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### PRELIMINARY GEOTECHNICAL ASSESSMENT:

## 74 Londonderry Drive, Killarney Heights

1.0	LANDSLIP RISK CLASS (Highlight indicates Landslip Risk Class of property)
	A - Geotechnical Report not normally required
	B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
	C - Geotechnical Report is required
	D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
	E - Geotechnical Report required

## 2.0 Proposed Development

- **2.1** Construct a new pool and deck on the downhill side of the property.
- 2.2 Re-landscape the uphill side of the proposed pool by filling to a maximum height of ~1.5m.
- **2.3** Apart from those for footings, no excavations are shown on the plans.
- 2.4 Details of the proposed development are shown on 5 drawings prepared by Right Angle Design and Drafting, Job number RADD20021, drawings numbered P1 to P5, dated April 2020.

#### 3.0 Site Location

- **3.1** The site was inspected on the 27<sup>th</sup> May, 2020.
- 3.2 This residential property is on the low side of the road and has an E aspect. It is located on the moderately graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops and steps down the property. Where sandstone is not exposed, it is expected to underlie the surface at relatively shallow



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depths. The natural surface of the block has been altered with filling used for

landscaping across the property. The proposed development will require filling to a

maximum depth of ~1.5m for additional landscaping.

**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

From the road frontage to the lower boundary, the natural slope falls at an average angle of

~15°. At the road frontage, a concrete driveway runs to a garage attached to the SW corner

of the house. The slope between the road frontage and the house has been terraced with a

series of stable stack rock retaining walls. Similar walls continue down both sides of the house.

The part two-storey brick house is supported on brick walls and brick piers. The external

supporting walls of the house display no significant signs of movement and the supporting

brick piers stand vertical. Some of the supporting walls and piers were observed to be

supported directly onto outcropping competent Medium Strength Sandstone. A gently

sloping lawn-covered fill extends off the downhill side of the house. The fill is supported by a

stable stack rock retaining wall ~1.2m high. A garden area continues from the base of this wall

to the lower common boundary. Sandstone outcrops through this slope in places. The area

surrounding the house is mostly paved or lawn covered. No signs of movement associated

with slope instability were observed on the grounds. The adjoining neighbouring properties

were observed to be in good order as seen from the road and the subject property.

5.0 Recommendations

The proposed development and site conditions were considered and applied to the Council

Flow Chart.

Provided good engineering and building practice are followed, no further Geotechnical

assessment is recommended for the proposed development.



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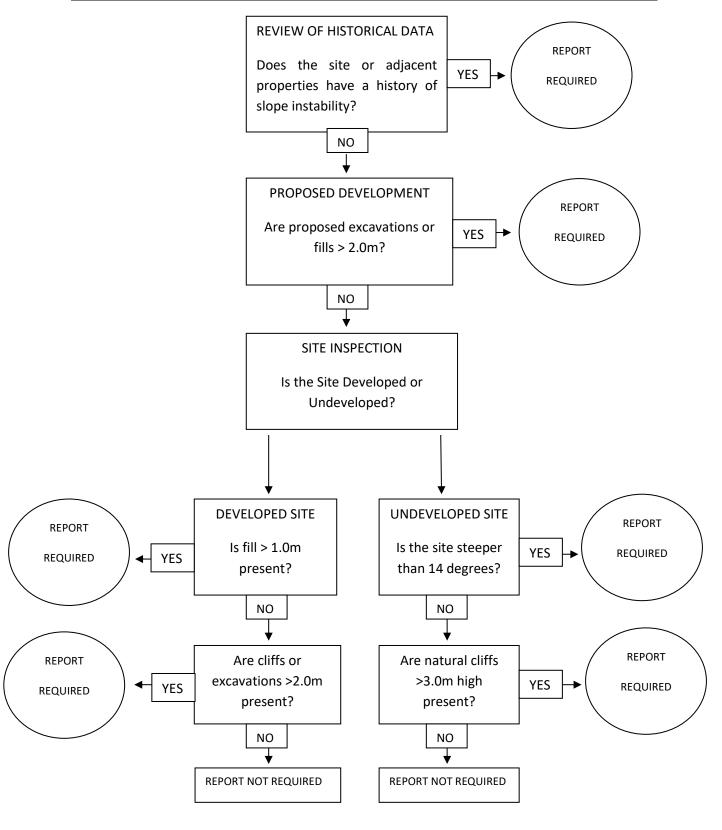
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Engineering Geologist.



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# <u>Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)</u>





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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.