

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **20 Warringah Road, Dee Why**

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> (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** Extend the SE side of the house over the existing garage.
- 2.2** No excavations are required. No fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 4 drawings prepared by BDDS, Project number 2021-076, drawing numbered DA04 is Revision A, dated 1/7/21, and drawings numbered DA01 to DA03 are Revision B, dated 23/9/21.

## **3.0 Site Location**

- 3.1** The site was inspected on the 26<sup>th</sup> November, 2021.
- 3.2** This residential property is on the high side of the road and has a SW aspect. The block runs longways to the SE so the slope is a cross-fall. It is located on the gentle to moderately graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops along the road frontage. 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 filling for the driveway and for landscaping

on the NW side of the property and with an excavation for 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 rises across the site at an average angle of ~9°. Competent Medium Strength Sandstone outcrops along the road frontage to the property. No significant geological defects were observed in the rock face and it is considered stable. At the road frontage, a concrete Right of Carriageway (ROW) runs across the slope to a garage attached to the SE side of the house. The cut for the garage is supported by a ~1.0m high brick retaining wall in good condition. The ROW continues beyond the SE common boundary. The fill for the ROW is supported by a stable mortared stack rock retaining wall reaching ~1.5m high. A gently sloping lawn-covered fill extends from the NW end of the property to a deck on the NW side of the house. The fill is supported by a timber retaining wall ~0.8m high in good condition. The two-storey brick house is supported on brick walls. The supporting walls display no significant signs of movement. The cut for the house is supported by a stable ~0.8m high timber retaining wall. The area surrounding the house and driveway is mostly 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.

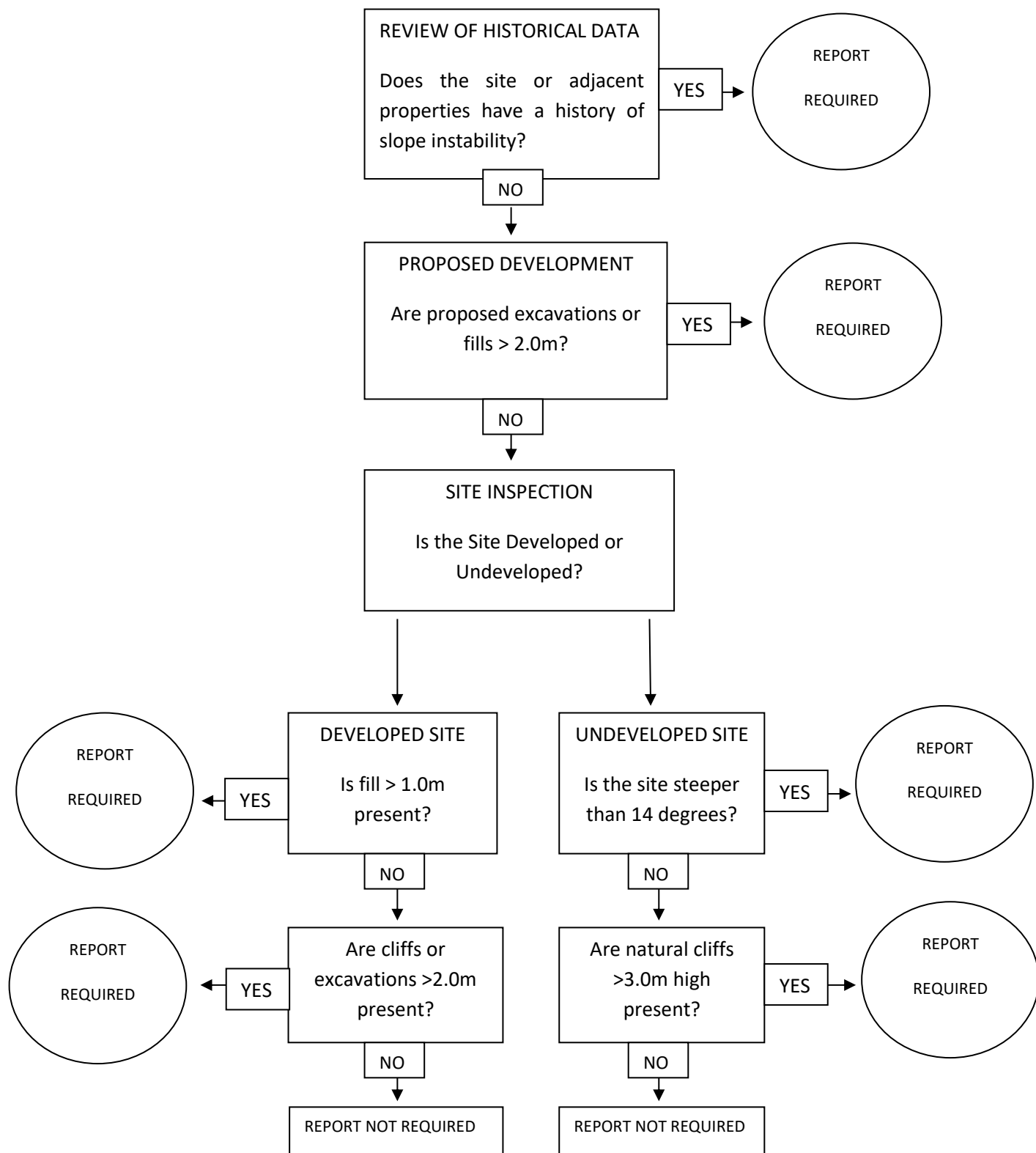
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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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