

PRELIMINARY GEOTECHNICAL ASSESSMENT:

34 Mary Street, Beacon Hill

1.0	LANDSLIP RISK CLASS (<i>Highlight indicates Landslip Risk Class of property</i>)
<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** Demolish part of the existing house, leaving most of the house intact. Rebuild the house.
- 2.2** Add a new first floor addition to the existing house.
- 2.3** Lower the level of the existing garage by excavating to a maximum depth of ~0.5m.
- 2.4** Alterations to the existing deck on the uphill side of the house.
- 2.5** No significant fills are shown on the plans.
- 2.6** Details of the proposed development are shown on 15 drawings prepared by Bent Patterson Design. Drawings numbered 0001, 1000, 1001, 1100, 1101, 1111, 2001 to 2003, 3001 to 4004 and 5000 are dated 26/5/21. Drawing number 1200 is dated 19/3/21.

3.0 Site Location

- 3.1** The site was inspected on the 2nd of August, 2021.

3.2 This residential property is on the high side of the road and has a S aspect. It 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 natural surface of the block has been altered with a cut for the existing garage and minor filling for garden and lawn areas across the property. The proposed development will require an excavation to a maximum depth of ~0.5m for the proposed garage alteration.

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 ~8°. At the road frontage, a concrete driveway runs up the slope to a garage attached to the house. Between the road frontage and the house is a gently sloping lawn. The single storey brick, sandstone dressed and vinyl clad house with garage below is supported by brick walls and brick piers. The supporting walls and piers stand vertical and show no significant signs of movement. A timber deck extends off the uphill side of the house. A gently sloping lawn extends from the deck to the uphill property boundary. A timber clad studio is located near the NE corner of the property. The area surrounding the house is mostly lawn covered with some paved areas. No signs of movement associated with slope instability were observed on the grounds. No cliffs or large rock faces were observed on the property or in the near vicinity. 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.

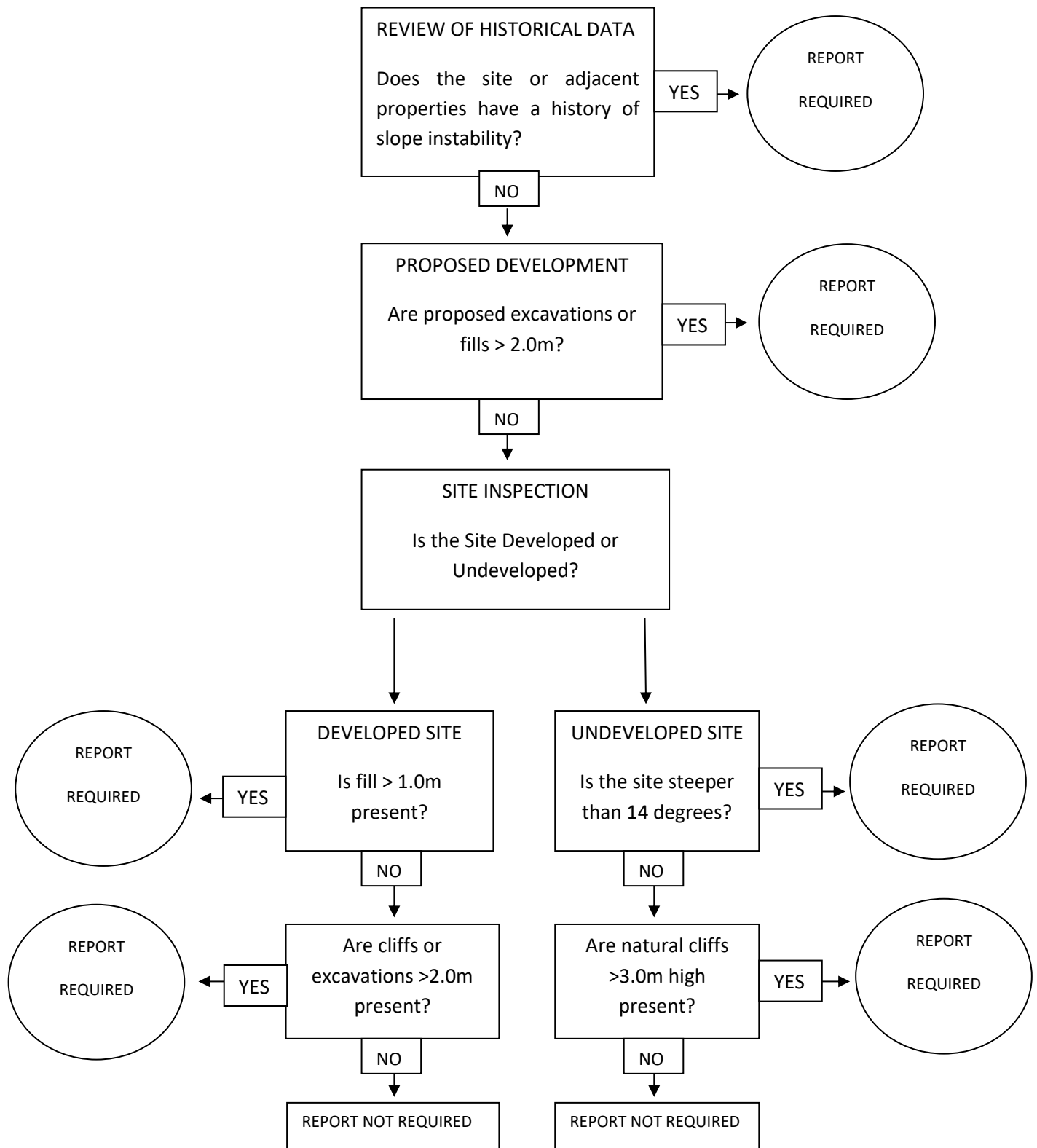
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

White Geotechnical Group Pty Ltd.



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.
