

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **24A Tango Avenue, Dee Why**

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> ( <i>Highlight indicates Landslip Risk Class of property</i> )
<input 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** Construct a first-floor addition over the footprint of the existing house.
- 2.2** Various other minor internal alterations and additions.
- 2.3** No excavations are required. No fills are shown on the plans.
- 2.4** Details of the proposed development are shown on 19 drawings prepared by LKS Design and Drafting, job number 2202, drawings numbered DA01 to DA19, dated 2<sup>nd</sup> June, 2022.

## **3.0 Site Location**

- 3.1** The site was inspected on the 5<sup>th</sup> May, 2022.
- 3.2** This irregularly shaped residential property is on the low side of the road and has a NW aspect. It is located on the moderate to steeply graded upper reaches of a hillslope. 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. The natural surface of the block has been altered with a cut for a pool and gentle to moderately sloping lawn area on

the uphill side of the property and a fill to create a level patio area on the downhill side of the property. The proposed development will not alter the property further.

**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  $\sim 10^\circ$  before falling at steep angles at the lower common boundary. At the road frontage, a concrete driveway runs down the slope to a granny flat attached to the uphill side of the house. Competent Medium Strength Sandstone can be seen outcropping along the upper common boundary. A rough  $\sim 1.0\text{m}$  high stack rock retaining wall supports a cut for the gentle to moderately sloping lawn area. This wall is partially supported on outcropping Medium Strength Sandstone. A stable  $\sim 1.4\text{m}$  high concrete block retaining wall supports a fill for a garden bed along the E common boundary. A pool has been partially cut into the slope near the N common boundary. The pool is not of concrete construction and is self-supported. The part two-storey brick house is supported on brick walls and brick piers. The brick walls show no significant signs of movement and the brick piers appear to stand vertical. A series of rough stack rock retaining walls reaching up to  $\sim 1.0\text{m}$  high terrace the slope to the lower common boundary. Some of the walls are supported directly on outcropping Medium Strength Sandstone. The area surrounding the house is lawn covered with some paved areas. No significant 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.

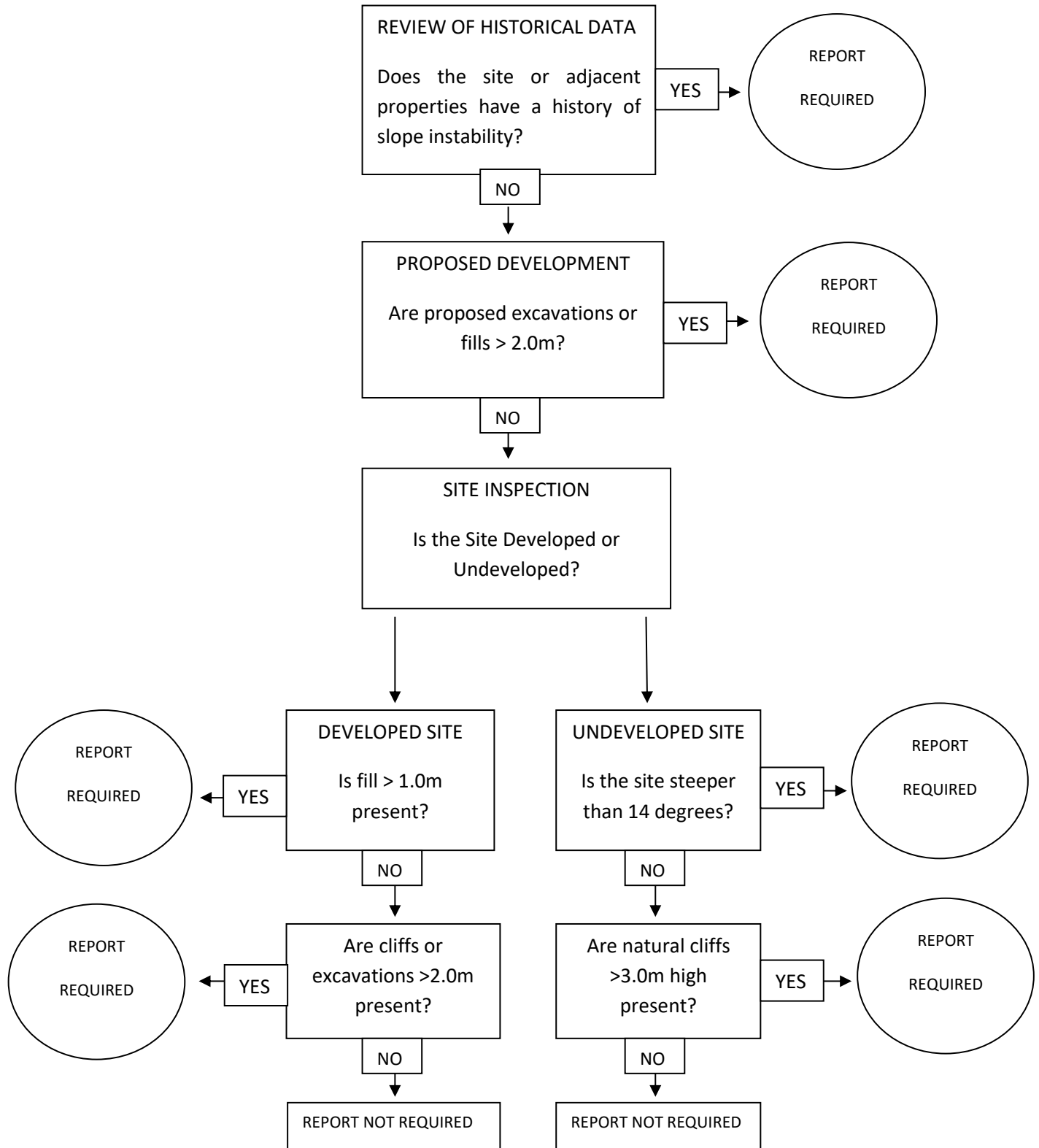
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

White Geotechnical Group Pty Ltd.



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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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