

**PRELIMINARY GEOTECHNICAL ASSESSMENT:**  
**23 Courtley Road, Beacon Hill**

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

## 2.0 Proposed Development

- 2.1** Demolish the existing deck and construct a new enclosed deck.
- 2.2** No significant excavations or fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 4 drawings prepared by Design Confidential, project number 1137, drawings numbered 01 to 04, dated September 2021.

## 3.0 Site Location

- 3.1** The site was inspected on the 3<sup>rd</sup> of December, 2021.
- 3.2** This residential property is on the low side of the road and has an E aspect. It is located on the gently graded upper middle reaches of a hillslope. No rock outcrops on the property. The Sydney 1:100 000 Geological sheet indicates the site is underlain by Hawkesbury Sandstone that is described as a medium to coarse grained quartz sandstone with very minor shale and laminite lenses. Sandstone bedrock is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered with a cut for the pool and filling for a paved area on the downhill

side of the house. The proposed development will not alter the surface further for the proposed works.

**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  $\sim 6^\circ$ . At the road frontage, a concrete and brick paved driveway runs down the slope to a garage on the ground floor of the house. Between the road frontage and the house is a gently sloping lawn area. The two storey brick, concrete block and timber clad house is supported by brick walls and concrete block walls. The external supporting walls show no significant signs of movement. A timber deck extends off the downhill side of the house. The steel posts supporting the decks stand vertical. A gently sloping lawn extends off the downhill side of the deck. A pool in good condition is located near the downhill property boundary. Fill provides a level platform for a paved area around the pool. The fill is supported by a low concrete block retaining wall. The area surrounding the house is mostly lawn/garden covered with some paved areas. No 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. 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.

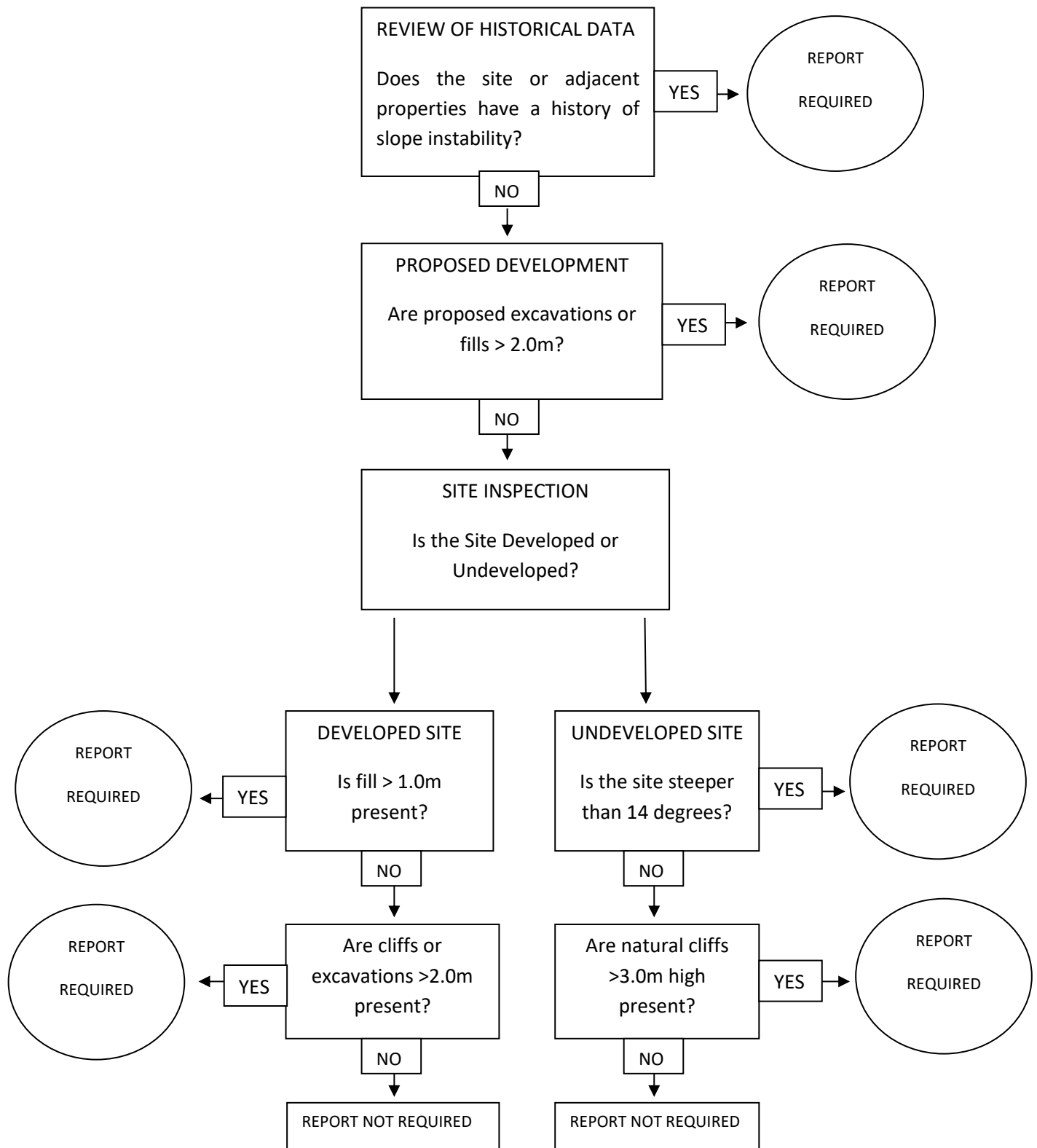
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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## Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)



## 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.

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