

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **28 Milham Crescent, Forestville**

<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 new first floor extension.
- 2.2** No excavations or fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 16 drawings prepared by Northern Beaches Designs, Project number 1923, drawings numbered DA2 to DA17, dated 28/8/19.

## **3.0 Site Location**

- 3.1** The site was inspected on the 4<sup>th</sup> September, 2019.
- 3.2** This residential property is on the low side of the road and has a NW aspect. The block runs longways to the NE so the slope is a cross-fall. It is located on the gently graded upper 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 depths. The natural surface of the block has been altered with an excavation for a pool on the downhill side of the

property and with filling on the downhill side of the property. 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 site at an average angle of  $\sim 6^\circ$ . At the road frontage, a concrete driveway runs to a stable carport on the uphill side of the property. The carport was observed to be supported directly onto outcropping Medium Strength Sandstone. Between the road frontage and the house is a gently sloping lawn and garden area. The slope is terraced with a  $\sim 1.0\text{m}$  high stable stack rock retaining wall. Medium Strength Sandstone outcrops beside this wall. The two-storey house is supported on brick and concrete block walls and piers. The supporting walls display no significant signs of movement and the supporting piers stand vertical. A gently sloping lawn-covered fill extends off the downhill side of the house to the lower common boundary. The fill is supported by a  $\sim 0.6\text{m}$  high sandstone block retaining wall that lines the lower common boundary. The wall was observed to be supported directly off competent sandstone bedrock. A pool has been cut into the slope in the NE corner 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 area surrounding the house and pool is mostly lawn-covered with some paved areas. 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.

## **6.0 Recommendations**

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

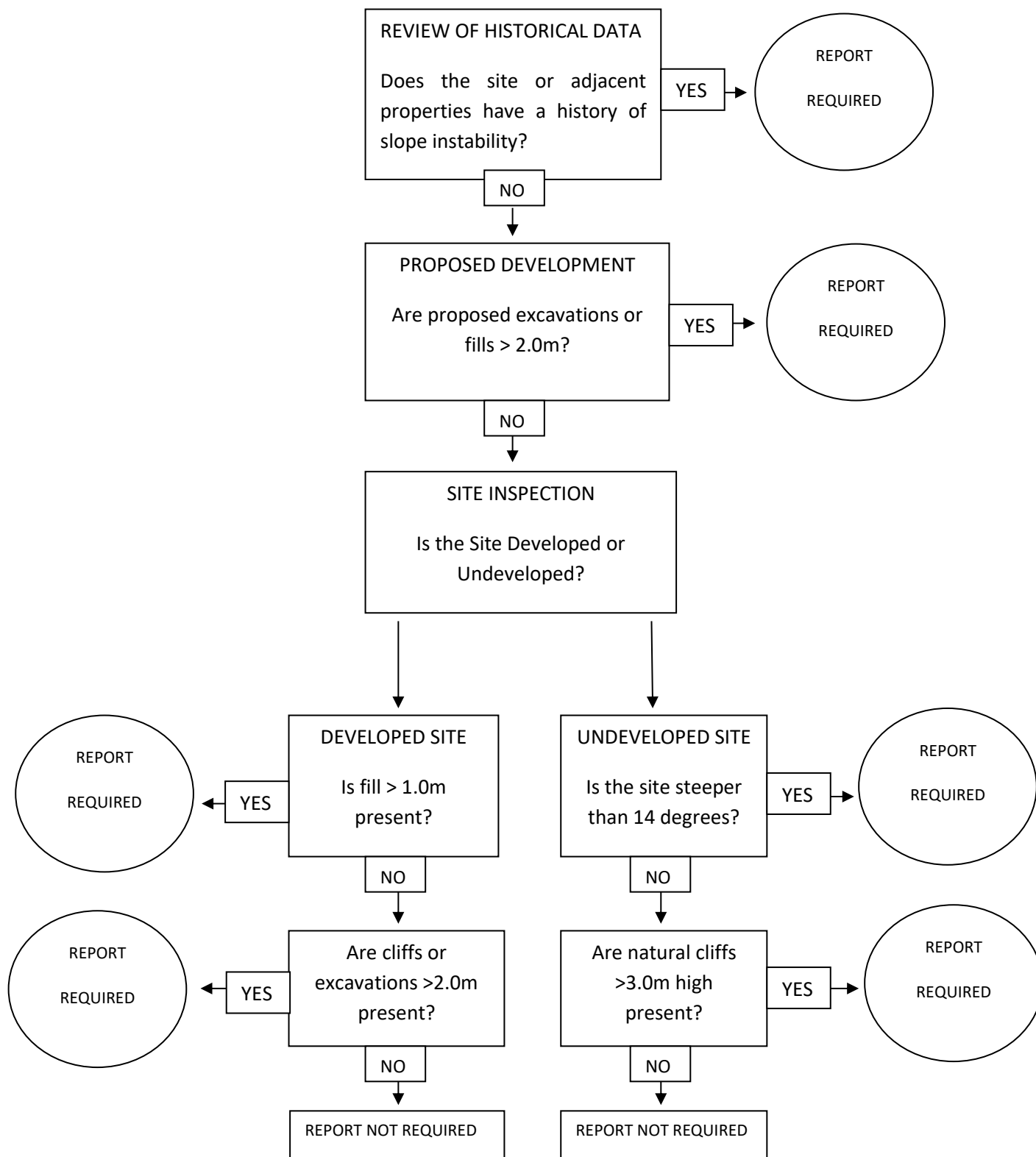
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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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