

PRELIMINARY GEOTECHNICAL ASSESSMENT:

85 Ballyshannon Road, Killarney Heights

1.0	LANDSLIP RISK CLASS (Highlight indicates Landslip Risk Class of property)
<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** Construct an addition to the W corner of the house.
- 2.2** Construct a verandah off the downhill side of the house.
- 2.3** Minor leveling may be required to construct the proposed addition.
- 2.4** Details of the proposed development are shown on 20 drawings prepared by Sally Gardner Design and Draft, job number 23-0607. Drawings numbered, A1 to A6, S1 to S7, N1 to N3, E1 to E2. All dated Monday, 5 February 2024.

3.0 Site Location

- 3.1** The site was inspected on the 8th February, 2024.
- 3.2** This residential property is on the low side of the road and has a SW aspect. It is located on the moderately graded upper reaches of a hillslope. Medium Strength Sandstone outcrops on the opposite side of the street and steps down below the property. 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 with

excavations for the garage and pool, and with minor filling for landscaping. The proposed development will require minor leveling for the proposed addition.

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 $\sim 11^\circ$. At the road frontage, a concrete driveway runs to a stable brick garage on the uphill side of the property. The cut for level pavement on the uphill side of the house, and fill for the driveway is supported by a series of low stable stack rock retaining walls. The cut for the garage is supported by a stable brick retaining wall reaching $\sim 2.3\text{m}$ in height. The part two-story brick house is supported on brick walls. No significant signs of movement were observed in the supporting walls. A pool that shows no significant signs of movement has been cut into the slope on the downhill side of the property. The fill that extends off the downhill side of the pool is battered at steep angles, is laid over exposed rock and has not been adequately planted out. However, due to its relatively low height and due to its location, it is not considered a threat to life or property should movement occur. The outcropping sandstone which steps down at steep angles below the property was seen to be undercut up to $\sim 2.5\text{m}$. However, the overhanging joint block has a relatively thick cantilever arm in relation to its overhang length, and displays no significant cracking when viewed from above or below. No other significant geological defects were observed in the rock face. As such, it is considered stable. The land surface surrounding the house and driveway is mostly paved with some garden areas. No significant signs of movement associated with slope instability were observed on the grounds. 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 Inspections

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.
