

PRELIMINARY GEOTECHNICAL ASSESSMENT:

34 Consul Road, Brookvale

1.0	LANDSLIP RISK CLASS (Highlight indicates Landslip Risk Class of property)
<input checked="" 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 uphill side of the house.
- 2.2** Various other internal and external alterations.
- 2.3** Apart from those for footings, no significant excavations are required. No fills are shown on the plans.
- 2.4** Details of the proposed development are shown on 13 drawings by LKS Design & Drafting, Project reference 1912, drawings numbered DA01 and DA03 to 14, Revision A, dated 5/2/20.

3.0 Site Location

- 3.1** The site was inspected on the 31st January, 2020.
- 3.2** This residential property is accessed by a Right of Carriageway (ROW) off Consul Road. It is on the uphill side of the road. The property has an E aspect. It is located on the gentle to moderately graded lower reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops on the uphill side of 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 excavations for the garage and for the uphill 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 rises across the site at an average angle of $\sim 13^\circ$. At the road frontage to Consul Road, a gravel ROW runs to the NE corner of the subject property. A concrete driveway diverts off the ROW to a garage under a brick secondary dwelling on the downhill side of the property. The supporting brick walls of the secondary dwelling display no significant signs of movement. The driveway continues past the N side of the secondary dwelling to a garage under the subject house. The cut for the garage is supported by a stable brick retaining wall $\sim 1.0\text{m}$ high. The single-storey brick house is supported on brick walls and brick piers. The supporting walls and piers display no significant signs of movement. An excavation has been made in the slope to create a level platform for the house. The cut is supported by a $\sim 1.7\text{m}$ high concrete block retaining wall. The wall displays minor cracking through the blocks but no signs of deflection. Thus, the wall is considered stable. A moderate to steeply graded lawn rises above the wall to the upper boundary. Competent Medium Strength Sandstone outcrops through the upper portion of the lawn. A fill on the S neighbouring property is supported by a stable stack rock retaining wall reaching $\sim 2.0\text{m}$ high. The area surrounding the house and secondary dwelling 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.

5.0 Recommendations

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

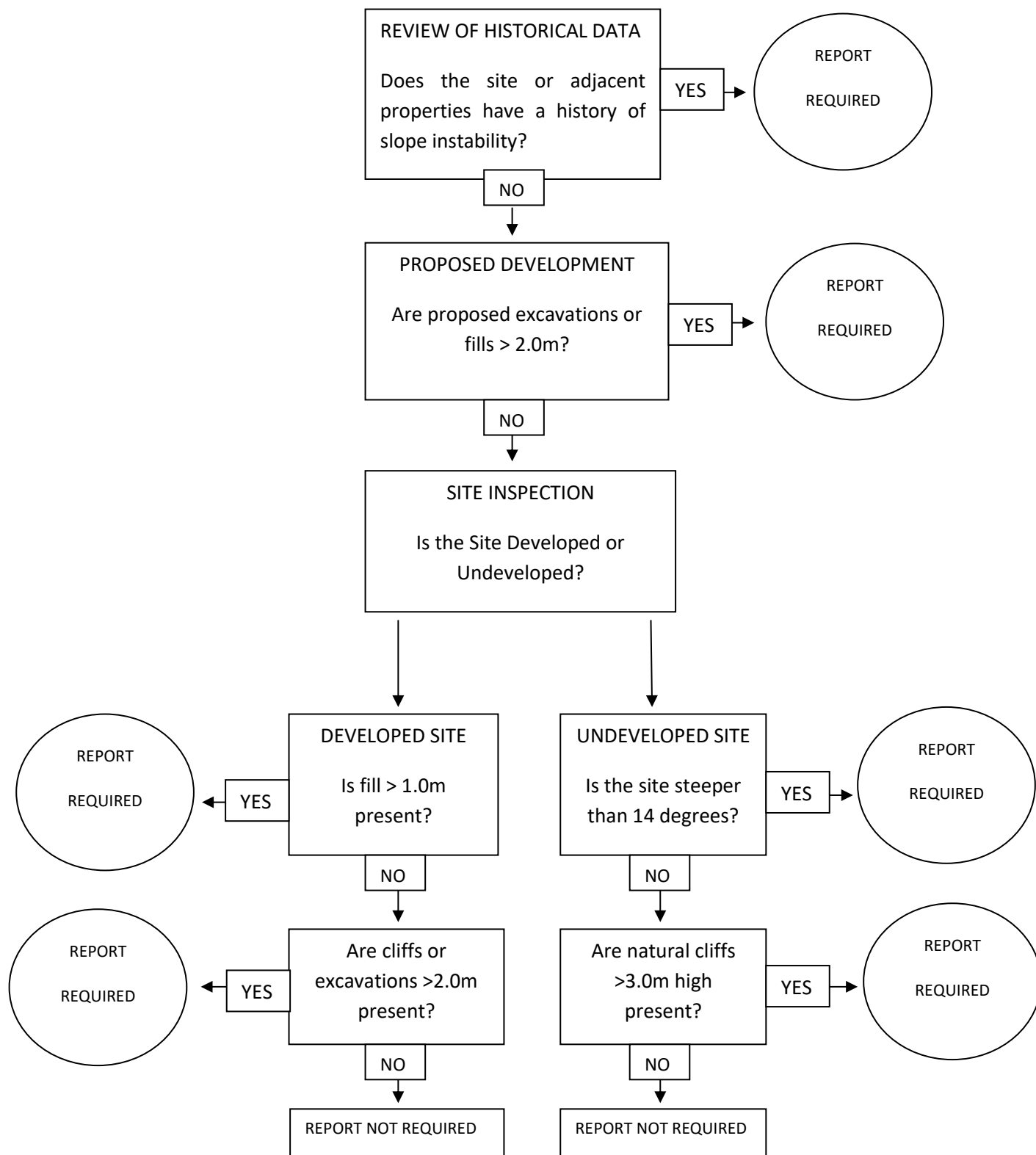
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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.
