

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

**84 Lincoln Avenue, Collaroy**

<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 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 checked="" 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** Extend the uphill side of the house by excavating to a maximum depth of ~1.2m.
- 2.2** Extend the balcony on the downhill side of the house.
- 2.3** Various other internal and external modifications.
- 2.4** No fills are shown on the plans.
- 2.5** Details of the proposed development are shown on 5 drawings prepared by High Design, drawings numbered 1-4 to 3-4 786 18 HD with two drawings numbered 4-4 786 18 HD, all drawings dated April 2019.

## **3.0 Site Location**

- 3.1** The site was inspected on the 15<sup>th</sup> July, 2019.
- 3.2** This residential property is on the high side of the road and has a SW aspect. The block is located on the gently graded upper 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 current development of the block has altered the natural surface with an excavation for a pool on the uphill side of the property and with filling used for landscaping across the property. The proposed development will require an excavation to a maximum depth of ~1.2m for the proposed extension to the uphill side of the house.

**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 rises across the property at an average angle of ~6°. At the road frontage, a concrete driveway runs to a garage on the ground floor of the house. Between the road frontage and the house is a gently sloping lawn-covered fill. The fill is supported by a stable battered slope lined with rough sandstone boulders. The two-storey brick house is supported on brick walls. The supporting brick walls show no significant signs of movement. Another gently sloping lawn extends off the uphill side of the house. A pool has been cut into the slope on the uphill side of the property. The water level of the pool indicates no ground movement has occurred in the shell of the pool since its construction. The land surface surrounding the driveway and house is mostly lawn-covered with some paved areas. No signs of movement related to 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 Council Flow Chart.

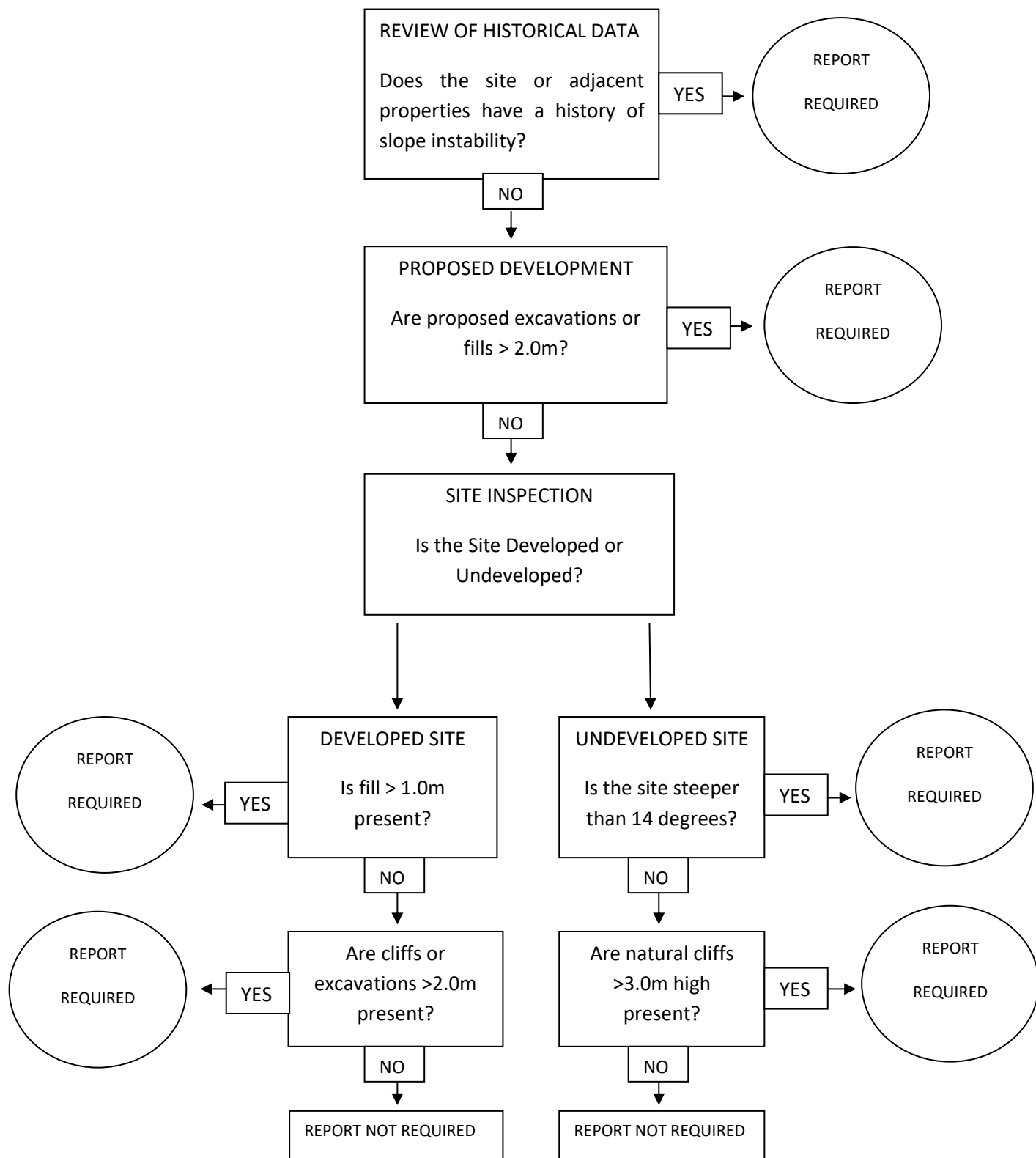
During the early stages of the excavation process, the geotechnical consultant is to inspect the cut to ensure ground materials are as expected and no temporary shoring is required until retaining walls are installed.

White Geotechnical Group Pty Ltd.



Ben White M.Sc. Geol.,  
AusIMM., CP GEOL.  
No. 222757  
Engineering Geologist.

## 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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