

PRELIMINARY GEOTECHNICAL ASSESSMENT:

4 Tipperary Avenue, Killarney Heights

1.0	LANDSLIP RISK CLASS (<i>Highlight indicates Landslip Risk Class of property</i>)
<input type="checkbox"/>	A - Geotechnical Report not normally required
<input checked="" type="checkbox"/>	B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
<input type="checkbox"/>	C - Geotechnical Report is required
<input type="checkbox"/>	D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
<input type="checkbox"/>	E - Geotechnical Report required

2.0 Proposed Development

- 2.1 Install a pool on the downhill side of the property by excavating to a maximum depth of ~1.1m.
- 2.2 No fills are shown on the plans.
- 2.3 Details of the proposed development are shown on 13 drawing prepared by Site Design+ Studios, project number 1504, drawings numbered L-01 to L-13, dated 5/3/24.

3.0 Site Location

- 3.1 The site was inspected on the 28th May, 2024.
- 3.2 This residential property is on the low side of the road and has a NE aspect. It is located on the gentle to moderately graded middle reaches of a hillslope. Medium Strength Sandstone outcrops underneath the existing house. Where sandstone is not exposed, it is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered by an excavation for the lower level of the house

and with a fill for a lawn area. The proposed development will require a ~1.1m excavation for the proposed pool.

3.3 The site shows no indications of historical movement in the natural surface that could have occurred since the property was developed. We are aware of no history of instability on the property.

4.0 Site Description

The natural slope falls across the property at an average angle of ~12°. At the road frontage, a concrete driveway crosses the road reserve to a suspended garage on the uphill side of the property. The garage is supported on timber posts. The posts appear to stand vertical. In between the road frontage and the house is a moderately sloping garden area. The cut for the upper level of the house is supported by a low timber log retaining wall. The part two-storey timber framed and clad house is supported on timber posts. The visible posts appear to stand vertical. The cut for the lower level of the house has been partially taken through outcropping Medium Strength Sandstone. The N end of this cut has been taken through soil and clay and has been left unsupported at near-vertical angles (Photo 1). Due to the height of the cut batter, it is not considered to be a risk to life should it collapse. However, there is a minor risk to property that can be addressed with the installation of an engineered retaining wall or through regrading of the cut batter to permanent angles of no steeper than 26° from horizontal. A gently sloping lawn area extends off the downhill side of the house to the lower boundary. The fill for the lawn is supported by a stable ~0.8m high boulder retaining wall. The land surface surrounding the house is mostly lawn covered. No significant signs of movement associated with slope instability were observed on the grounds. No cliffs or large rock faces were observed on the property or in the near vicinity. No geotechnical hazards that could impact on the subject property were observed on the surrounding neighbouring properties as viewed from the subject property and the street.

5.0 Recommendations

The proposed development and site conditions were considered and applied to the current council requirements. See the required inspection below that is to be carried out during construction and is a requirement for the final geotechnical certification. Apart from the inspection, it is not expected additional geotechnical input will be required provided good design and building practices are followed.

6.0 Inspection

The client and builder are to familiarise themselves with the following required inspection as well as council geotechnical policy. We cannot provide geotechnical certification for the owners or the regulating authorities if the following inspection has not been carried out during the construction process.

- All footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.



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Information about your Preliminary Assessment

This Preliminary Assessment relies on visual observations of the surface features observed during the site inspection. Where reference is made to subsurface features (e.g., the depth to rock) these are interpretations based on the surface features present and previous experience in the area. No ground testing was conducted as part of this assessment and it is possible subsurface conditions will vary from those interpreted in the assessment.

In some cases, we will recommend no further geotechnical assessment is necessary despite the presence of existing fill or a rock face on the property that exceed the heights that would normally trigger a full geotechnical report, according to the Preliminary Assessment Flow Chart. Where this is the case, if it is an existing fill, it is either supported by a retaining wall that we consider stable, or is battered at a stable angle and situated in a suitable position on the slope. If it is a rock face that exceeds the flow chart limit height, the face has been deemed to be competent rock that is considered stable. These judgements are backed by the inspection of over 5000 properties on Geotechnical related matters.

The proposed excavation heights referred to in section 2.0 of this assessment are estimated by review of the plans we have been given for the job. Although we make every reasonable effort to provide accurate information excavation heights should be checked by the owner or person lodging the DA. If the excavation heights referred to in in section 2.0 of this assessment are incorrect, we are to be informed immediately and before this assessment is lodged with the DA.