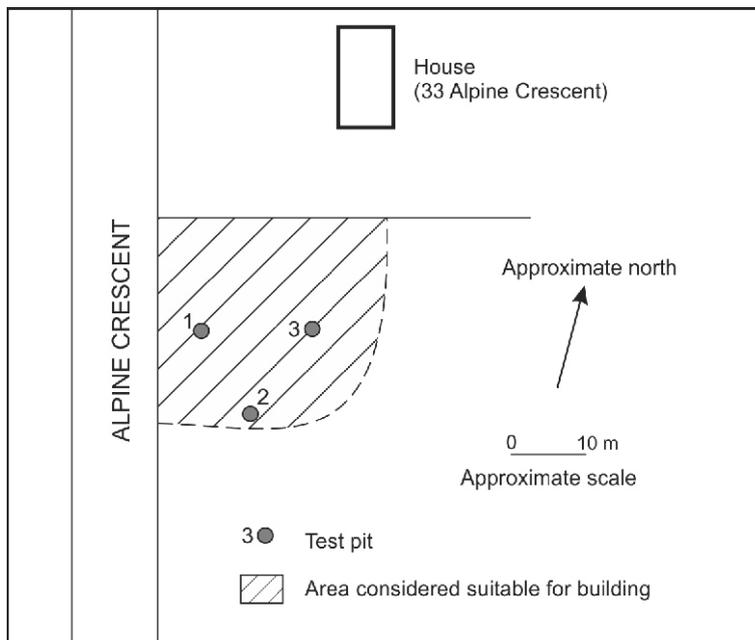


Figure 1

Sketch plan showing location of test pits and area considered suitable for building.